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**SERIES**  
**1250**  
**UNIVERSAL**  
**SWITCH CONTROLLER**

**PUBLICATION NO. 980609 Volume 2 of 2**

**RACAL INSTRUMENTS**

**Racal Instruments, Inc.**

4 Goodyear St., Irvine, CA 92618-2002  
Tel: (800) RACAL-ATE, (800) 722-2528, (949) 859-8999; FAX: (949) 859-7139

**Racal Instruments, Ltd.**

480 Bath Road, Slough, Berkshire, SL1 6BE, United Kingdom  
Tel: +44 (0) 1628 604455; FAX: +44 (0) 1628 662017

**Racal Systems Electronique S.A.**

18 Avenue Dutartre, 78150 LeChesnay, France  
Tel: +33 (1) 3923 2222; FAX: +33 (1) 3923 2225

**Racal Systems Elettronica s.r.l.**

Strada 2-Palazzo C4, 20090 Milanofiori Assago, Milan, Italy  
Tel: +39 (0)2 5750 1796; FAX +39 (0)2 5750 1828

**Racal Elektronik System GmbH.**

Technologiepark Bergisch Gladbach, Friedrich-Ebert-Strasse, D-51429 Bergisch Gladbach, Germany  
Tel.: +49 2204 8442 00; FAX: +49 2204 8442 19

**Racal Australia Pty. Ltd.**

3 Powells Road, Brookvale, NSW 2100, Australia  
Tel: +612 9936 7000, FAX: +612 9936 7036

**Racal Electronics Pte. Ltd.**

26 Ayer Rajah Crescent, 04-06/07 Ayer Rajah Industrial Estate, Singapore 0513.  
Tel: +65 7792200, FAX: +65 7785400

**Racal Instruments, Ltd.**

Unit 5, 25F., Mega Trade Center, No 1, Mei Wan Road, Tsuen Wan, Hong Kong, PRC  
Tel: +852 2405 5500, FAX: +852 2416 4335

<http://www.racalstruments.com>



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## WARRANTY STATEMENT

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### **Duration of Warranty**

The warranty period for this Racal Instruments, Inc. hardware is one year, except software and firmware products designed for use with Racal Instruments, Inc. Hardware are warranted not to fail to execute their programming instructions due to defect in materials or workmanship for a period of ninety (90) days from the date of delivery to the initial end user.

### **Return of Product**

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## Chapter 5

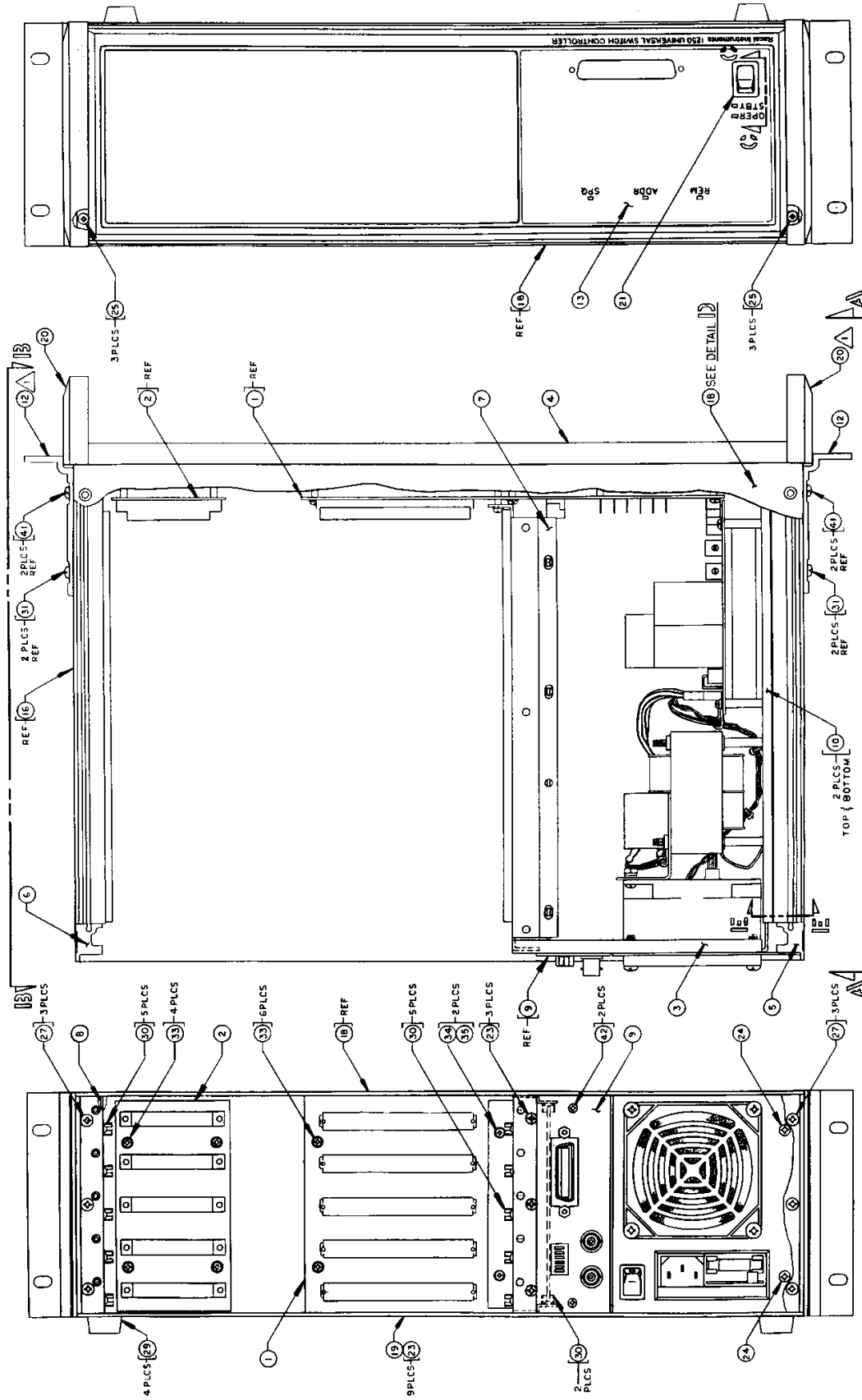
# CHASSIS DRAWINGS

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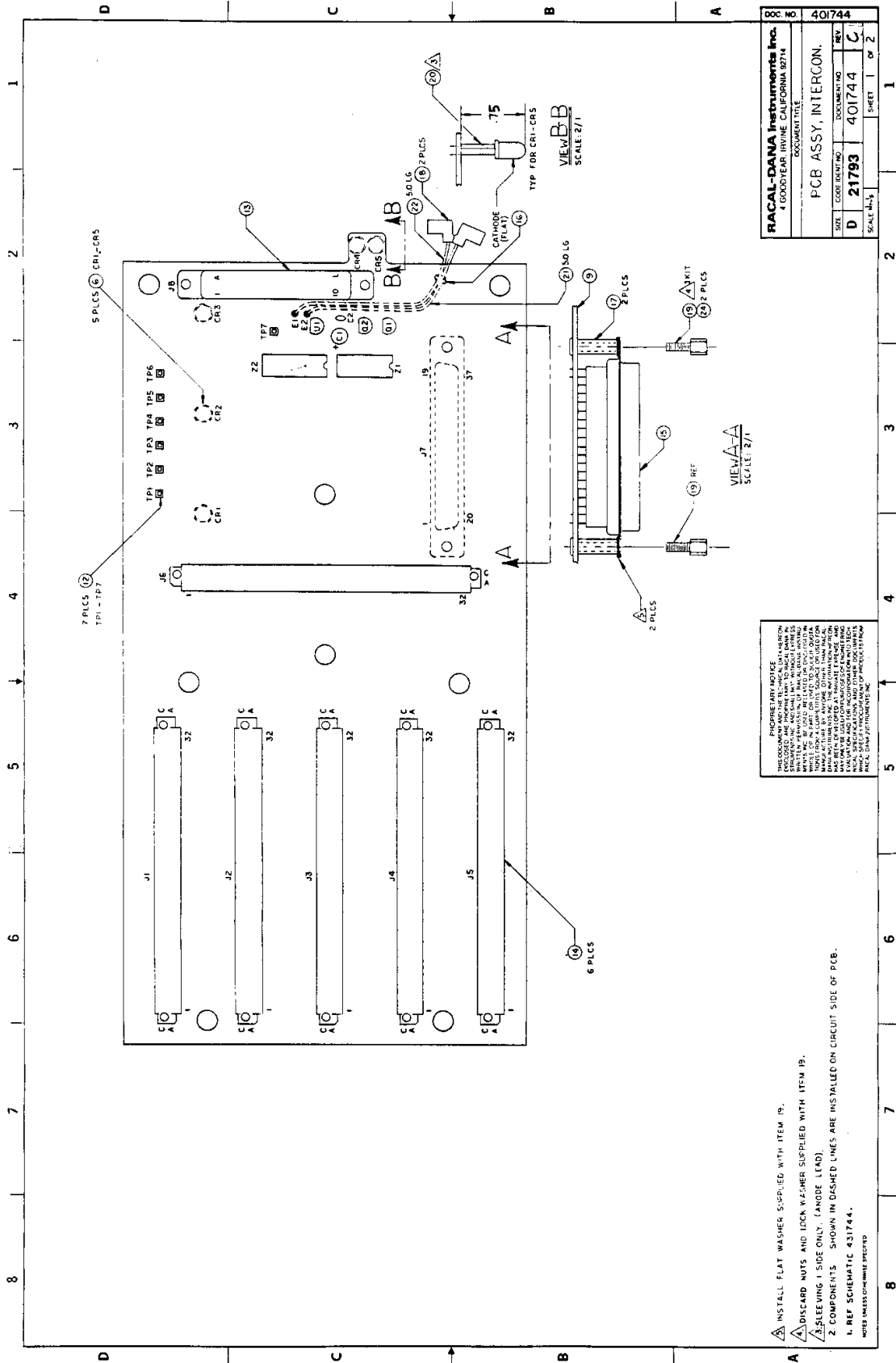
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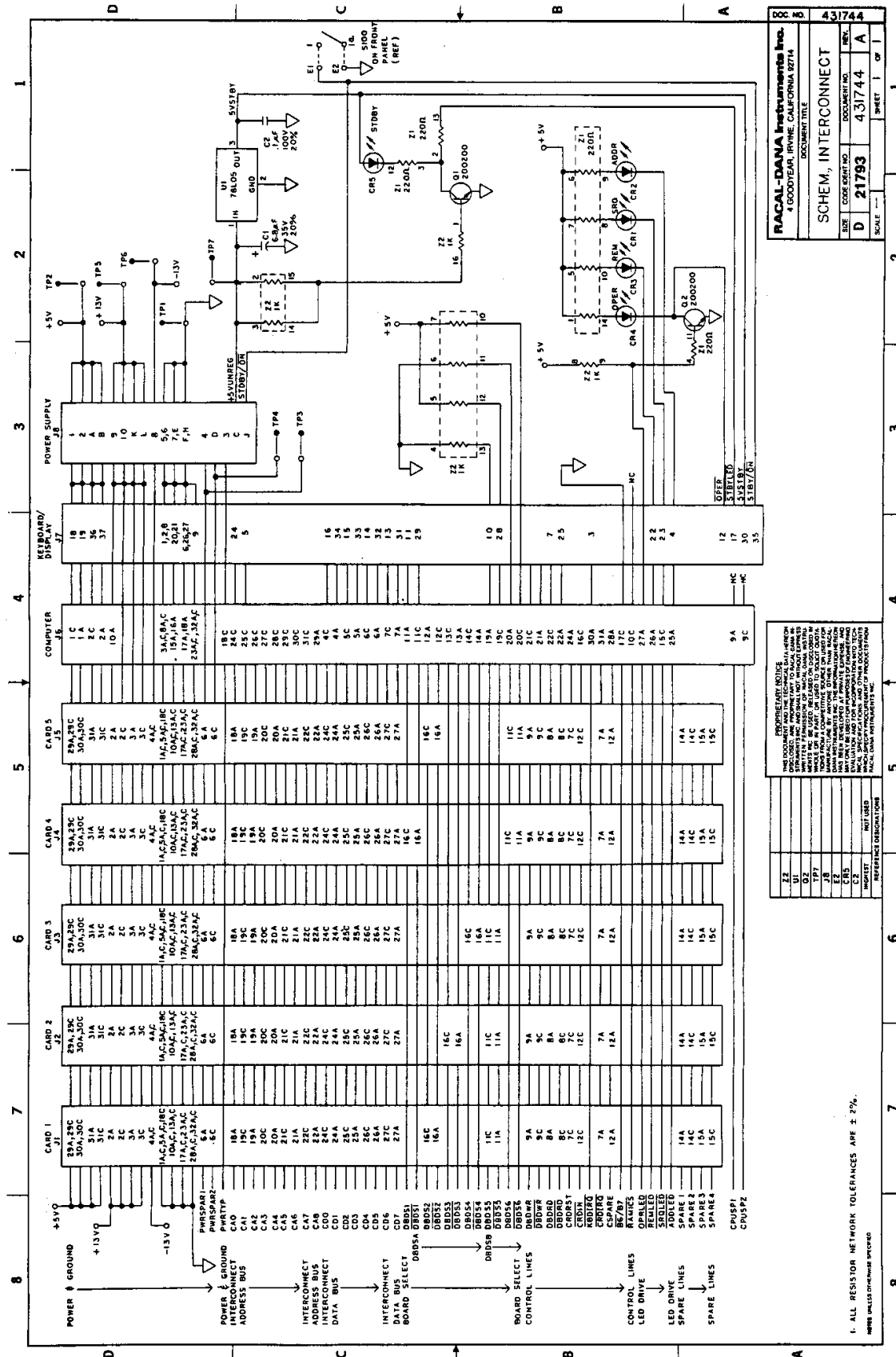




<b>RACAL-DANA Instruments Inc.</b> 4 GOODYEAR IRVINE CALIFORNIA 92714	
DOCUMENT TITLE <b>PCB ASSY, INTERCON.</b>	
DOC NO <b>401744</b>	REV <b>C</b>
SIZE <b>D</b>	DOCUMENT NO <b>401744</b>
SCALE <b>1/1</b>	SHEET <b>1</b> OF <b>2</b>

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- ▲ INSTALL FLAT WASHER SUPPLIED WITH ITEM 19.
  - ▲ DISCARD NUTS AND LOCK WASHER SUPPLIED WITH ITEM 19.
  - ▲ SLEEVEING 1 SIDE ONLY. (ANODE LEAD).
  - 2 COMPONENTS SHOWN IN DASHED LINES ARE INSTALLED ON CIRCUIT SIDE OF PCB.
  - 1. REF SCHEMATIC 431744.
- NOTE: UNLESS OTHERWISE SPECIFIED



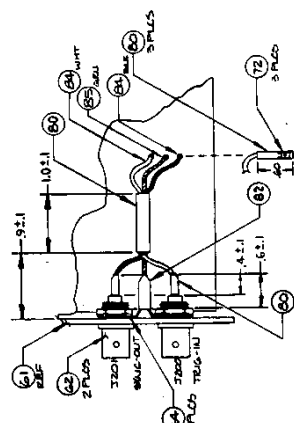
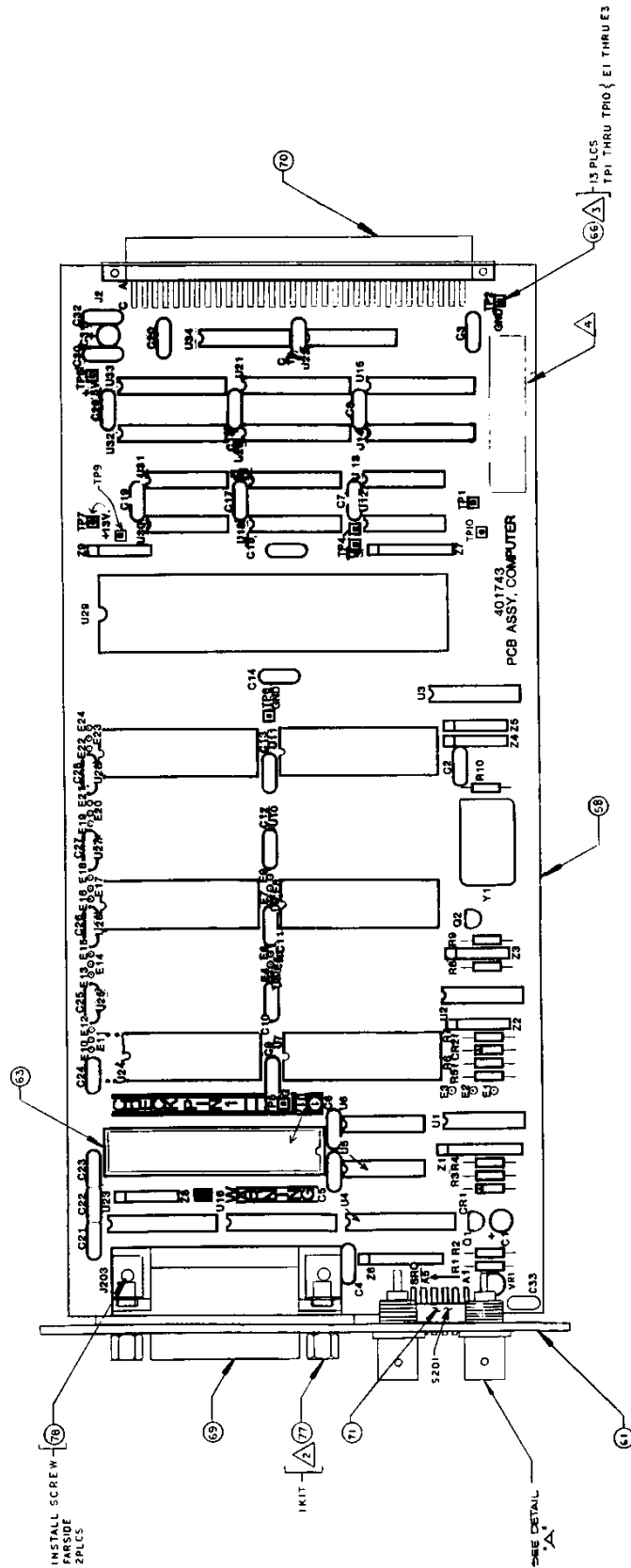
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DOCUMENT TITLE: SCHEM, INTERCONNECT  
 DOCUMENT NO: 431744  
 REV: A

DATE: 21793  
 SHEET: 1 OF 1

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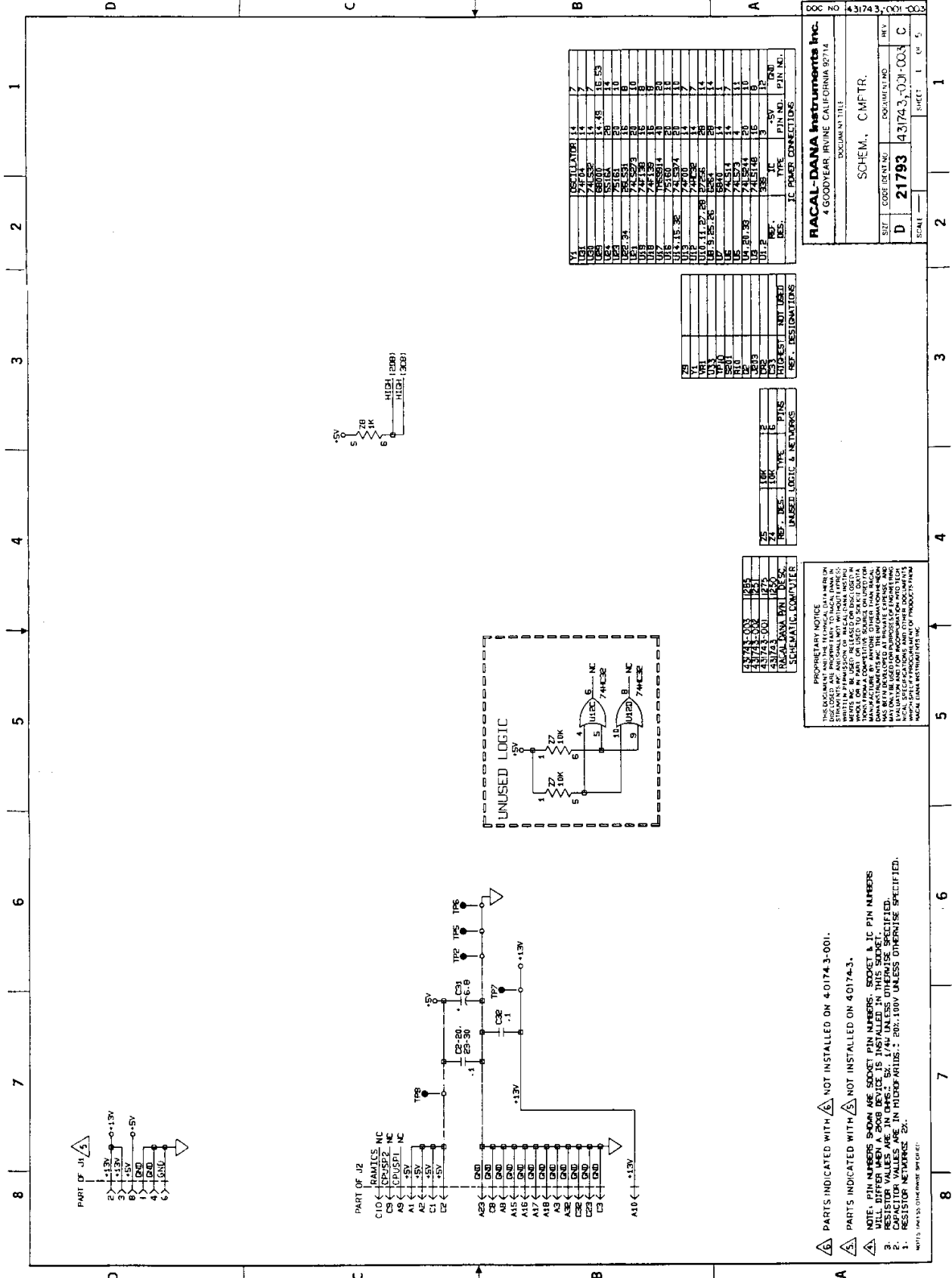
**WIRE LIST**

FROM	TO	CONDUCTOR TYPE, GAUGE, COLOR	PART NUMBER	WIRE LENGTH	REFERENCE
J201 (SING OUT)	E1	24 GA, STRND, TEF, BLK	500132	3"	TWIST PAIR
J200 (TRIG IN)	E3	24 GA, STRND, TEF, WHT	500132	3"	
J200 (WG)	J201 (WG)	---	---	---	
J201 (WG)	E2	24 GA, STRND, TEF, GRN	524555	3"	

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4 Goodyear St., Irvine, CA 92714-2002			
DOCUMENT TITLE			
<b>PCB ASSY, COMPUTER</b>			
SIZE	CODE ORIENT NO.	DOCUMENT NO.	REV.
D	21783	401743	F
SCALE 2:1			SHEET 1 OF 6

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- 1. INSTAMP RACAL INSTR SERIAL # APPROX. WHERE SHOWN COMPONENT SIDE.
  - 2. TRIM POST (ITEM 66) TO MAX. HEIGHT OF .25 ABOVE PCB.
  - 3. DISCARD NUTS (2) LOCKWASHERS (2) SUPPLIED WITH ITEM 77.
  - 4. REFERENCE SCHEMATIC 43174-3.
- NOTE: WIRE SIDE OF BOARD



DOC NO		431743-001	
REV		C	
SHEET		1 OF 5	
SCALE		1:1	
SHEET		1 OF 5	

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DOCUMENT TITLE  
SCHEM., CMFTR.

SIT	CODE	REV	NO	DOCUMENT NO	REV
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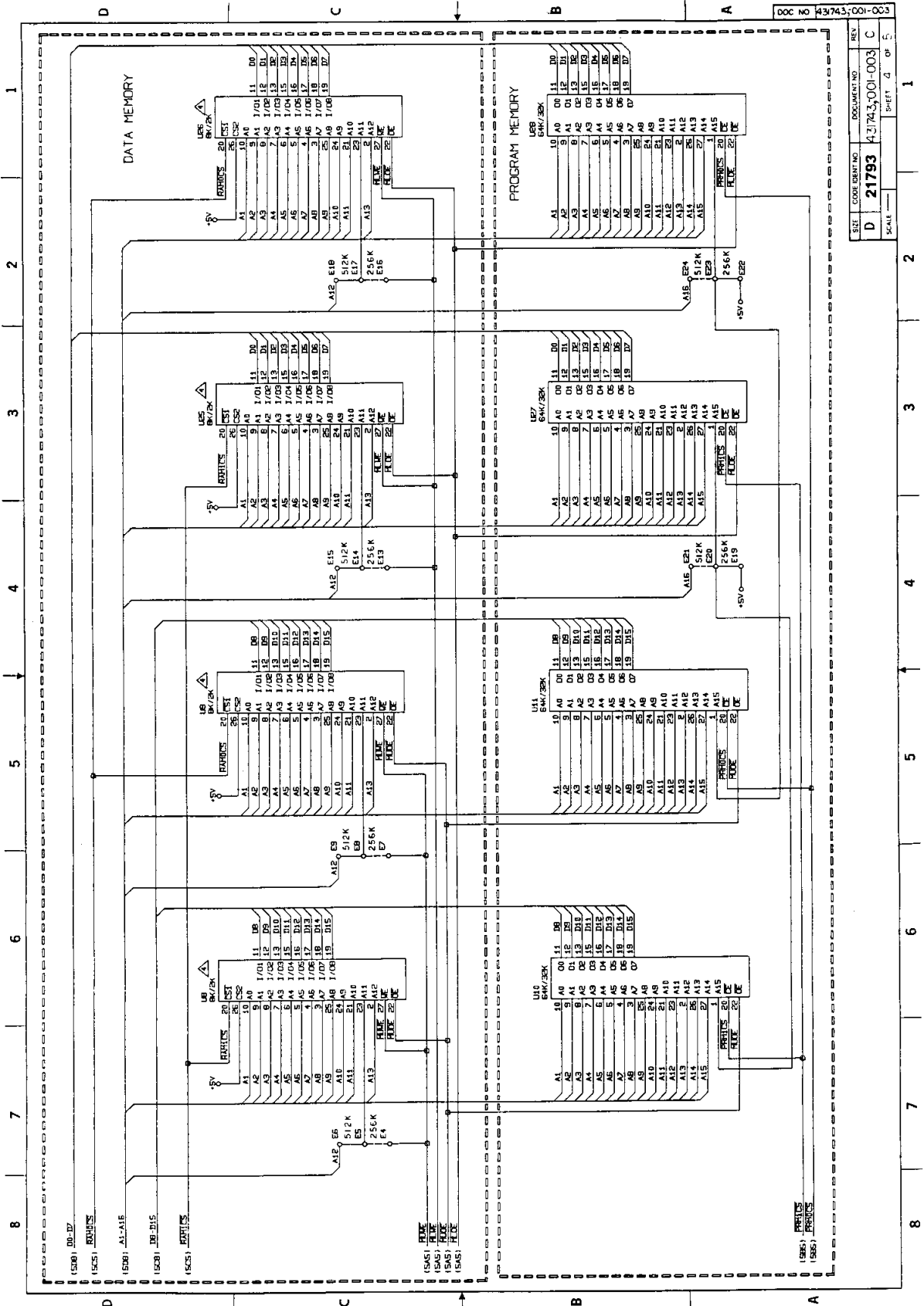
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3	74HC00	IC	2	
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7	74HC00	IC	2	
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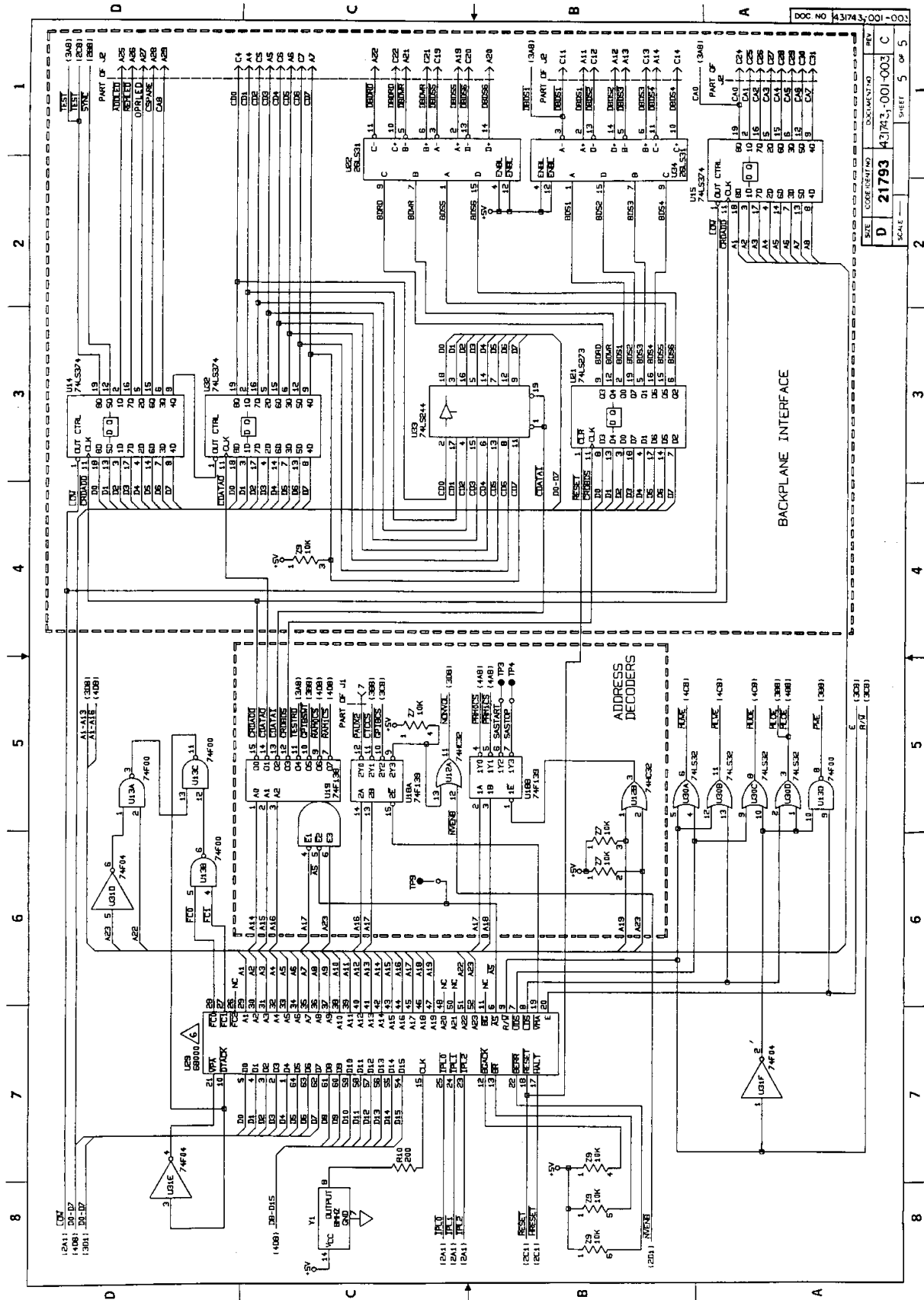
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- △ NOTE: PIN NUMBERS SHOWN ARE SOCKET PIN NUMBERS. SOCKET & IC PIN NUMBERS WILL DIFFER WHEN A 2008 DEVICE IS INSTALLED IN THIS SOCKET.
- △ RESISTOR VALUES ARE IN OHMS.; SZ. 1/4W UNLESS OTHERWISE SPECIFIED.
- △ RESISTOR VALUES ARE IN OHMS.; SZ. 1/4W UNLESS OTHERWISE SPECIFIED.
- △ RESISTOR VALUES ARE IN OHMS.; SZ. 1/4W UNLESS OTHERWISE SPECIFIED.
- △ RESISTOR VALUES ARE IN OHMS.; SZ. 1/4W UNLESS OTHERWISE SPECIFIED.

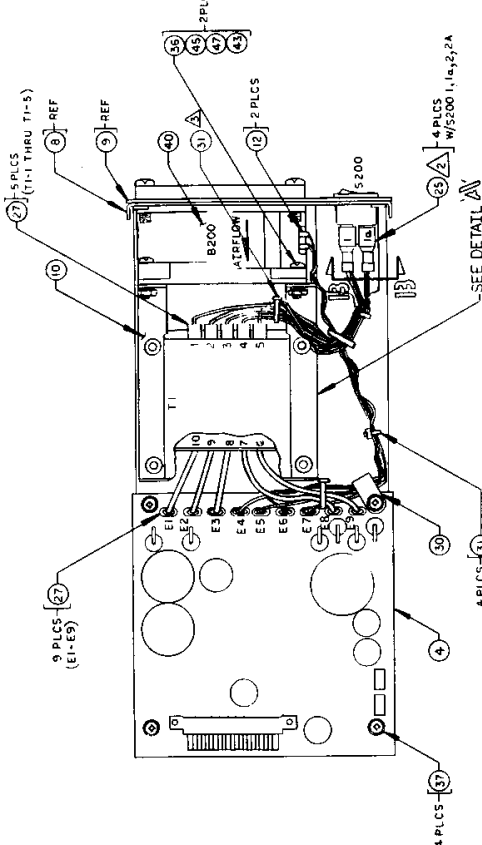
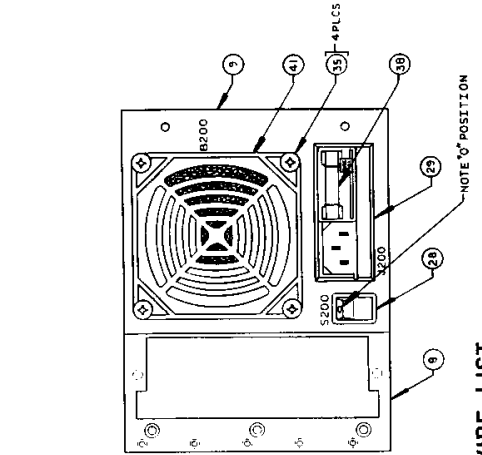
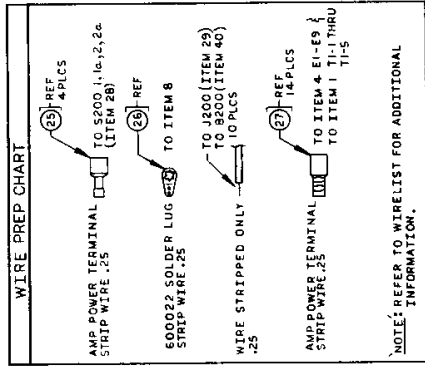






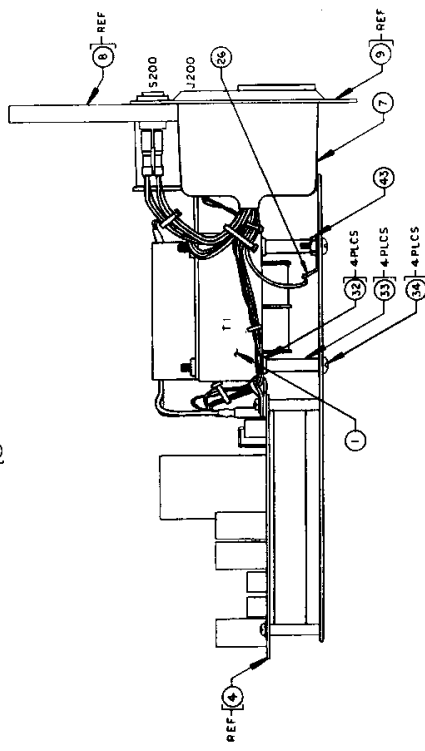






**WIRE LIST**

FROM	TO	CONDUCTOR TYPE, GAUGE, COLOR	PART NUMBER	WIRE LENGTH
B200	PRM SUPPLY ASSY (401742) E4	WHT TWISTED PAIR	500132	11.0"
B200	PRM SUPPLY ASSY (401742) E6	BLK PAIR	500025	5.5"
J200-B	S200-1	20GA, STRND, TEF, BLK	500233	5.0"
J200-J	S200-2	20GA, STRND, TEF, WHT	500229	5.5"
J200-L (BOTTOM)	S200-1a	20GA, STRND, TEF, BRN	500118	5.0"
J200-N (TOP)	S200-2a	20GA, STRND, TEF, BLU	500117	9.0"
J200-C	PRM SUPPLY ASSY (401742) E5	20GA, STRND, TEF, GRN	500230	8.0"
J200-E	PRM SUPPLY ASSY (401742) E7	18GA, STRND, TEF, GRN/YEL	500215	4.0"
J200-GND	600022 SOLDER, LLIG	20GA, STRND, TEF, YEL	500119	6.0"
J200-A	T1-4	20GA, STRND, TEF, GRN	500117	6.0"
J200-C	T1-5	20GA, STRND, TEF, RED	500116	6.5"
J200-D	T1-2	20GA, STRND, TEF, ORG	500230	6.0"
J200-E	T1-3	20GA, STRND, TEF, BRN	N/A	4.0"
J200-F	T1-1	20GA, STRND, TEF, GRN	N/A	4.0"
PRM SUPPLY ASSY (401742) E8	T1-6	TRANSFORMER ORG WIRE	N/A	3.0"
PRM SUPPLY ASSY (401742) E8	T1-7	TRANSFORMER BRN WIRE	N/A	3.0"
PRM SUPPLY ASSY (401742) E3	T1-8	TRANSFORMER RED WIRE	N/A	3.0"
PRM SUPPLY ASSY (401742) E2	T1-9	TRANSFORMER WHT WIRE	N/A	3.0"
PRM SUPPLY ASSY (401742) E1	T1-10	TRANSFORMER BLK WIRE	N/A	3.0"



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DOCUMENT TITLE  
**POWER SUPPLY ASSY**

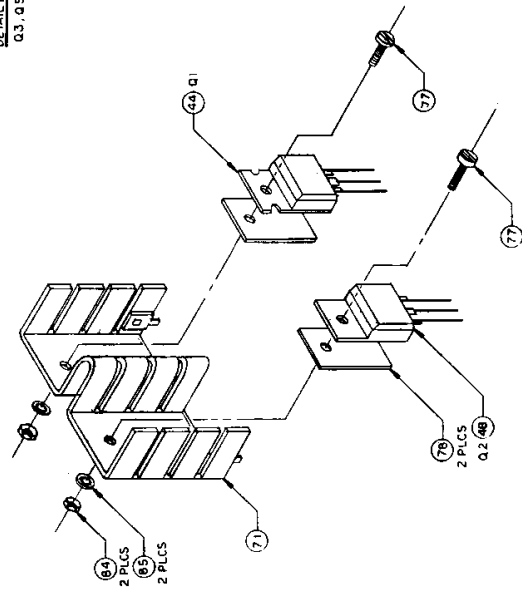
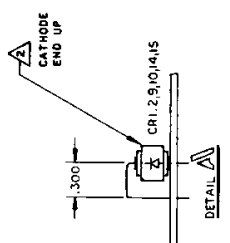
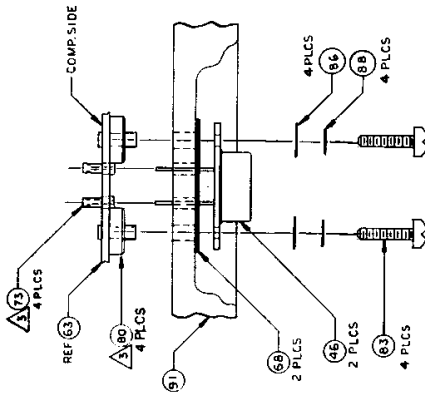
SIZE  
**D 21793**

CODE IDENT NO  
**404362**

REV  
**C**

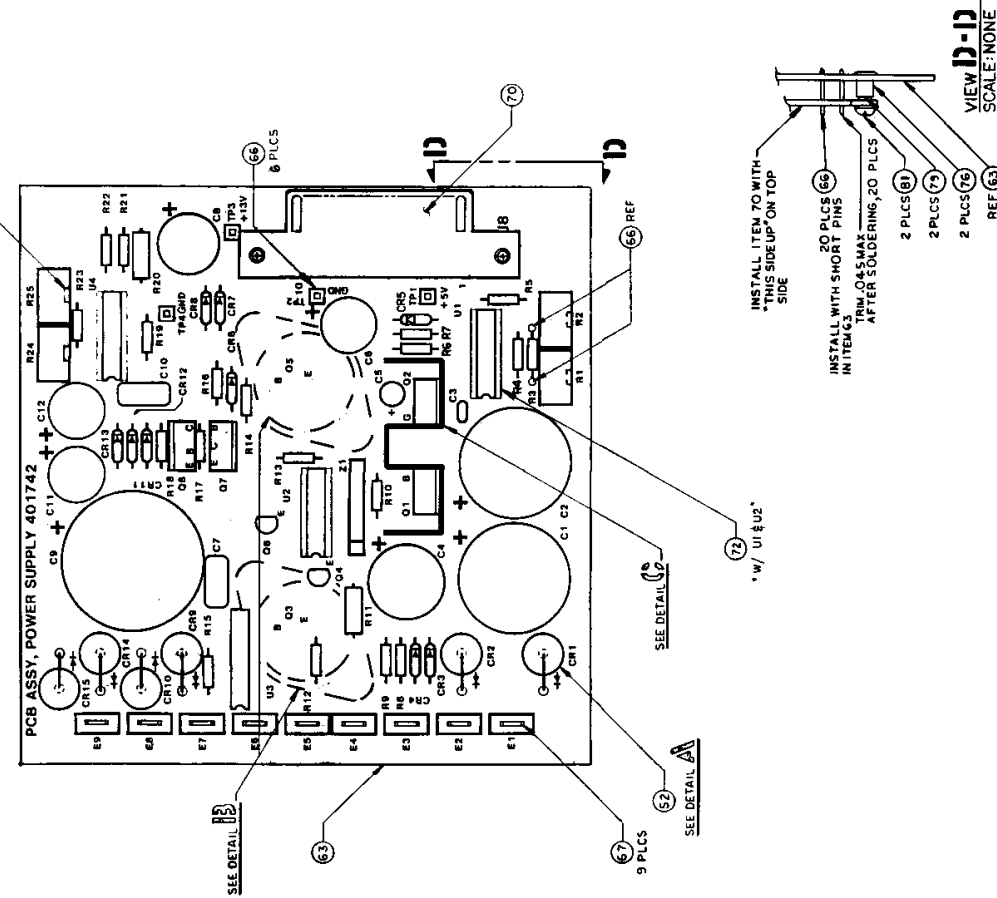
SCALE  
SHEET 1 of 4

- 1 TIE WRAP TO TRANSFORMER WIRING AS SHOWN, DRESS WIRES AWAY FROM FAN.
  - 2 MARK TERMINAL DESIGNATOR (1, 1a, 2, 2a) USING INK PEN
  - 3 STAMP SERIAL \* APPROXIMATELY WHERE SHOWN.
- NOTES: UNLESS OTHERWISE SPECIFIED



DETAIL 60

ADJ. LOCATION  
TYP. [R1, 2, 24, 25.]



INSTALL ITEM 70 WITH  
"THIS SIDE UP" ON TOP  
SIDE

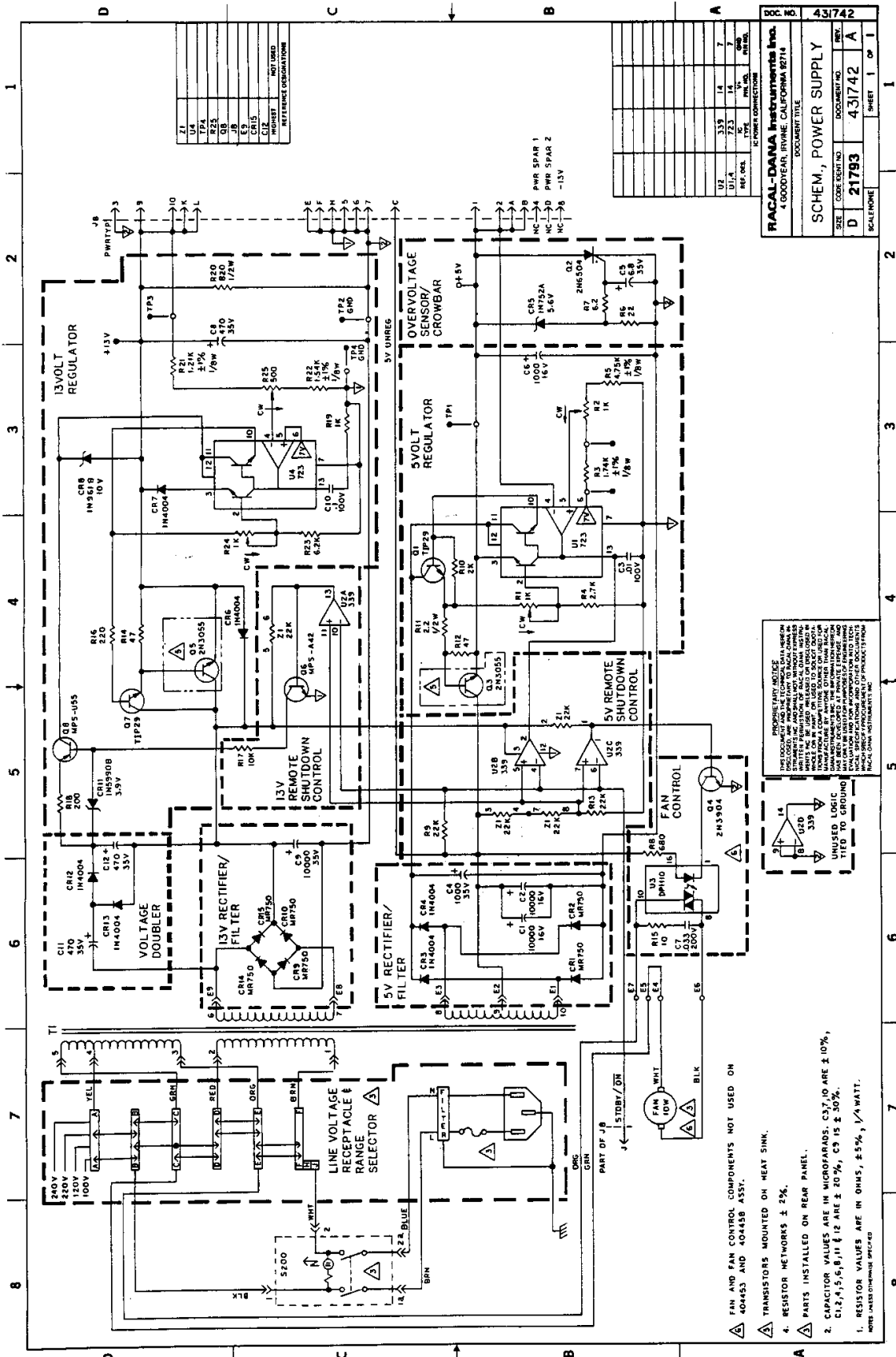
INSTALL WITH SHORT PINS  
IN ITEM C3  
IF ITEM C4 IS MAX  
AFTER SOLDERING 20 PLCS  
2 PLCS (81)  
2 PLCS (71)  
2 PLCS (75)  
REF (63)

VIEW D-D  
SCALE: NONE

<b>Racal Instruments, Inc.</b> 4 Goodyear St., Irvine, CA, 92718-2002	
DOCUMENT TITLE	
PCB ASSY, POWER SUPPLY	DOCUMENT NO.
D 21793	401742
REL. C	SHEET 1 OF 5

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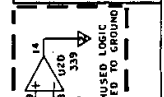
⚠ THESE COMPONENTS MUST BE INSTALLED FLUSH TO BOARD SURFACE.  
 ⚠ SOME DIODES HAVE A SCHEMATIC SYMBOL ON THE SIDE, AS SHOWN, OTHERS HAVE A POLARITY BAND AT THE CATHODE END.  
 L. REF. SCHEM. 431742  
 NOTES UNLESS OTHERWISE SPECIFIED



DOC. NO.	431742
ISSUE	1
DATE	10/74
SCALE	1:1
SHEET	1 OF 1
REV.	A
DOC. TITLE	SCHEM., POWER SUPPLY
DOC. NO.	431742
REV.	A
SCALE	1:1
SHEET	1 OF 1

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UNUSED LOGIC  
 THIS LOGIC IS NOT USED IN THIS CIRCUIT.

FAN AND FAN CONTROL COMPONENTS NOT USED ON 40453 AND 40458 A331.

- 1. RESISTOR VALUES ARE IN OHMS, ±5%, 1/4 WATT.
- 2. CAPACITOR VALUES ARE IN MICROFARADS. C3,7,10 ARE ±10%.
- 3. CAPACITOR VALUES ARE IN MICROFARADS. C1,2,4,5,6,8,11,12 ARE ±20%, C9 IS ±30%.
- 4. RESISTOR NETWORKS ±2%.
- 5. TRANSISTORS MOUNTED ON HEAT SINK.
- 6. PARTS INSTALLED ON REAR PANEL.

NOTES: (SEE DIMENSION SPECIFICATIONS)

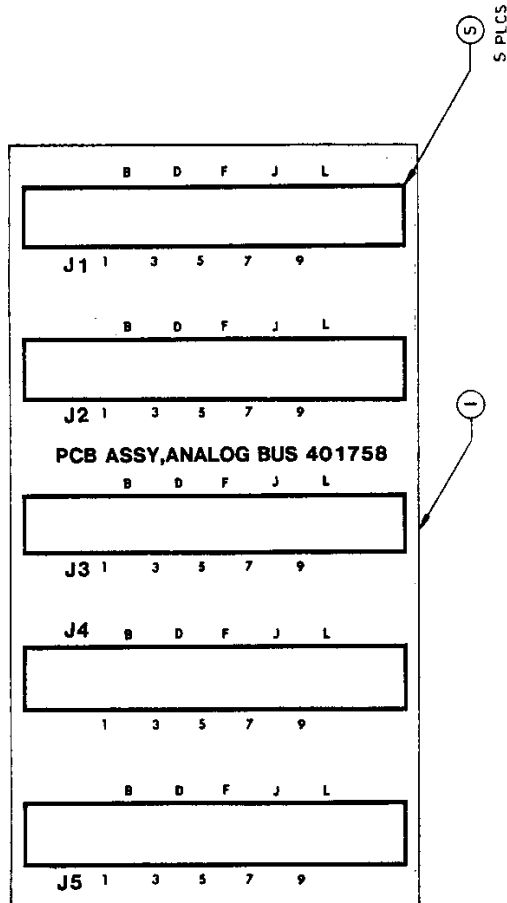
DOC NO 401758

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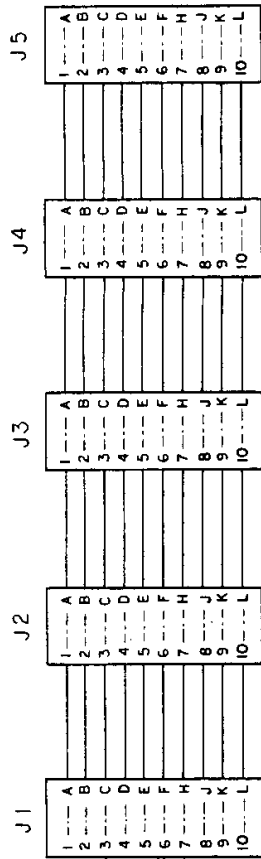
DOCUMENT TITLE  
**PCB ASSY, ANALOG BUS**

SIZE	CODE	REV
C	21793	401758
SCALE	NONE	SHEET 1 OF 2



2. J1-J5 MUST BE INSTALLED AS SHOWN. NOTE ORIENTATION OF PIN 1  
 1. REF. SCHEMATIC 431758  
 NOTES: UNLESS OTHERWISE SPECIFIED

DOC NO 43175B



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DOCUMENT TITLE

SCHEM, ANALOG BUS

SIZE	CODE	REV
C	21793	431758
SCALE	NO	1 OF 1

NOTES: UNLESS OTHERWISE SPECIFIED

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## Chapter 6

**MODULE DRAWINGS**

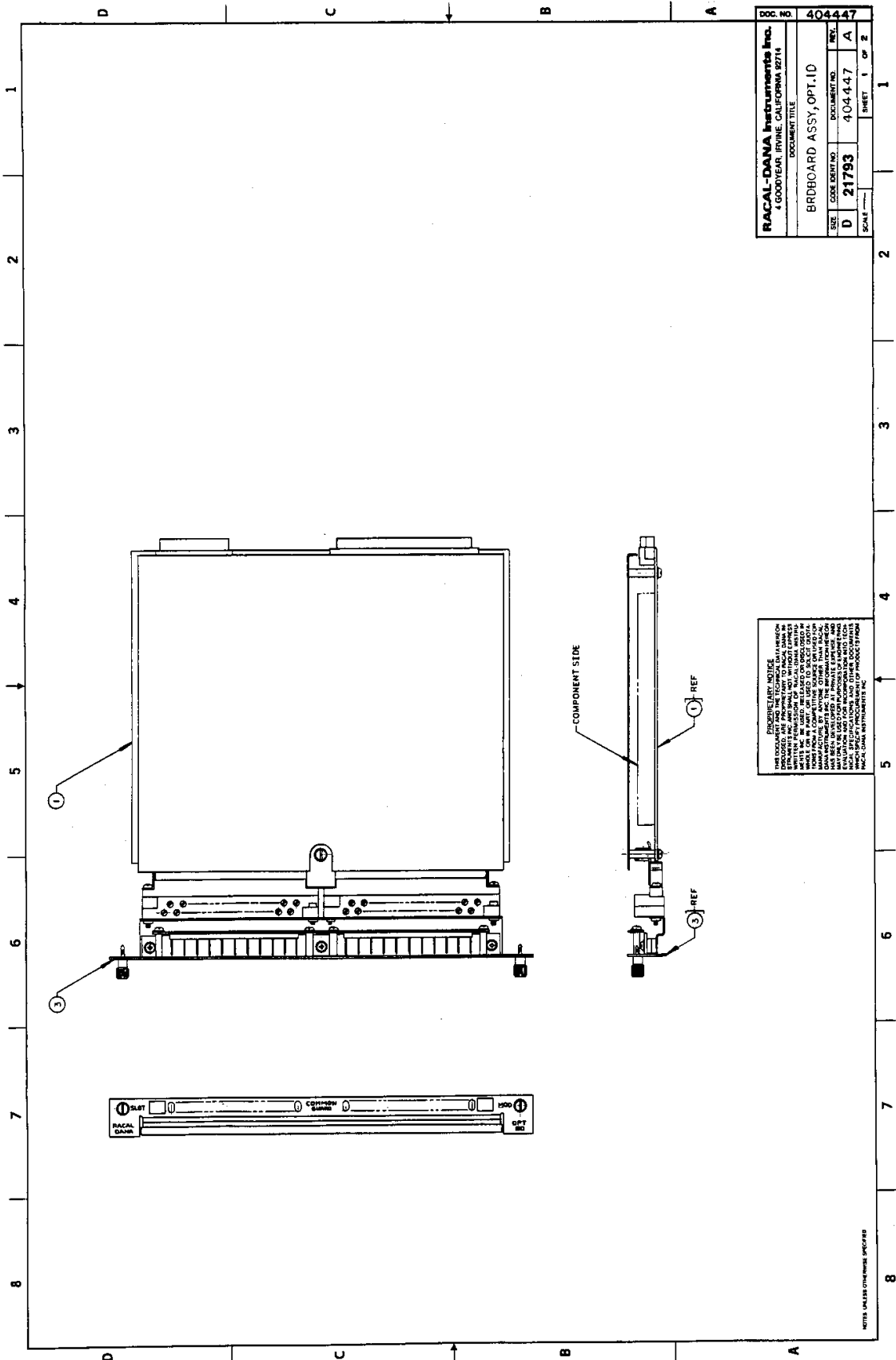
404447	Option 10, Breadboard Assembly.....	6-5
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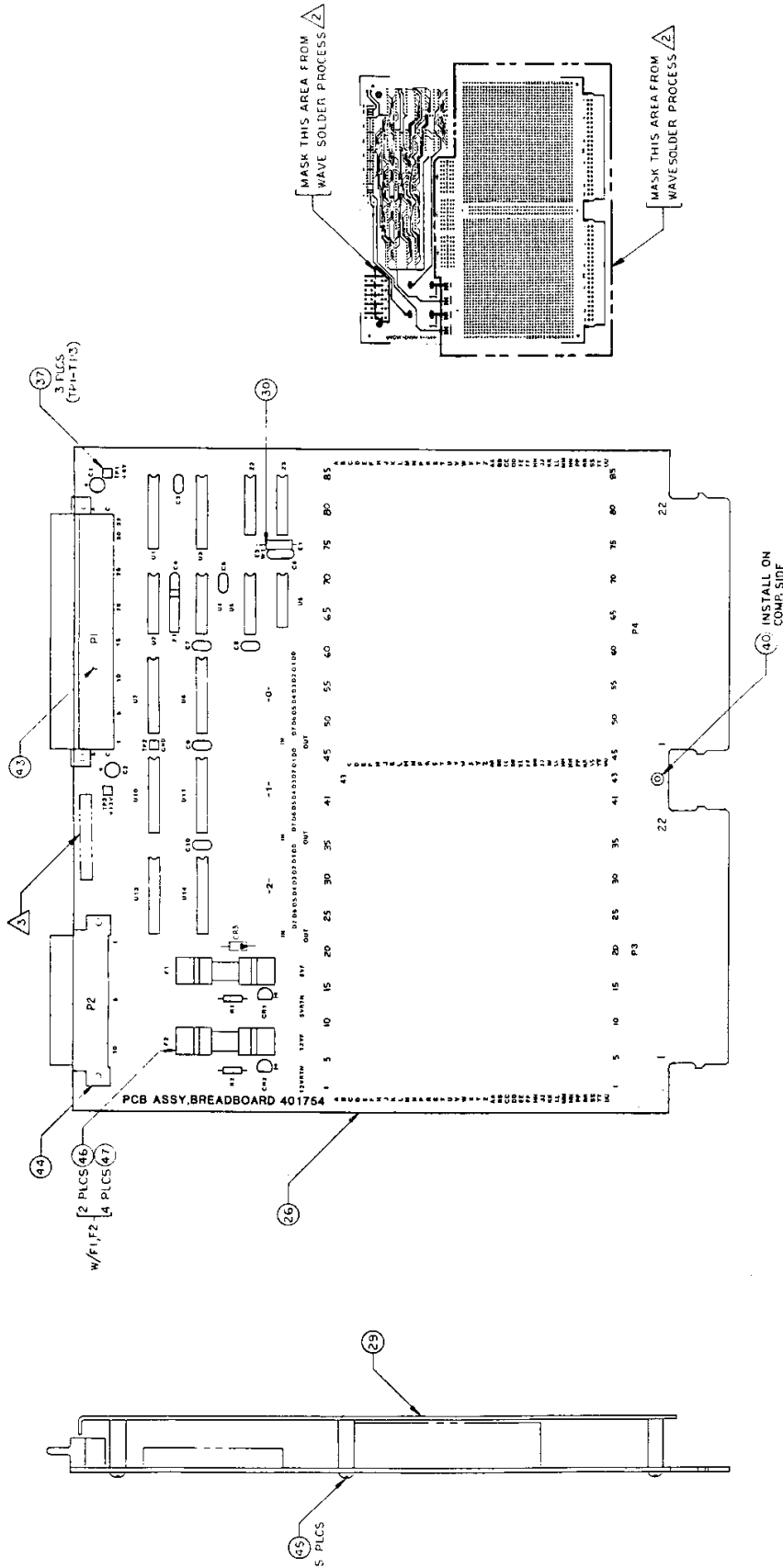
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1 GOOD YEAR IRVINE CALIFORNIA 92714		REV	A
DOCUMENT TITLE		BRD BOARD ASSY, OPT. ID	
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404447	A
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 6. SEE OTHER DRAWINGS FOR DIMENSIONS AND TOLERANCES.  
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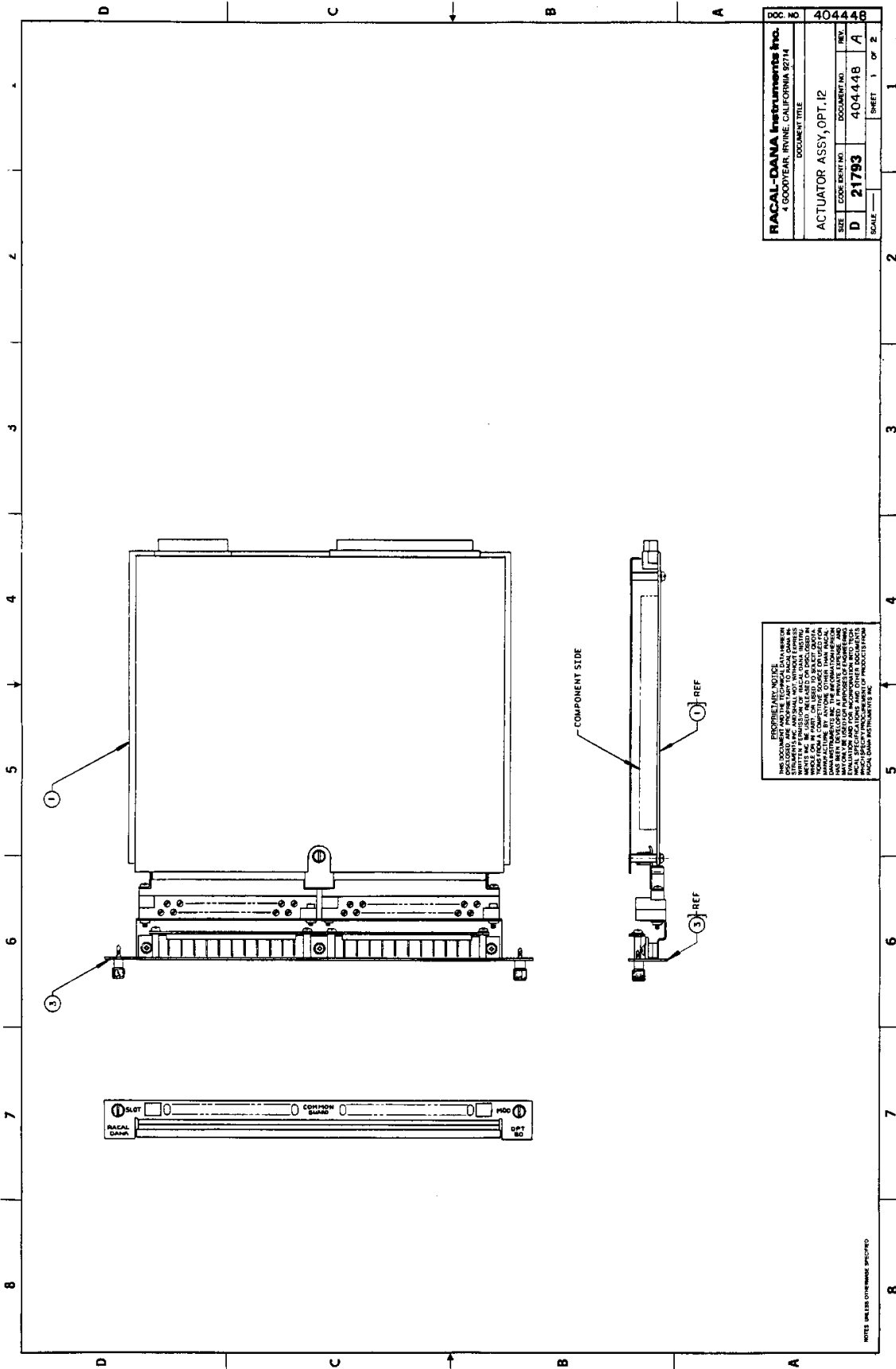
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- △ INK STAMP SERIAL NUMBER ON CIRCUIT SIDE IN INDICATED AREA.
- ② HOLES IN THIS AREA MUST BE FREE OF SOLDER.



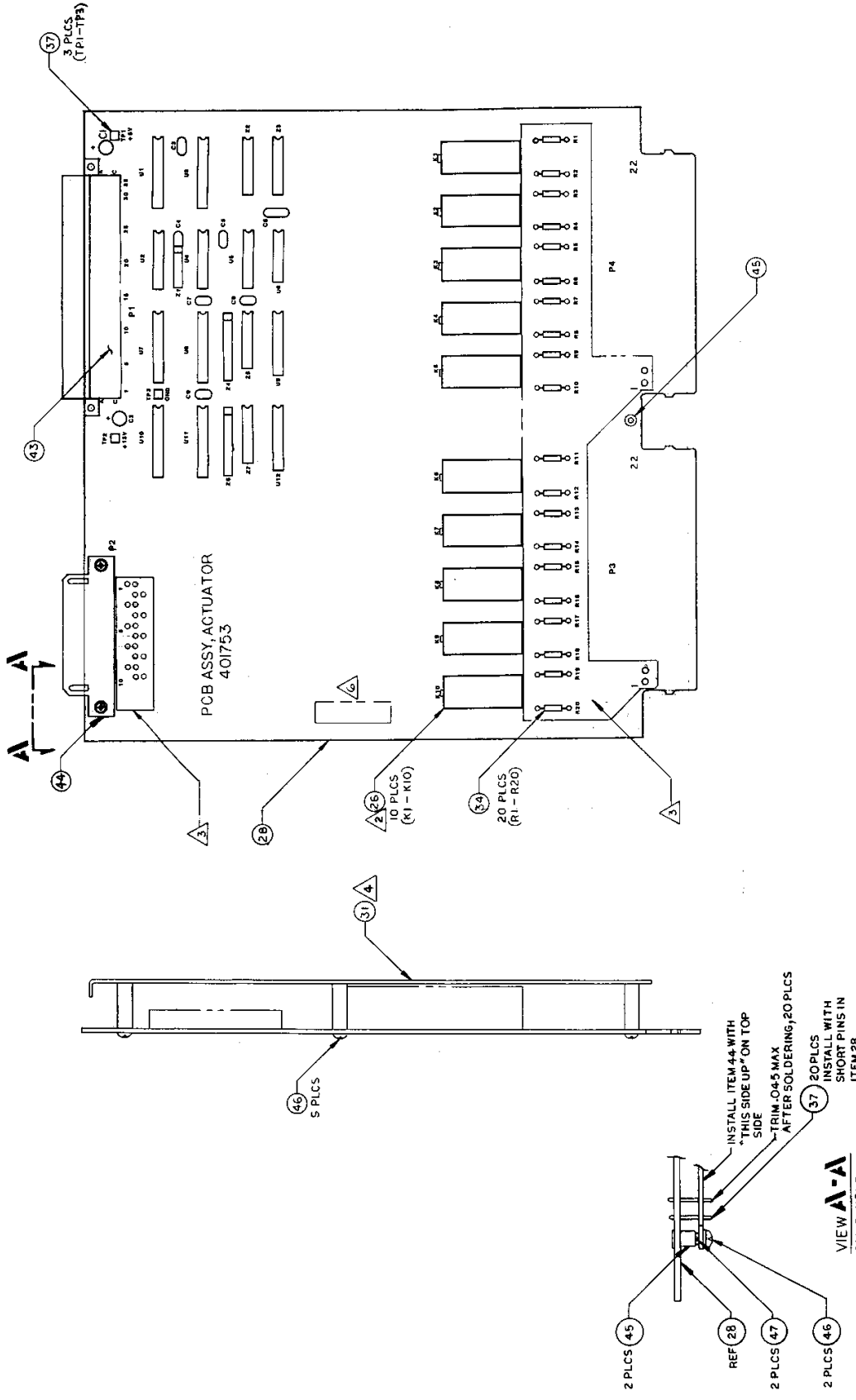




RACAL-DANA Instruments Inc.		DOC NO	40444B
4 GOODYEAR, IRVINE, CALIFORNIA 92714		REV	A
DOCUMENT TITLE		DOCUMENT NO.	40444B
SIZE	CODE BOOK NO.	21793	SCALE
ACTUATOR ASSY, OPT. IZ		SHEET 1 OF 2	

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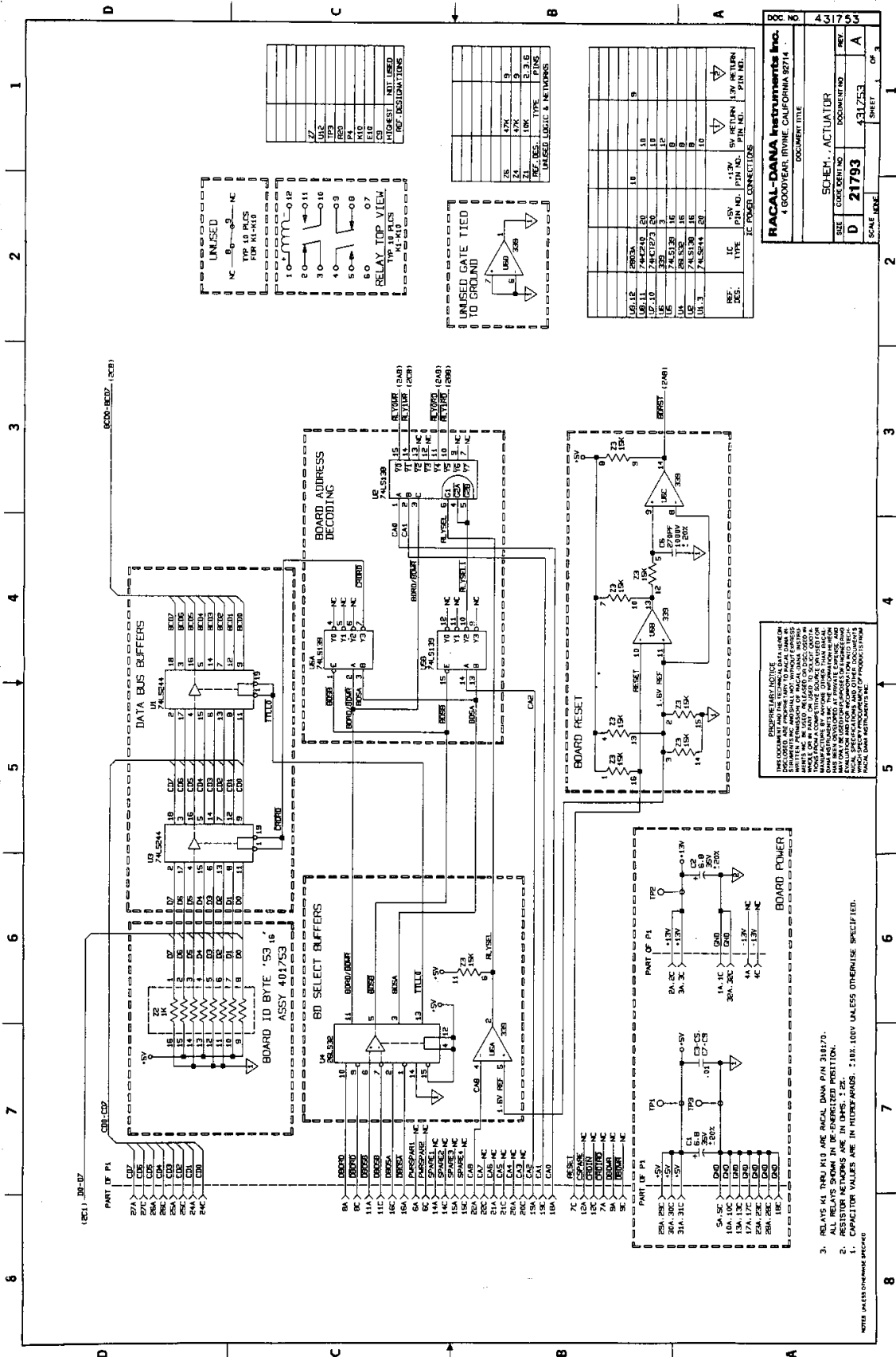


<b>RACAL Instruments, Inc.</b> 4 Goodyear St., Irvine, CA, 92718-2062	
DOCUMENT TITLE	
PCB ASSY, ACTUATOR	
SIZE	REV.
D	D
CODE IDENT NO.	DOCUMENT NO.
21793	401753
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- 5. INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.
  - 5. PCB HANDLING TO CONFORM TO R/D 900325.
  - 4. INSTALL SHIELD AFTER BOARD TEST.
  - 3. HOLES IN THIS AREA MUST BE FREE TO SOLDER.
  - 1. REF. SCHEMATIC 431753
- NOTE: UNLESS OTHERWISE SPECIFIED

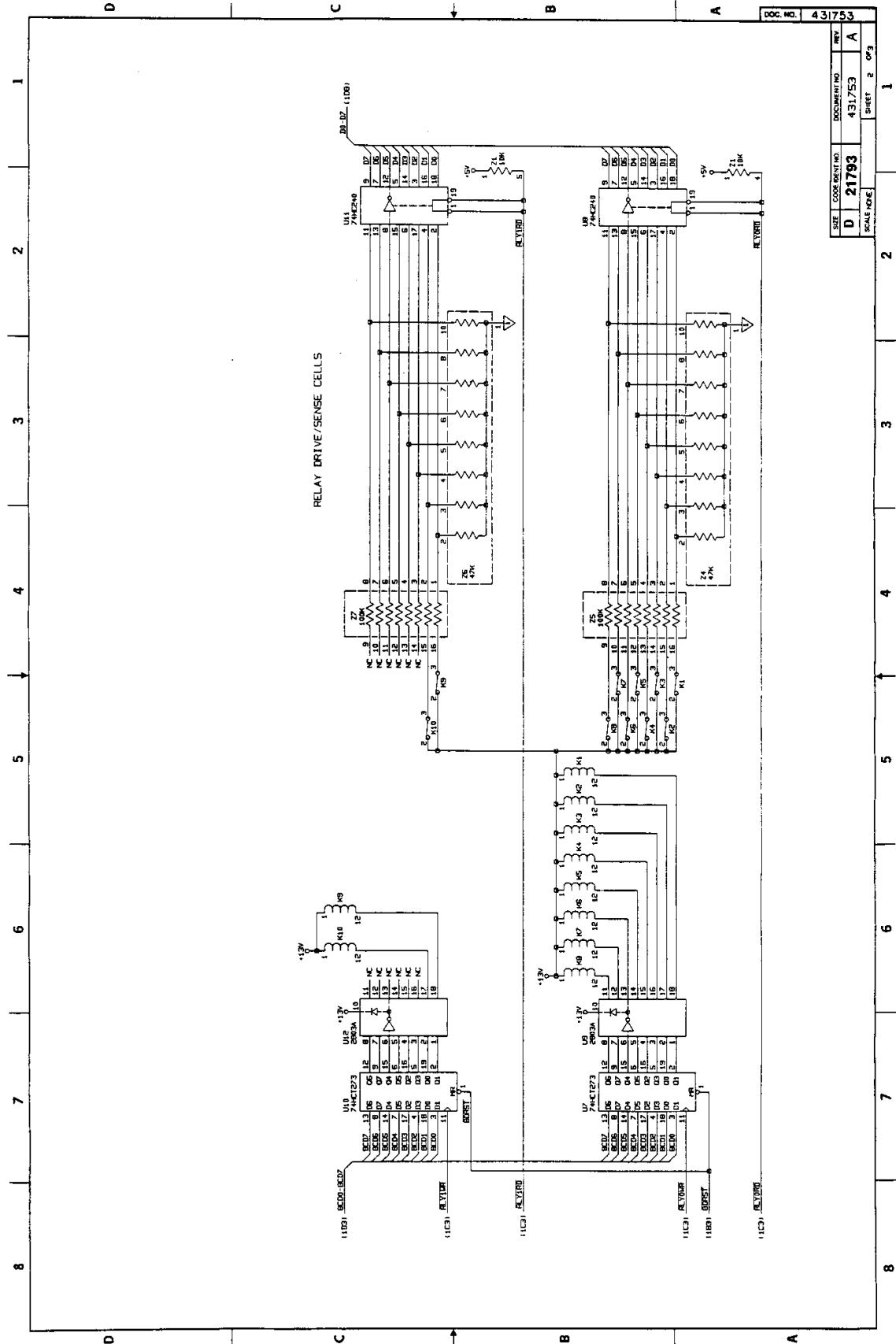




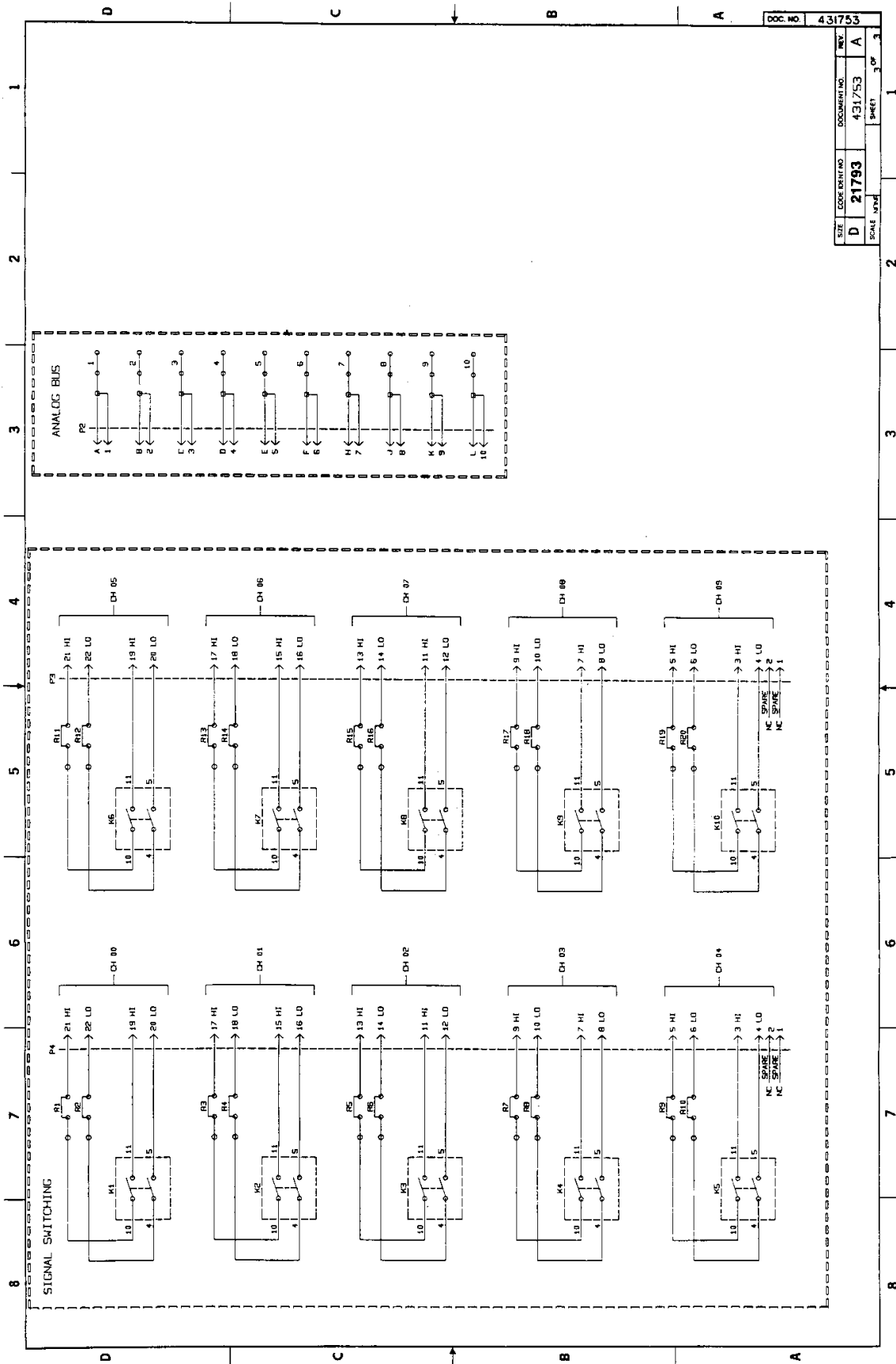
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- RELAYS K1 THRU K10 ARE FRACAL-DANA P/N 388273.
- ALL RELAYS SHOW THE DEFERRED POSITION.
- ALL RESISTOR VALUES ARE IN OHMS UNLESS OTHERWISE SPECIFIED.
- CAPACITOR VALUES ARE IN MICROFARADS. 10K, 100V UNLESS OTHERWISE SPECIFIED.

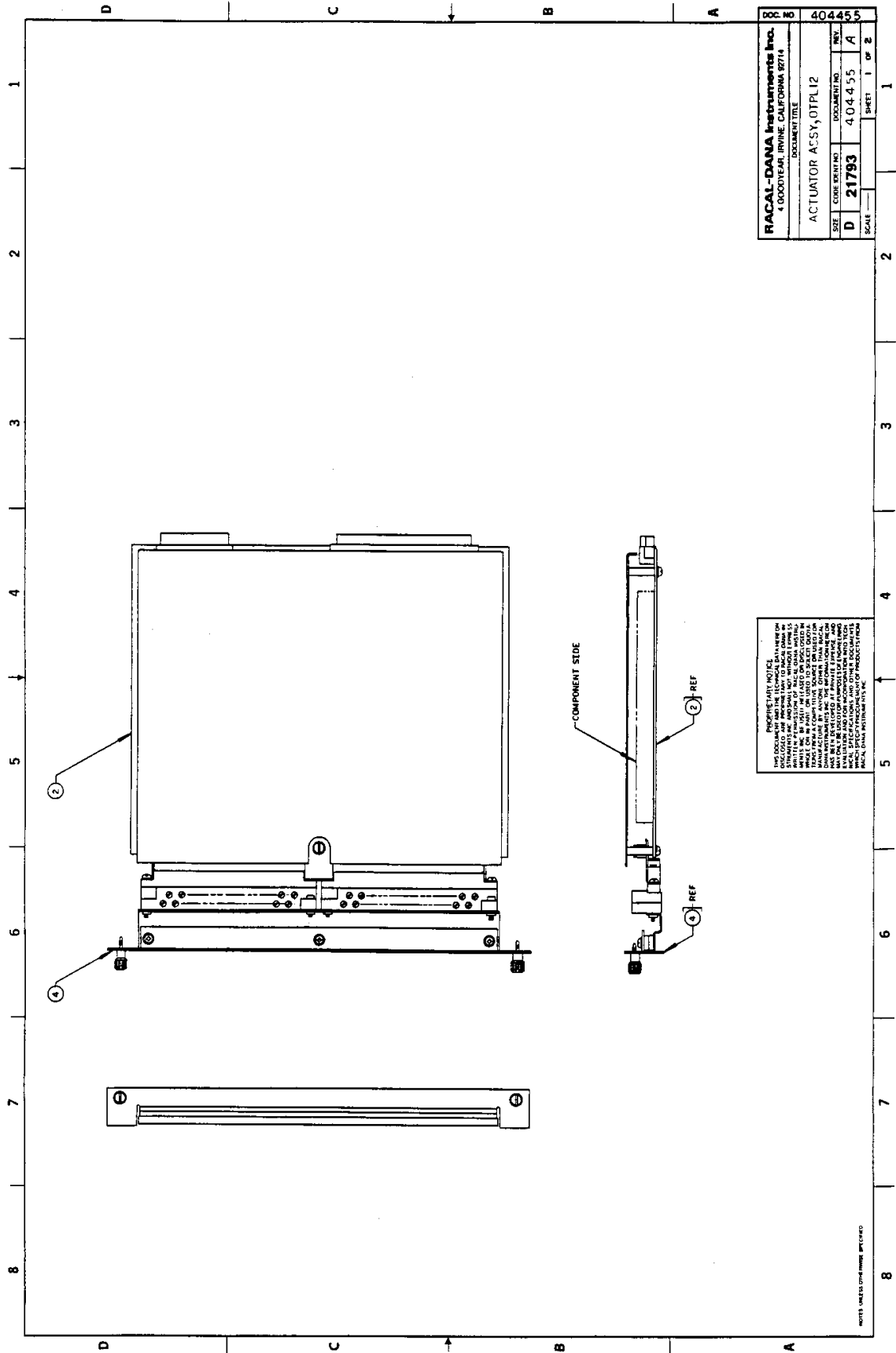
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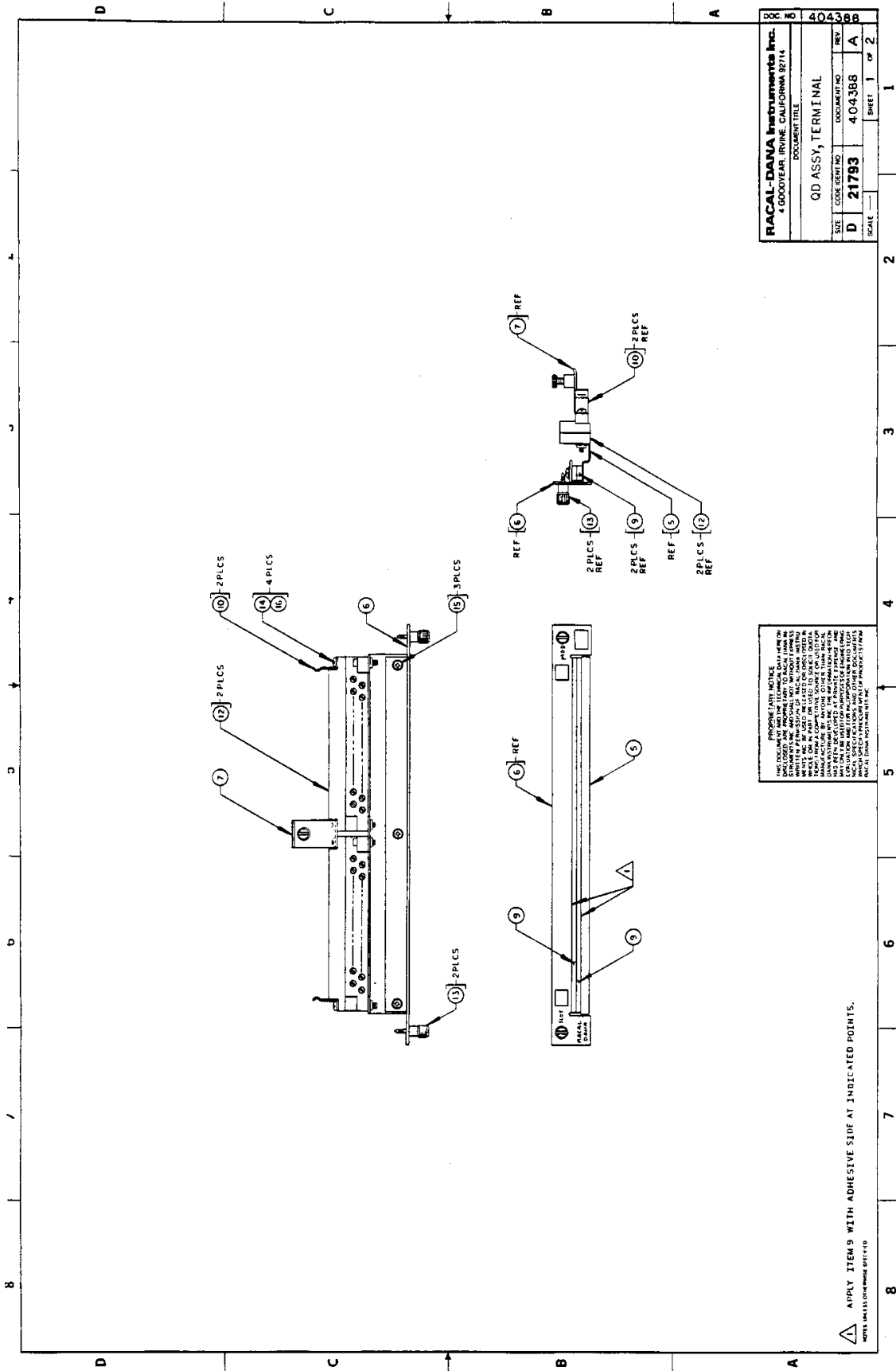


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CODE	21793
SCALE	1:1
REVISION	A
SHEET	2 OF 3



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CODE	21793
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REVISION	A
SCALE	1/8"
SHEET	3 OF 3

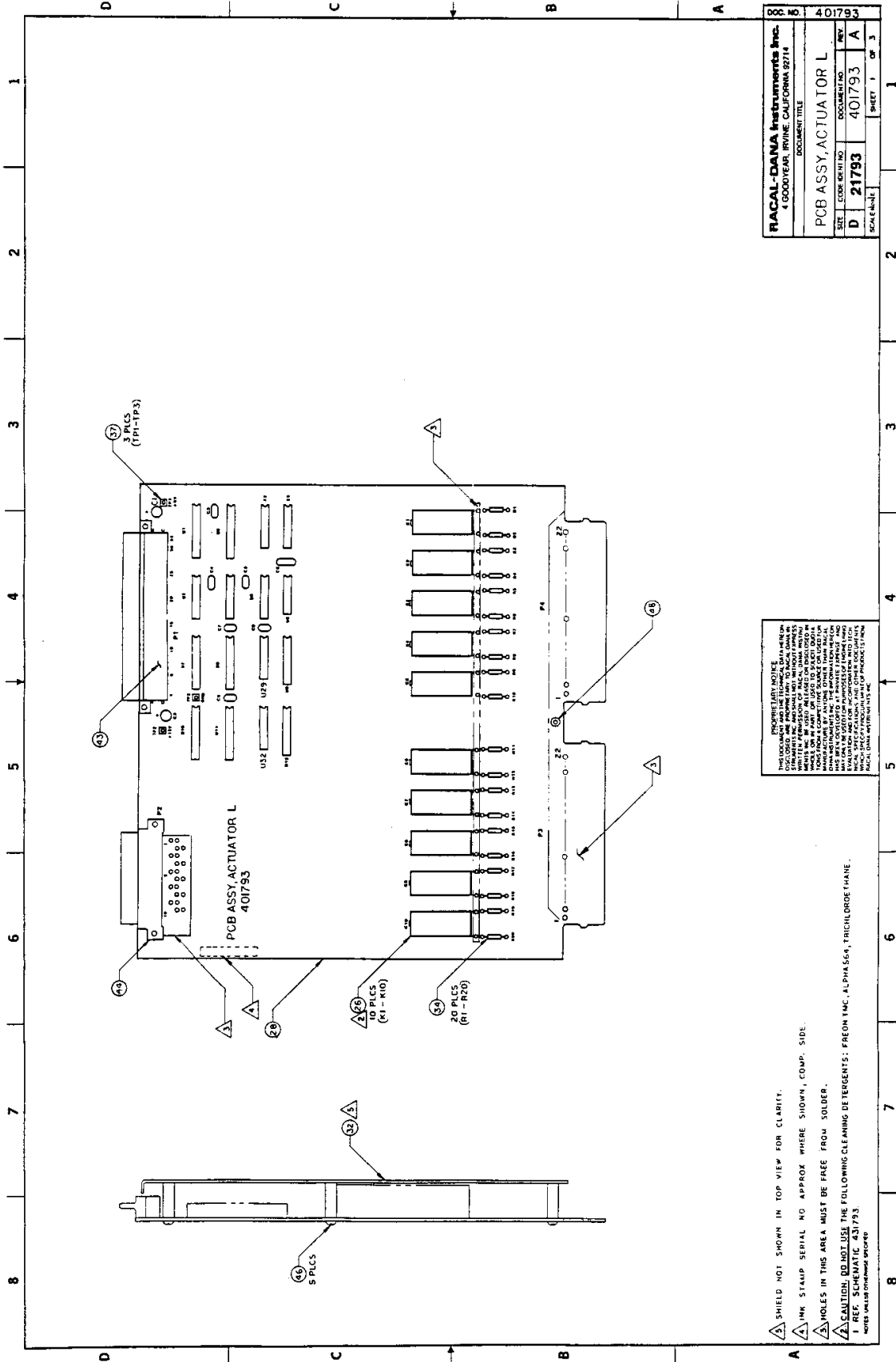


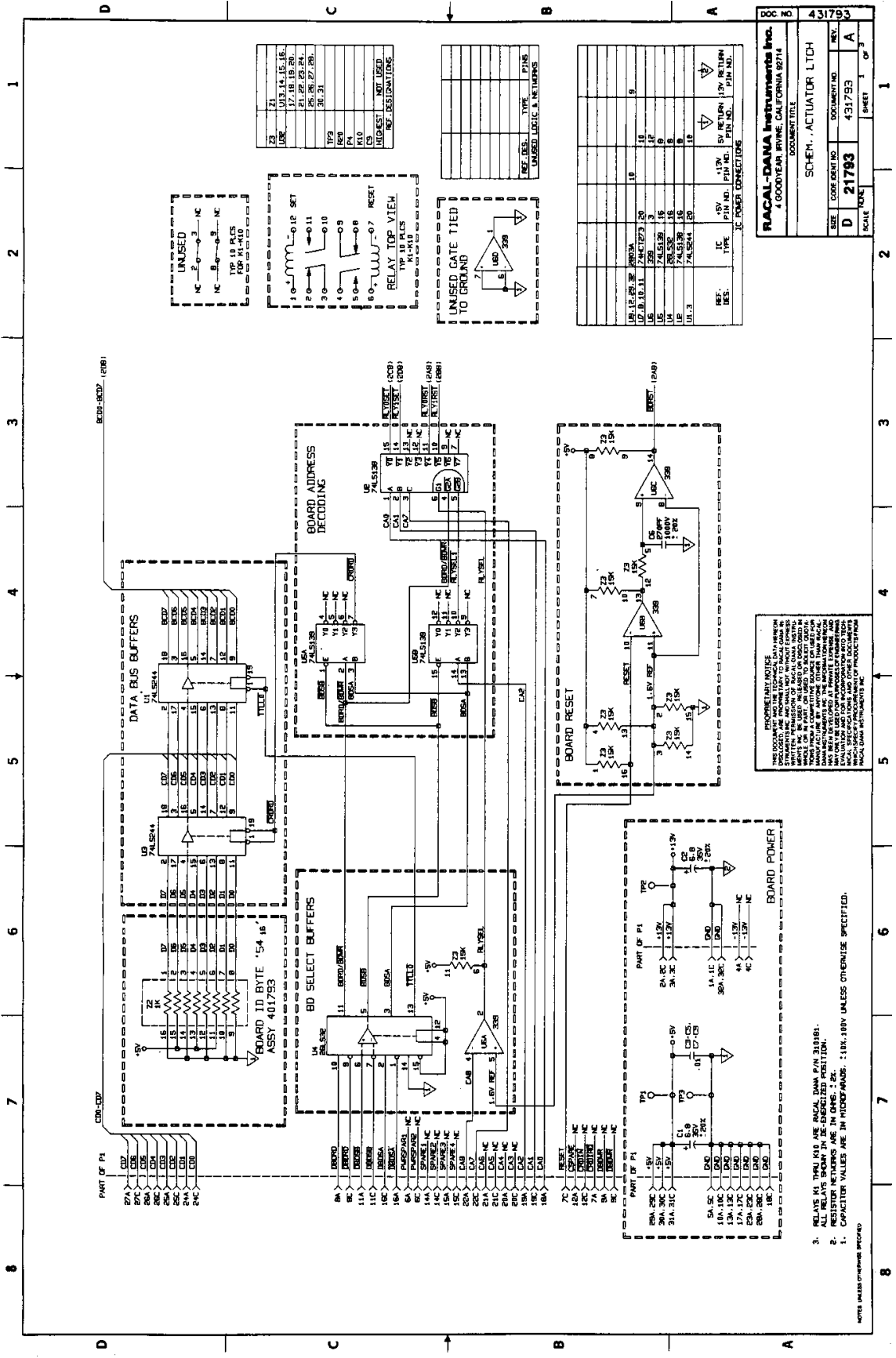


RACAL-DANA Instruments Inc.		DOC NO	404388
4 GOODPASTER IRVINE, CALIFORNIA 92714		REV	
DOCUMENT TITLE		REV	
QD ASSY, TERMINAL		A	
SITE	DOC IDENT NO	DOCUMENT NO	REV
D	21793	404388	A
SCALE	SHEET 1		OF 2

PROVIDE PART NUMBER FOR EACH CALLOUT AND APPROVE PART TO EACH DRAWING. PART NUMBERING SHALL BE IN ACCORDANCE WITH THE DRAWING WHICH IS THE SOURCE OF THE PART. DO NOT INCLUDE PART NUMBERING IN THE DRAWING UNLESS IT IS SPECIFICALLY INDICATED BY ANOTHER DRAWING. PART NUMBERING SHALL BE IN ACCORDANCE WITH THE DRAWING WHICH IS THE SOURCE OF THE PART. DO NOT INCLUDE PART NUMBERING IN THE DRAWING UNLESS IT IS SPECIFICALLY INDICATED BY ANOTHER DRAWING.

APPLY ITEM 9 WITH ADHESIVE SIDE AT INDICATED POINTS.  
 NOTES: 1. SEE OTHER DRAWING 404388-10

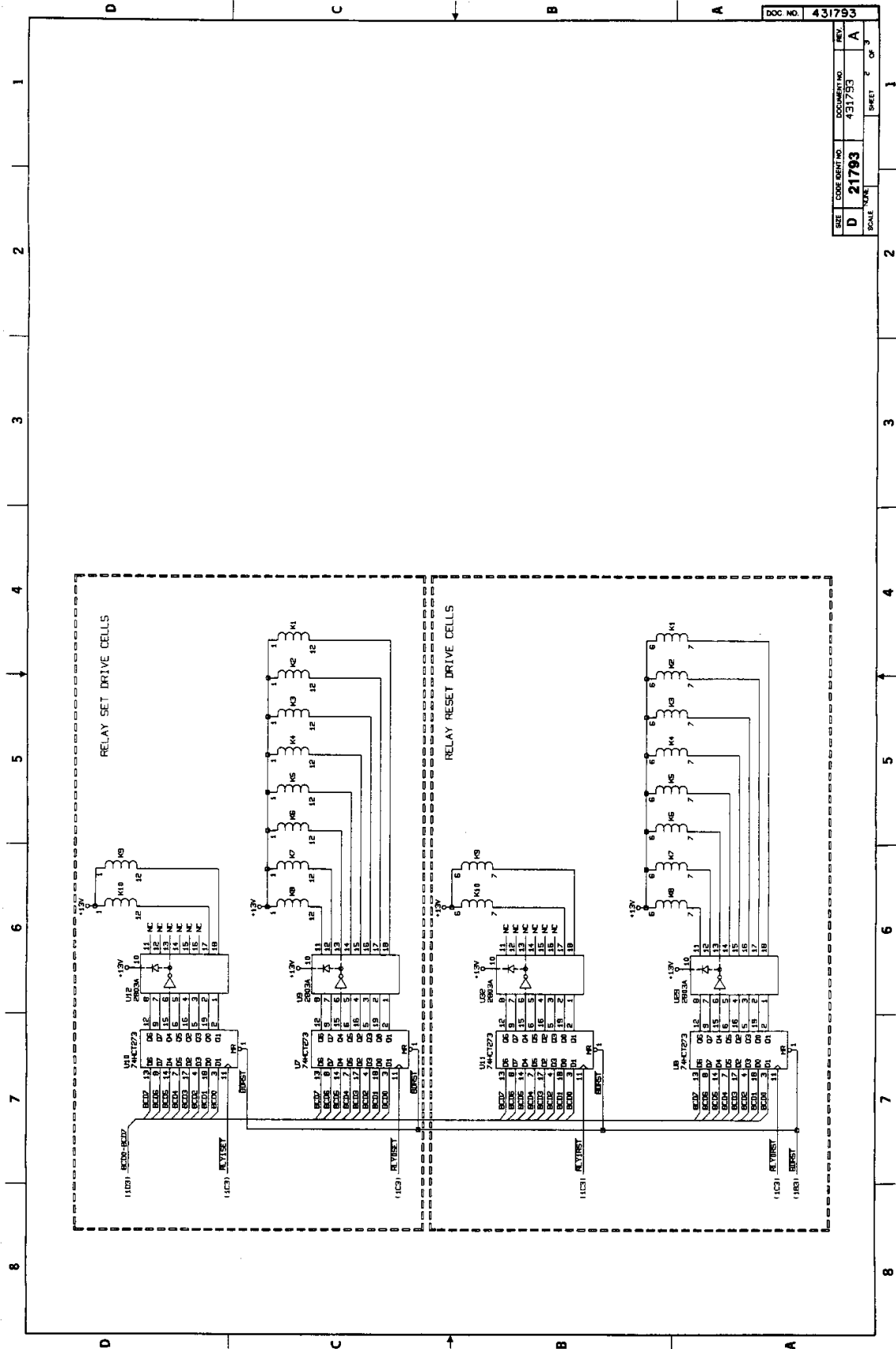




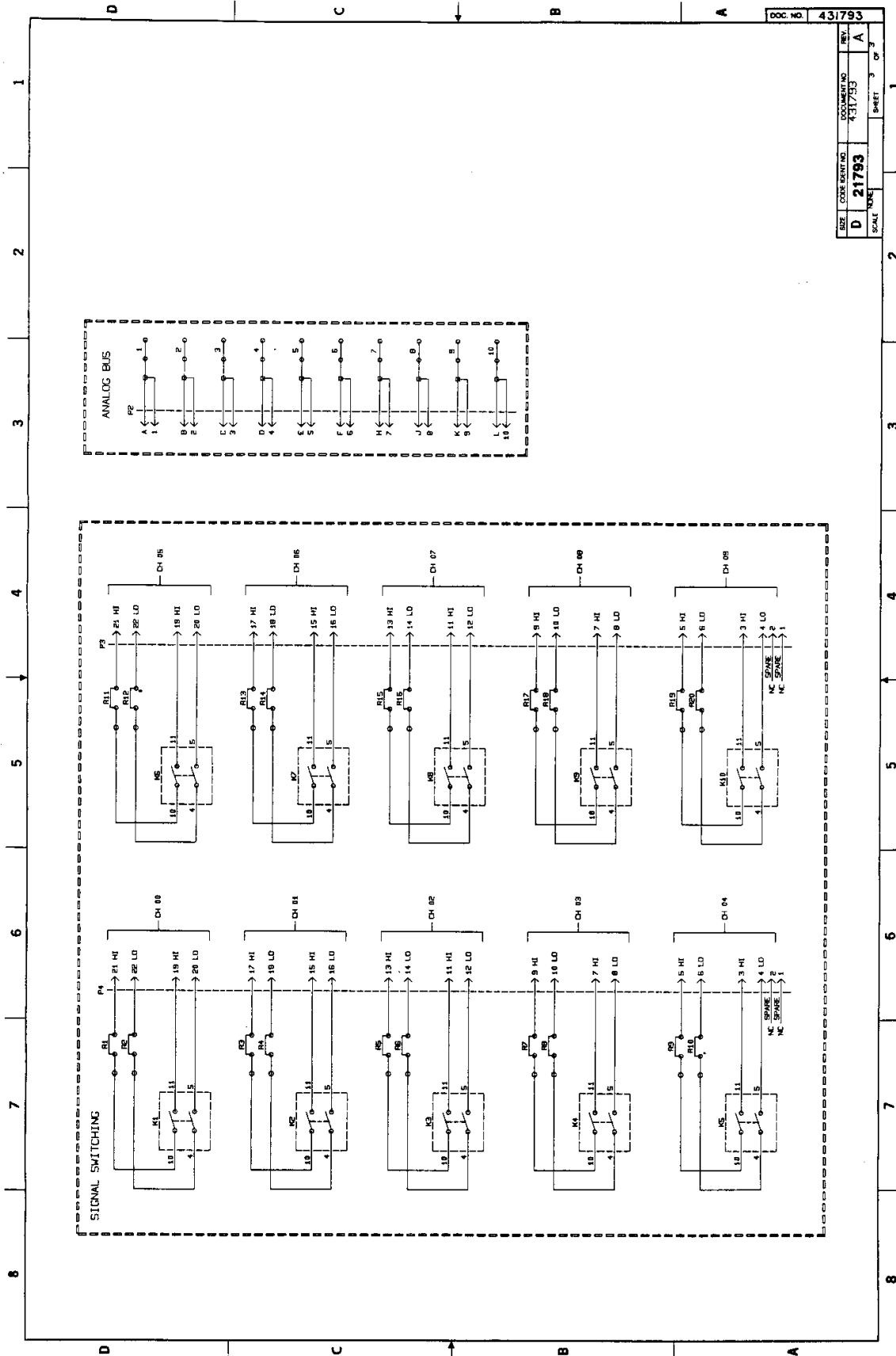
DOC NO. 431793  
 RACAL-DANA Instruments Inc.  
 1 GOODYEAR BLVD. CALIFORNIA 92114  
 DOCUMENT TITLE: SCHEM. ACTUATOR LITCH  
 SIZE: D CORE IDENT NO: 21793 DOCUMENT NO: 431793 REV: A  
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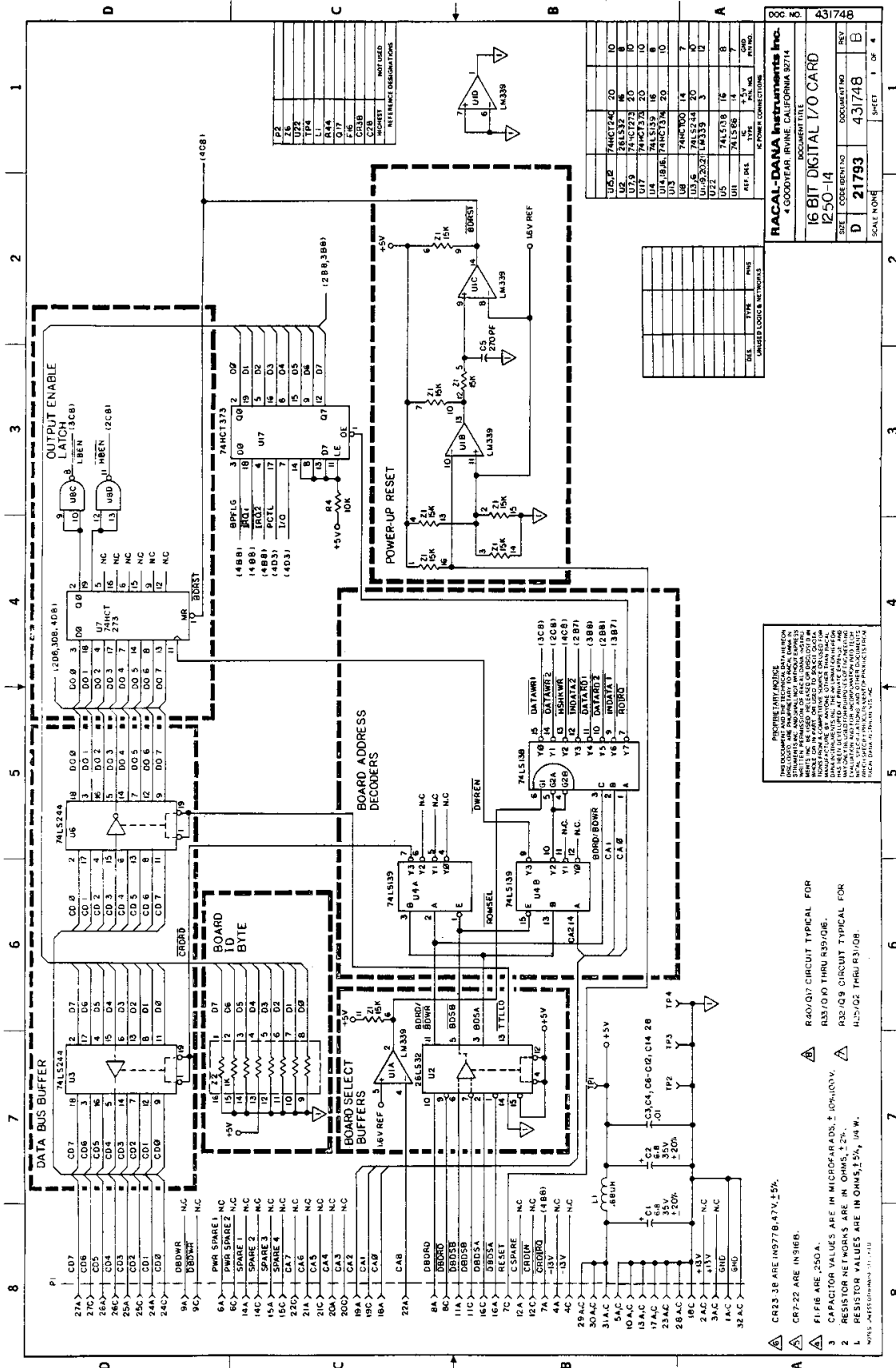
- NOTES (UNLESS OTHERWISE INDICATED)
- RELAYS K1 THRU K10 ARE RACAL-DANA P/N 30181.
  - ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
  - RESISTOR VALUES ARE IN OHMS - ZK.
  - CAPACITOR VALUES ARE IN MICROFARADS - 10K-100V UNLESS OTHERWISE SPECIFIED.











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**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR IRVINE, CALIFORNIA 92714  
 DOCUMENT TITLE  
**16 BIT DIGITAL I/O CARD**  
 1250-14  
 SIZE CODE REVISION NO. DOCUMENT NO. REV.  
**D 21793 431748**

SCALE NONE  
 SHEET 1 OF 4

**CR23,38 ARE IN 9778,47V,15%.**  
**CR7-22 ARE IN 56R.**  
**F1E IS .250A.**  
**3 CAPACITOR VALUES ARE IN MICROGRADS., 10% IN 5V.**  
**RESISTOR NETWORKS ARE IN OHMS, 1%.**  
**RESISTOR VALUES ARE IN OHMS, 1%, 1/4W.**

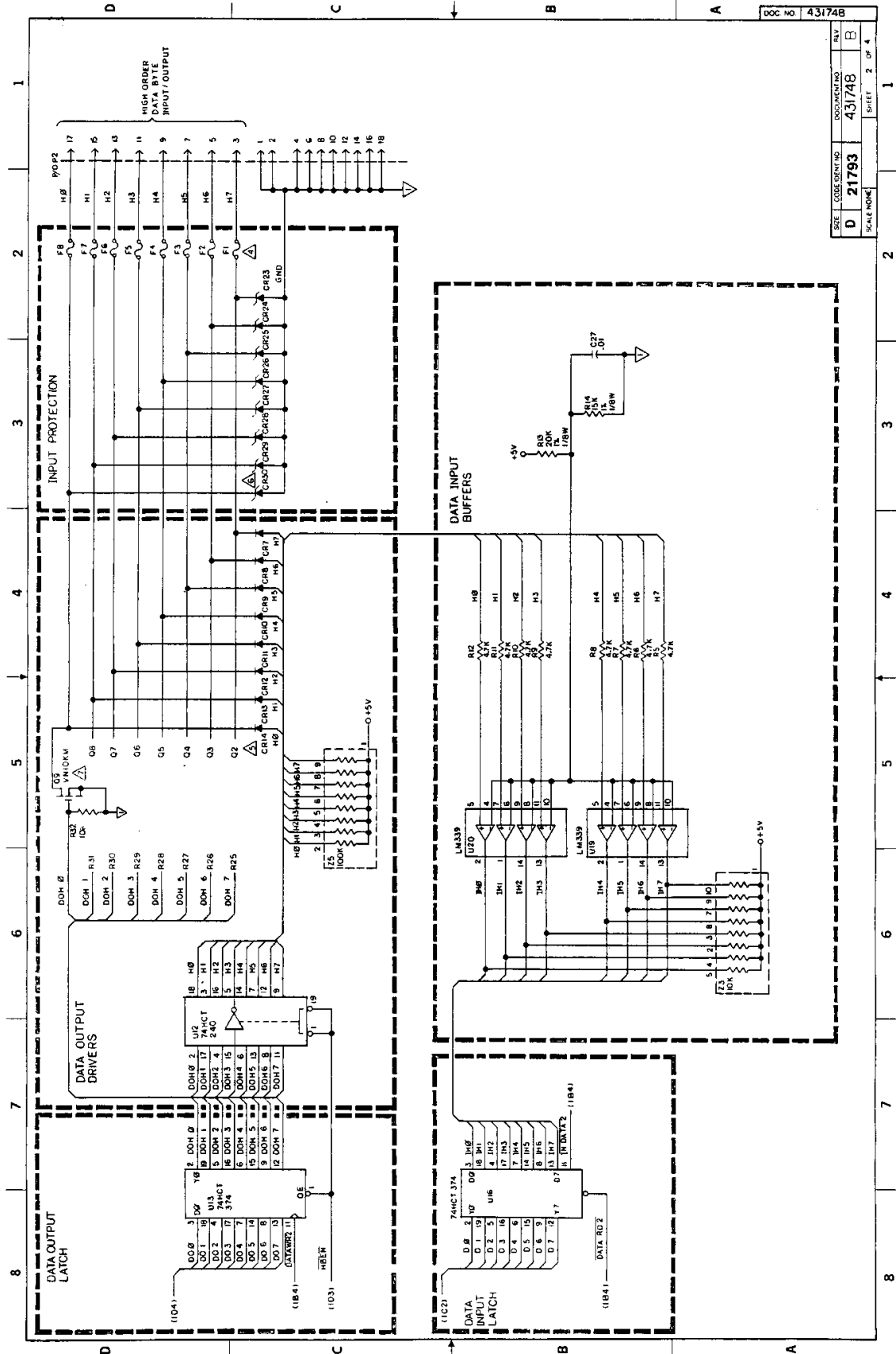
**R40/Q17 CIRCUIT TYPICAL FOR R33/Q10 THRU R39/Q6.**  
**R32/Q9 CIRCUIT TYPICAL FOR R25/Q2 THRU R31/Q8.**

**WPS-24555-0000-01-01**

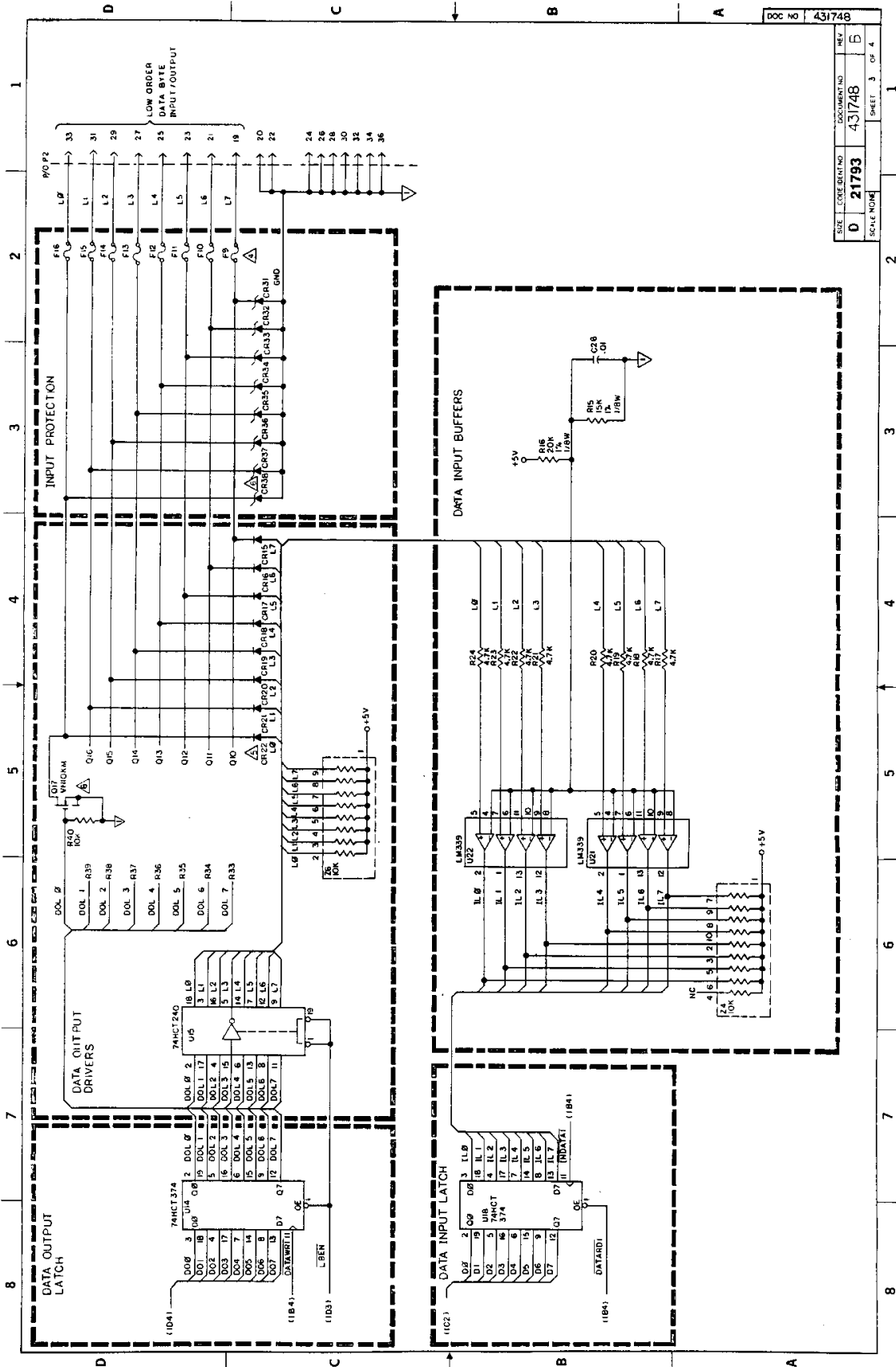
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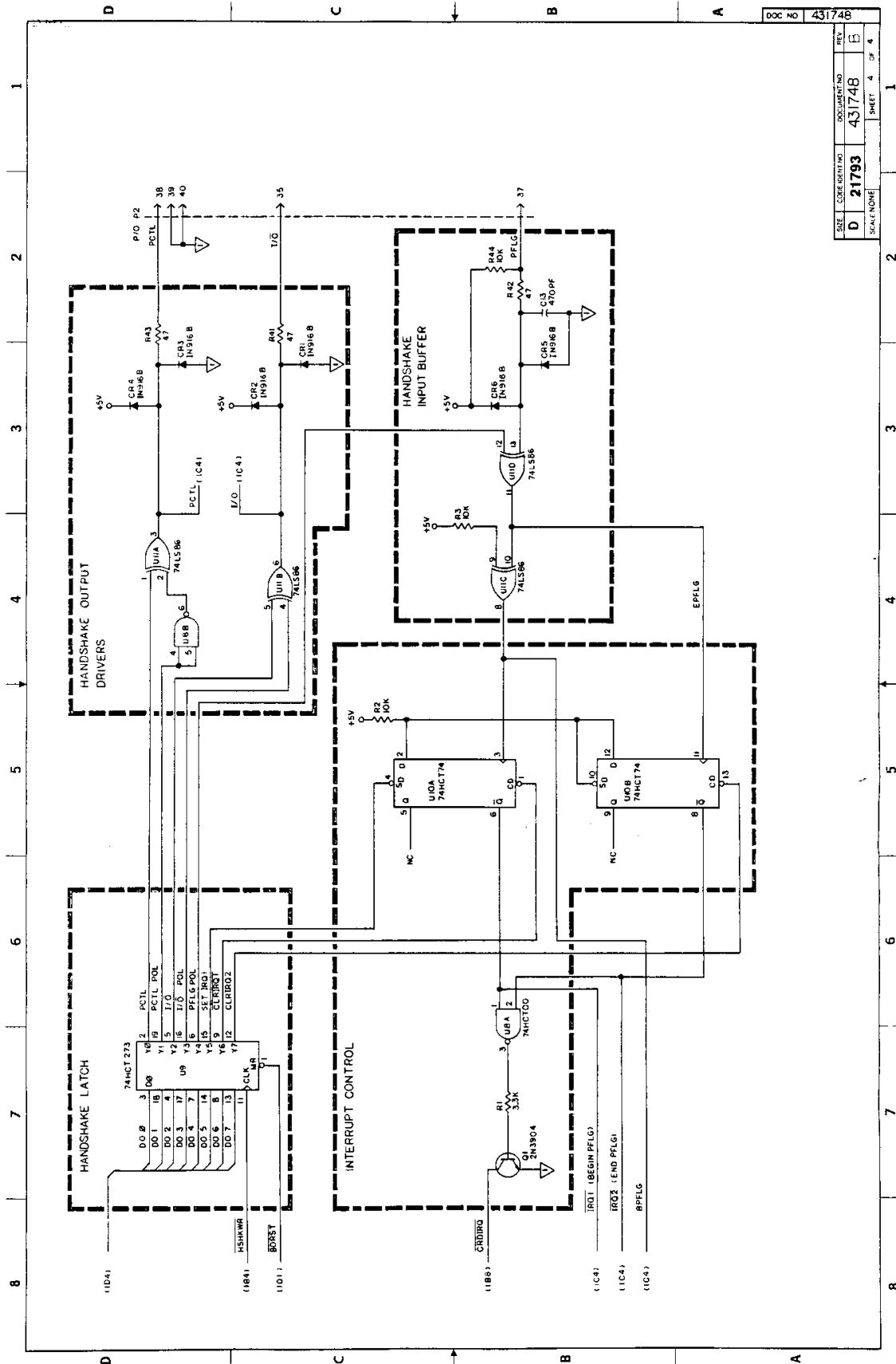
**UNUSED LOGIC NETWORKS**

**UNUSED LOGIC NETWORKS**

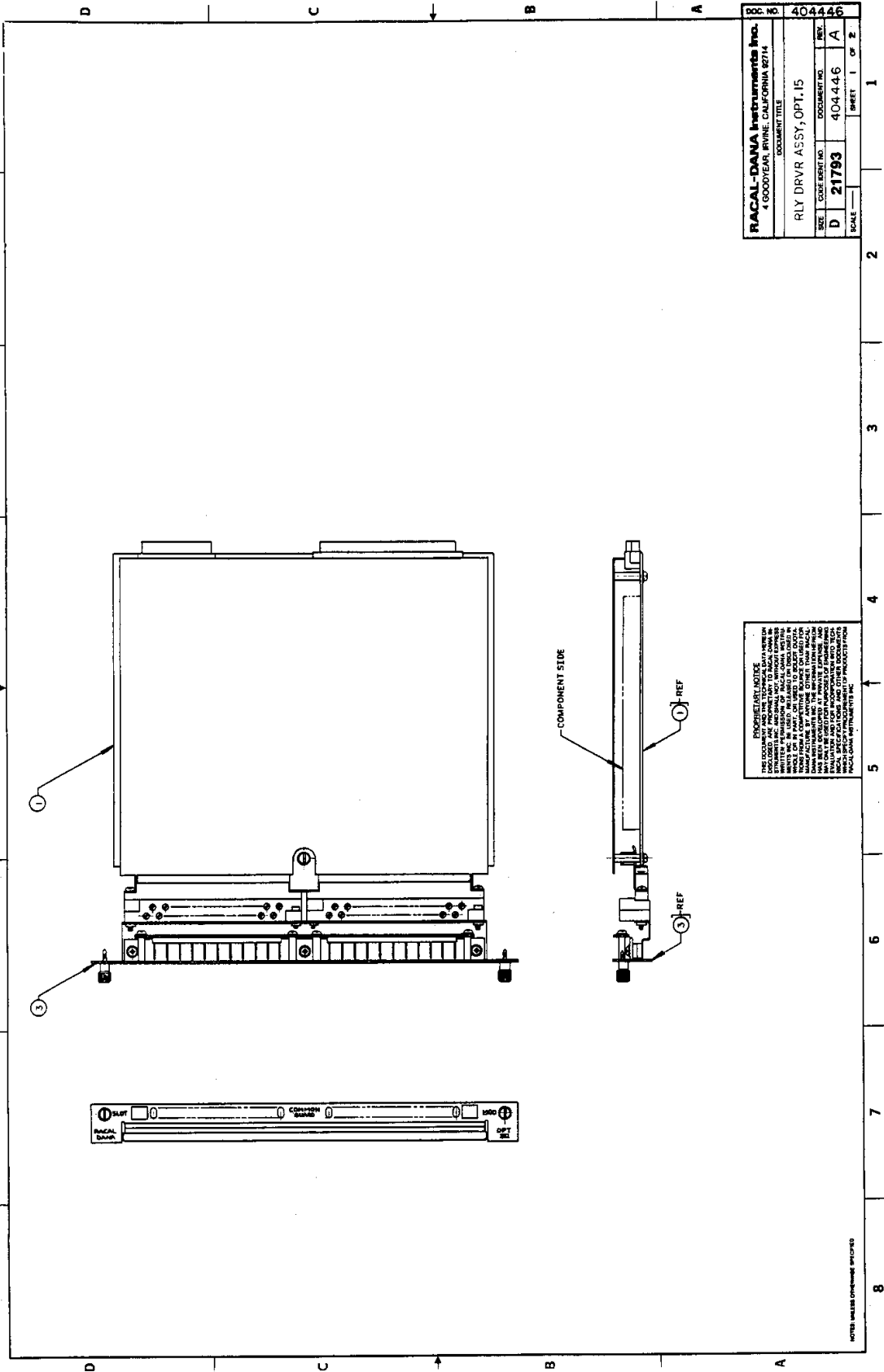


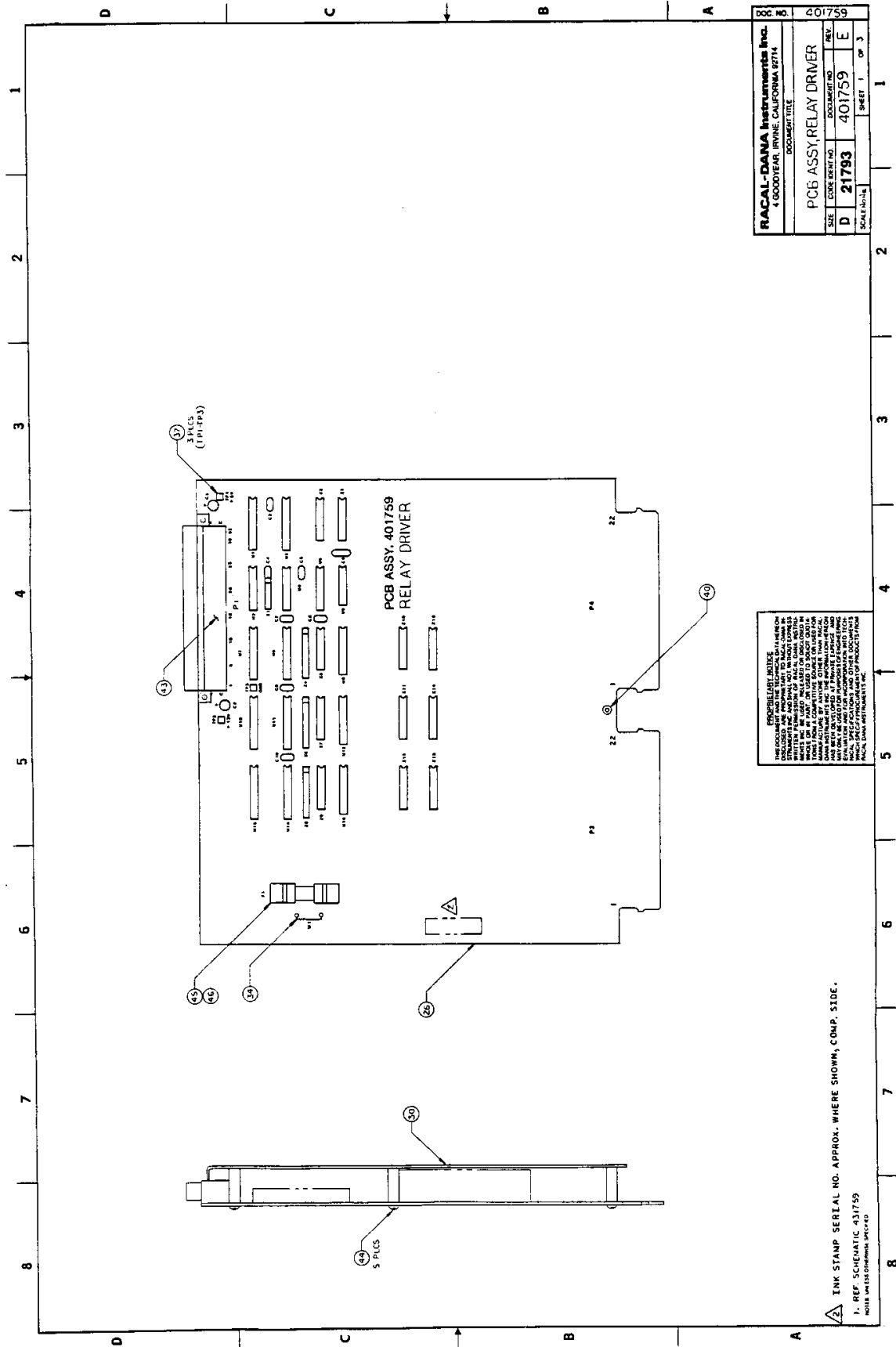
DOC NO 431748	
SHEET 2 OF 4	REV B
SCALE NONE	DOCUMENT NO 431748
D 21793	





DOC NO	431748
REV	B
SCALE	NONE
SHEET	4 OF 4
DOCUMENT NO	431748
REV	B
SIZE	D
CORE IDENT NO	21793

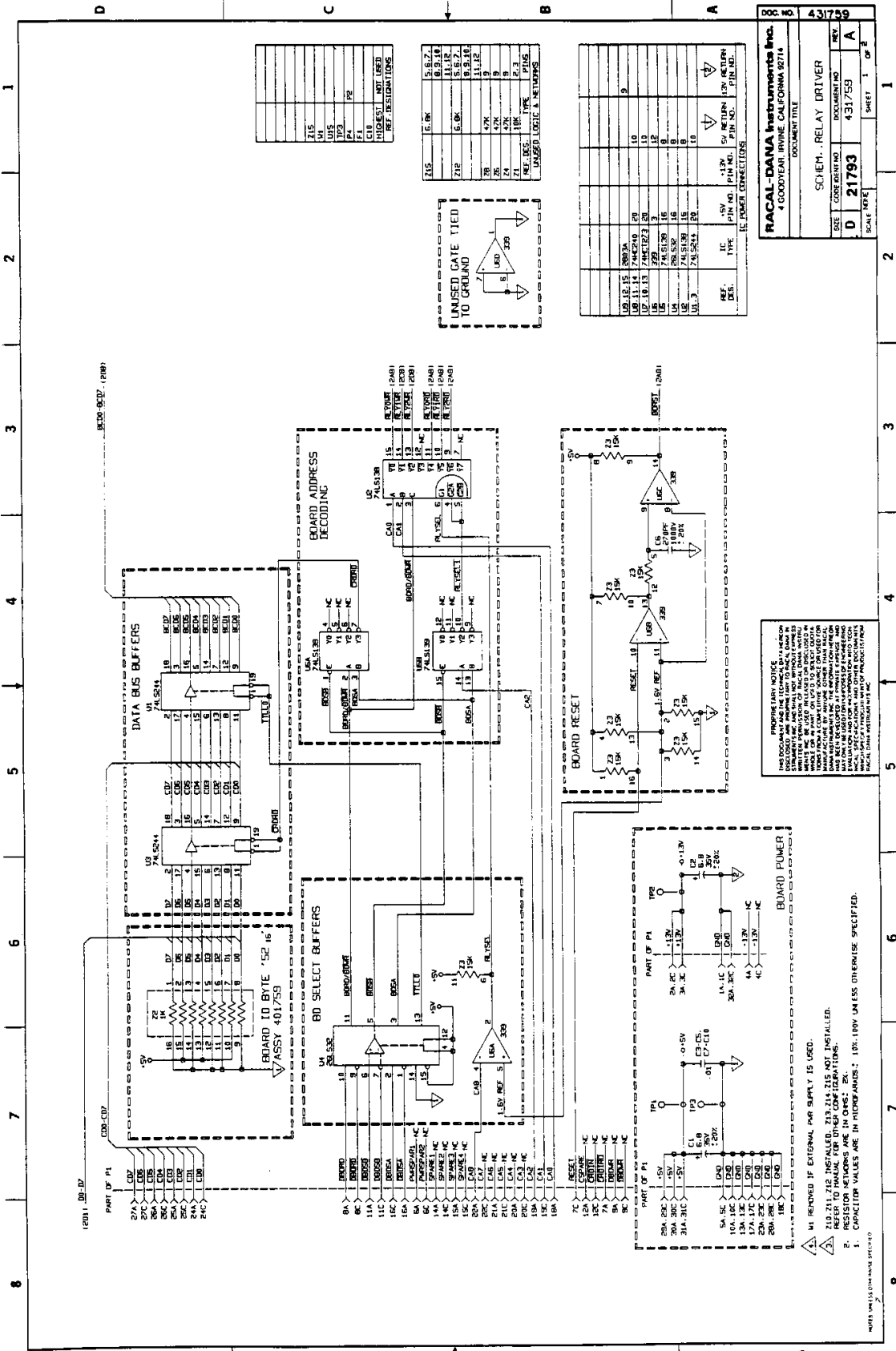




RACAL-DANA Instruments Inc. 4 GOODPASTER, IRVINE, CALIFORNIA 92714		401759
DOCUMENT TITLE		
PCB ASSY. RELAY DRIVER	DOCUMENT NO.	REV.
D	21793	401759
SIZE	D	21793
SCALE	1/8" = 1"	SHEET 1 OF 3

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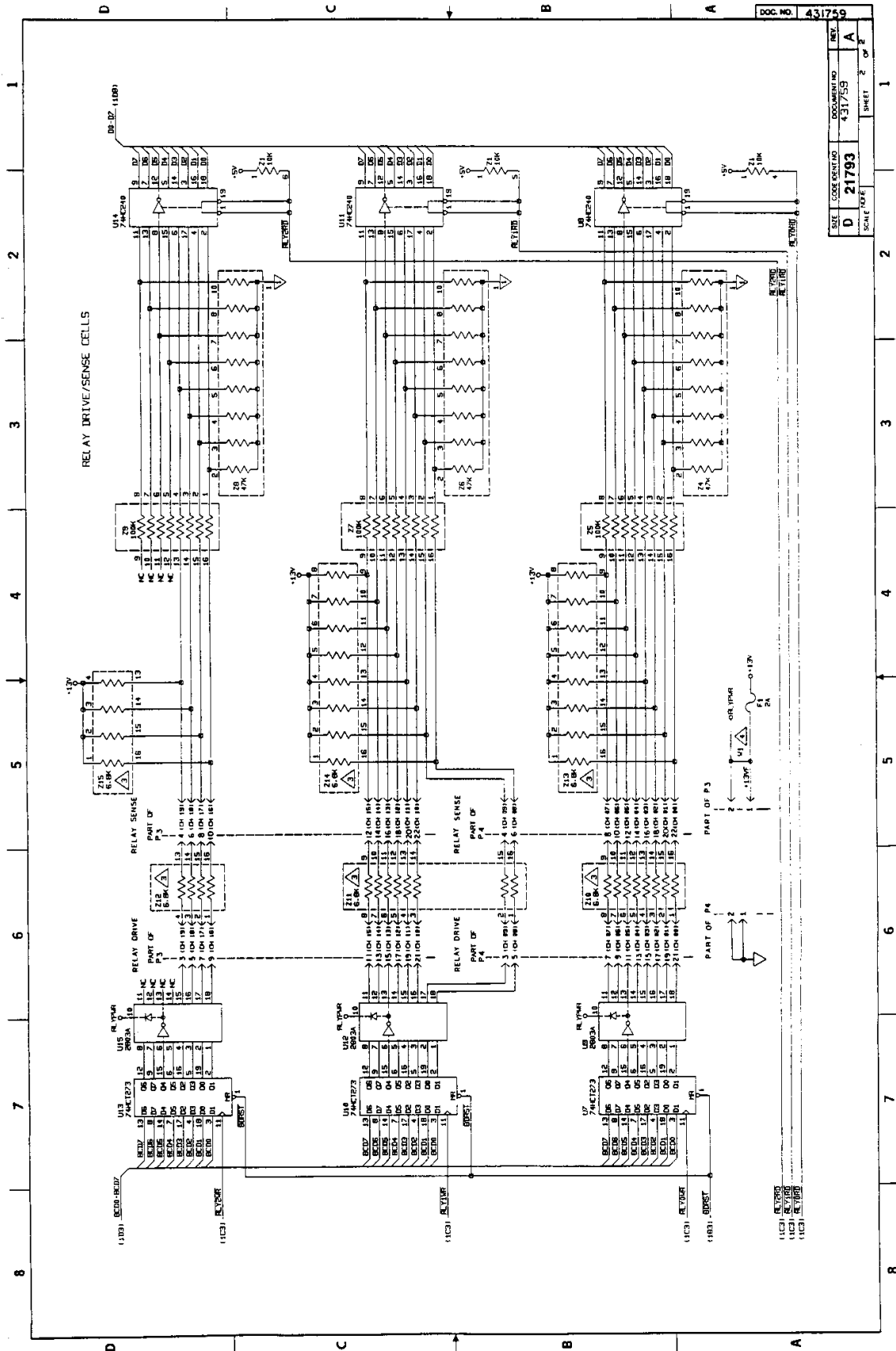


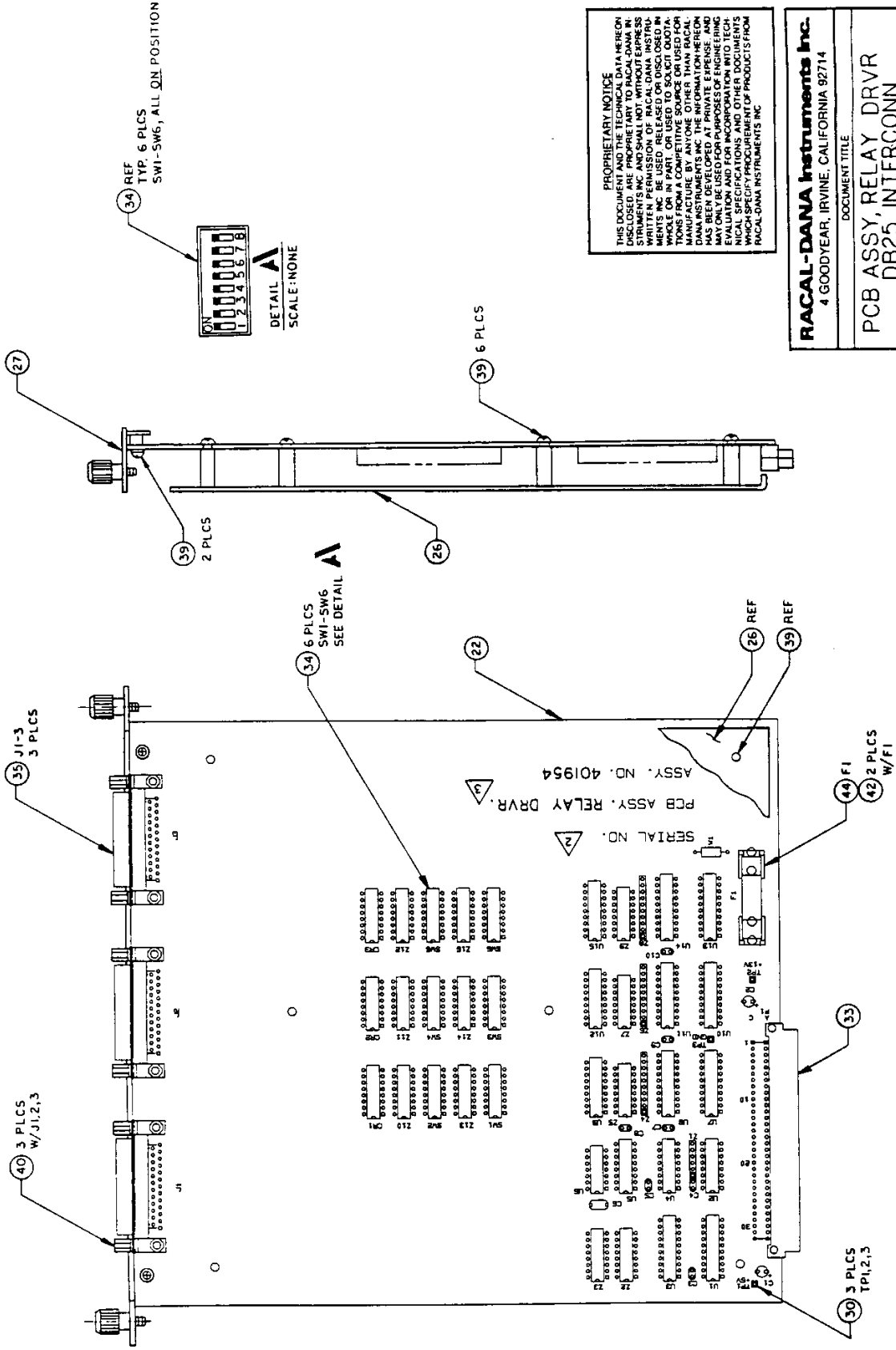


DOC. NO. 431759	
RACAL-DANA Instruments Inc.	
4 GOODPASTER IRVINE CALIFORNIA 92714	
DOCUMENT TITLE	
SCHEM. - RELAY DRIVER	
SIZE	DOCUMENT NO.
D	21793
SCALE	REF. NO.
1/16"	431759
SHEET 1 OF 3	

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NOTES: 1. CAPACITOR VALUES ARE IN MICROGRAMS; 10K, 100K UNLESS OTHERWISE SPECIFIED.

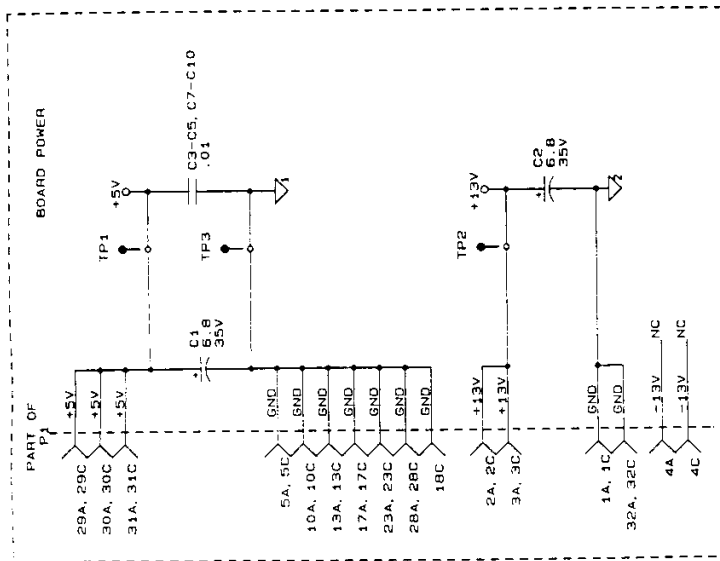




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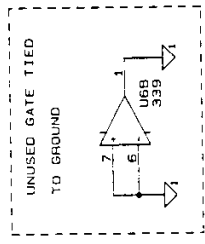
<b>RACAL-DANA Instruments Inc.</b> 4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, RELAY DRVR DB25 INTERCONN			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401954	A
SCALE			SHEET 1 OF 2

- ③ INK STAMP ASSEMBLY NAME & NUMBER APPROX WHERE SHOWN ON CIRCUIT SIDE.
- ② INK STAMP SERIAL NUMBER ON CIRCUIT SIDE IN INDICATED AREA.
- 1. REFERENCE SCHEMATIC 431954.
- NOTES UNLESS OTHERWISE SPECIFIED



PART OF P1

6A	PMRSPAR1	NC
6C	PMRSPAR2	NC
14A	SPARE1	NC
14C	SPARE2	NC
15A	SPARE3	NC
15C	SPARE4	NC
22C	CA7	NC
21A	CA5	NC
21C	CA5	NC
20A	CA4	NC
20C	CA3	NC
12A	CSPARE	NC
12C	CRDIN	NC
7A	CRDIRQ	NC
9A	DBDMR	NC
9C	DBDMR	NC



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HIGHEST REF. DES.

REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9, 12, 15	5803	20	10	10	9
U9, 11, 13	74HC290	20	10	10	9
U6, 10, 13	74HC123	20	10	10	9
U5	74LS139	16	8	8	8
U4	56LS32	16	8	8	8
U2	74LS138	20	10	10	9
U1, 3	74LS148	20	10	10	9

IC POWER CONNECTIONS

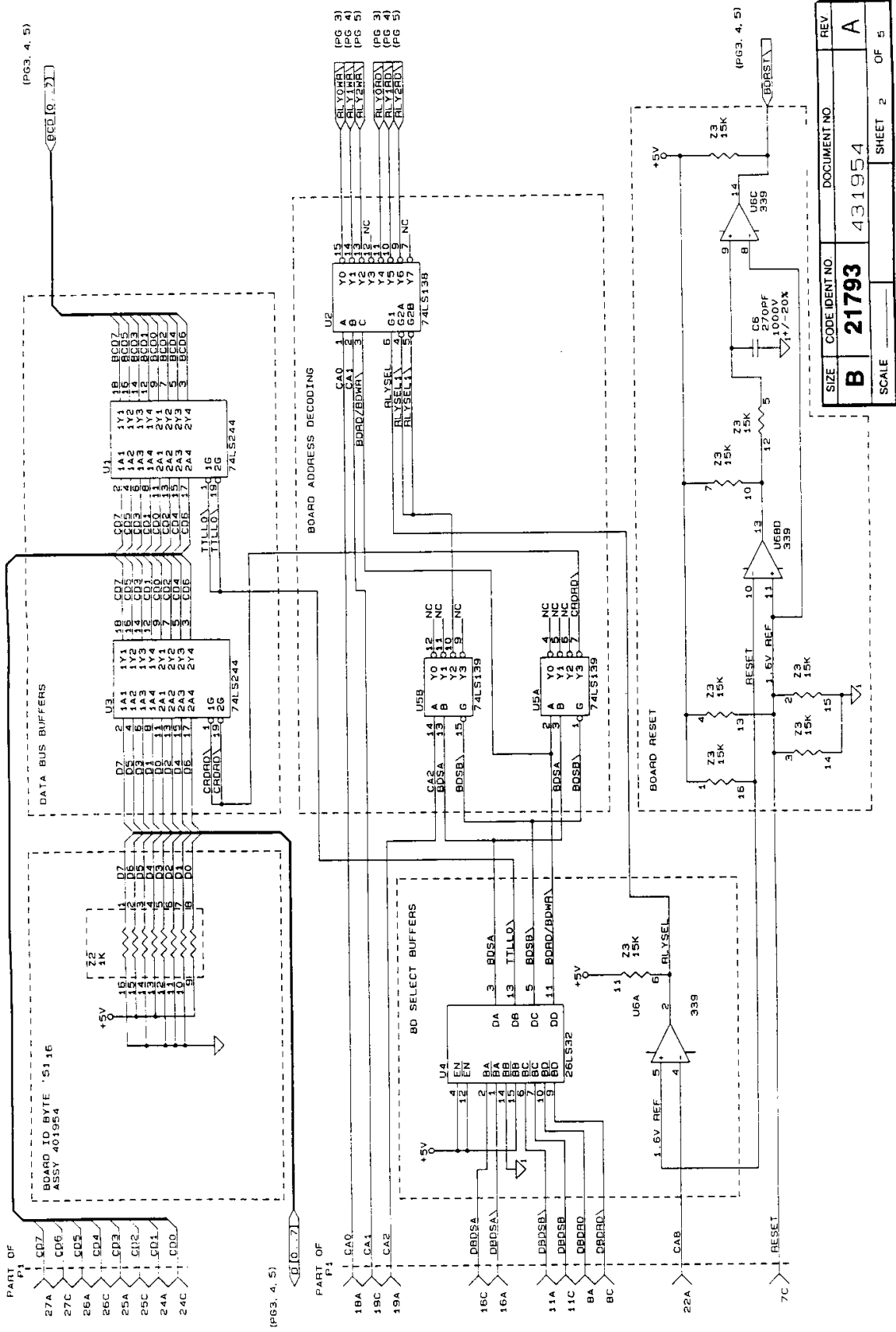
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 4 GOODYEAR, IRVINE, CALIFORNIA 92714

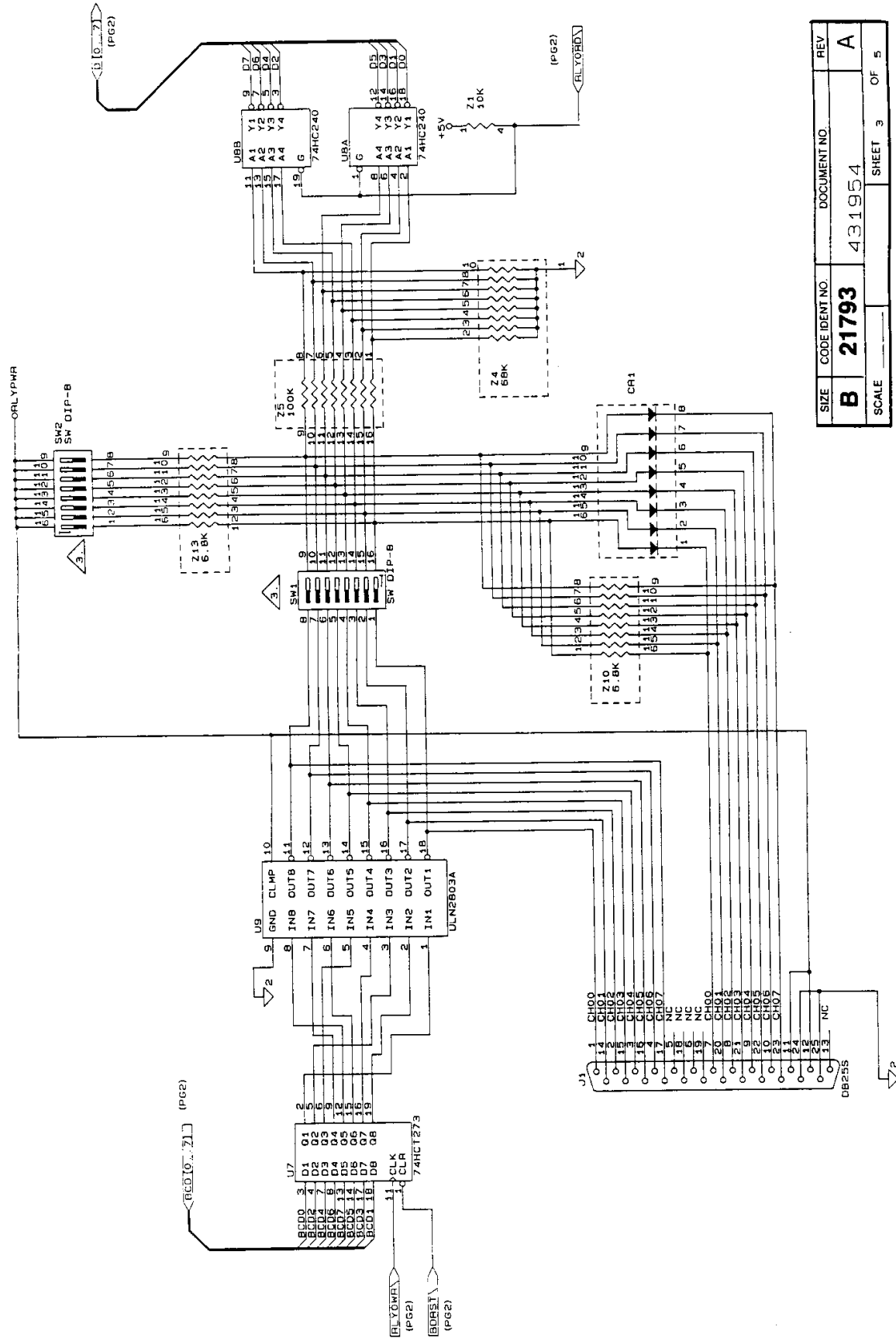
DOCUMENT TITLE  
**SCHEM. RELAY DRIVER**

SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431954	A

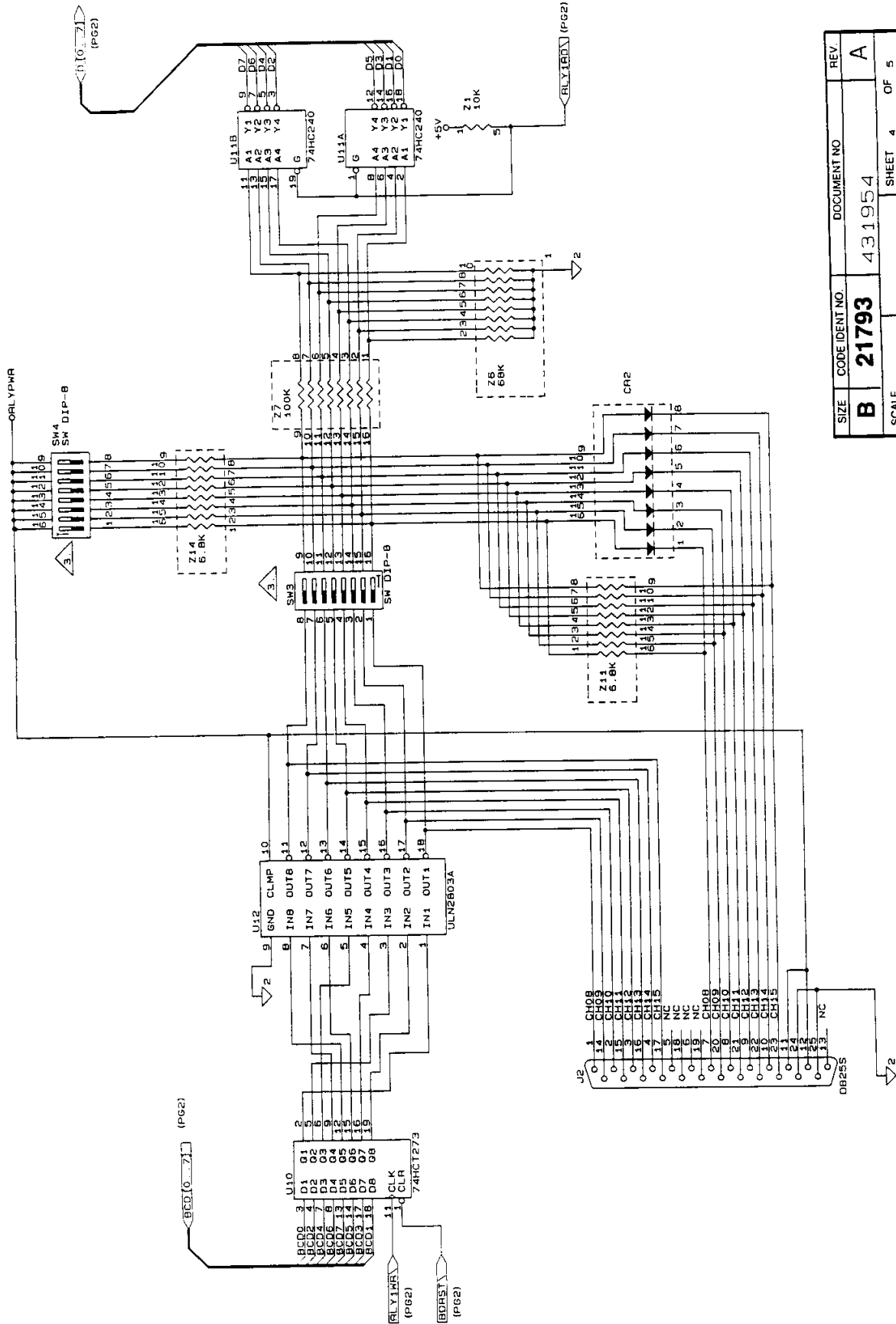
SCALE \_\_\_\_\_ SHEET 1 OF 5



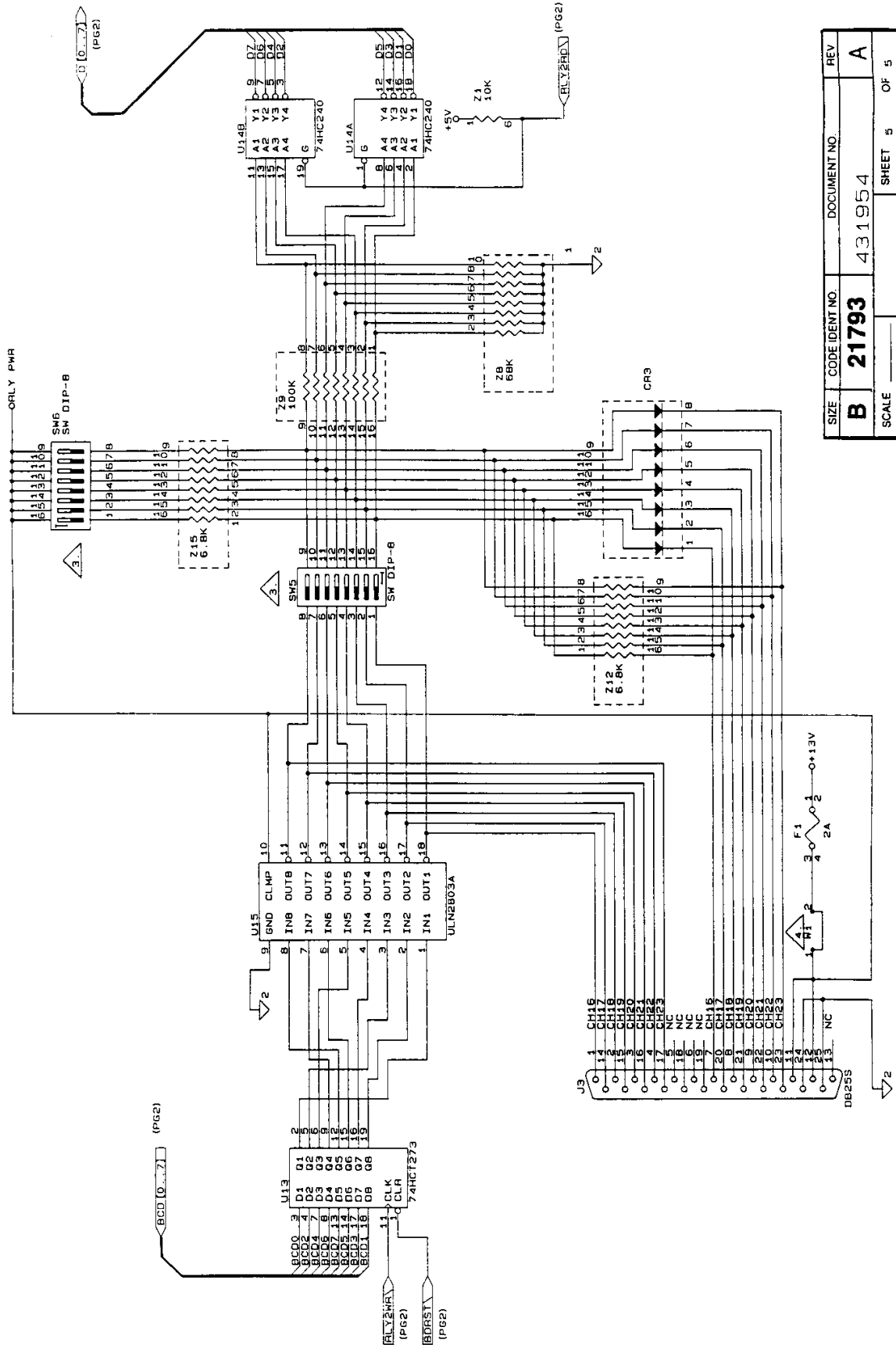
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV
B	21793	431954	A
SCALE		SHEET 2	OF 5



SIZE	CODE IDENT NO	DOCUMENT NO.	REV
B	21793	431954	A
SCALE		SHEET 3	OF 5

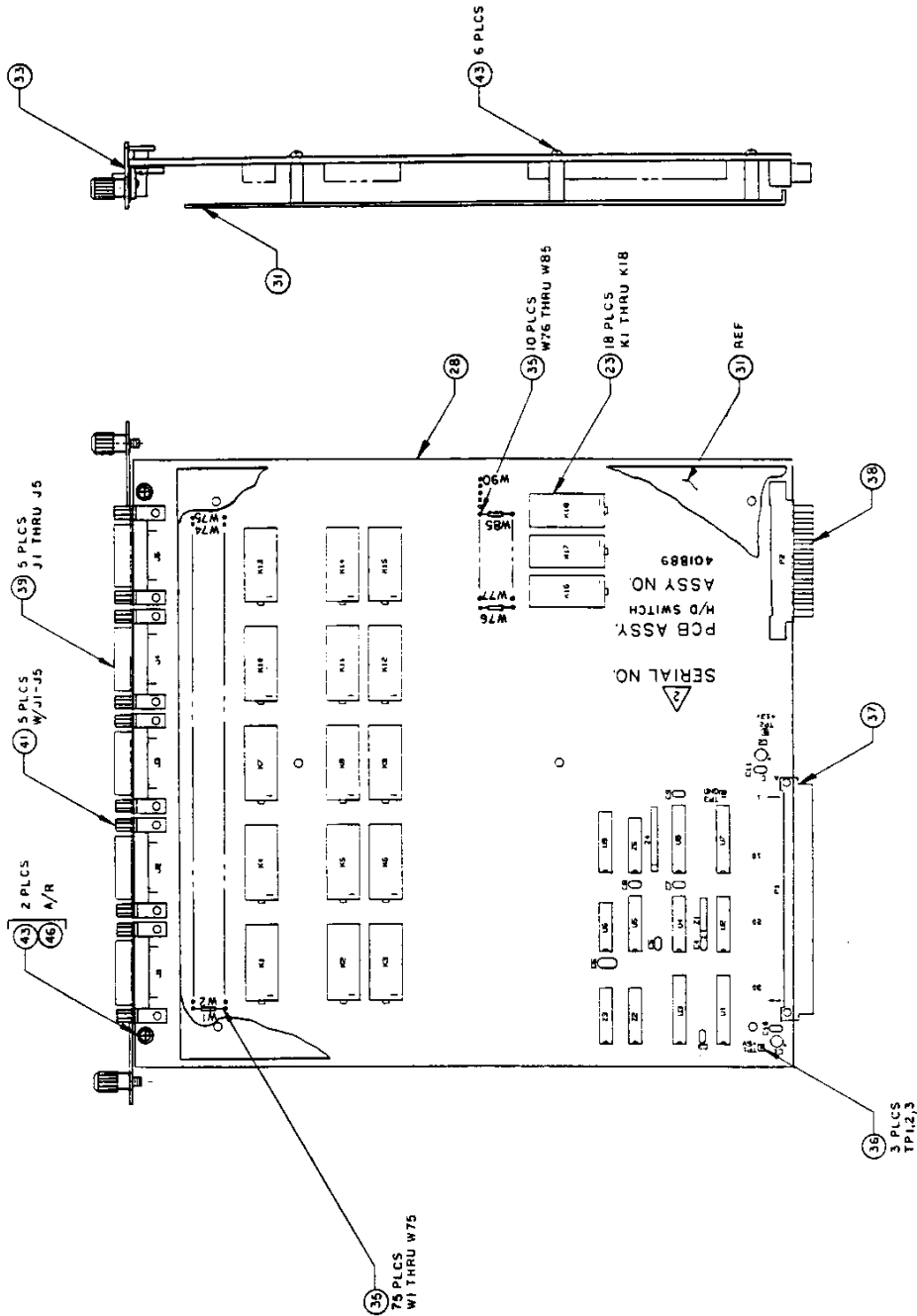


SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431954	A
SCALE		SHEET 4	OF 5



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV
<b>B</b>	<b>21793</b>	431954	<b>A</b>
SCALE		SHEET 5	OF 5





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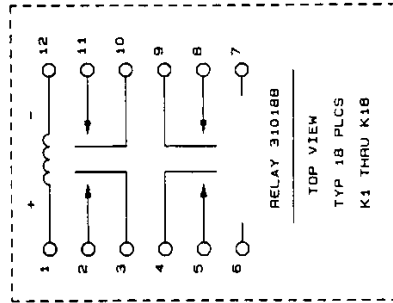
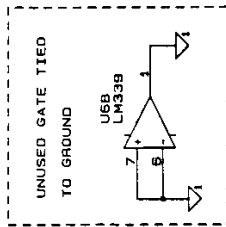
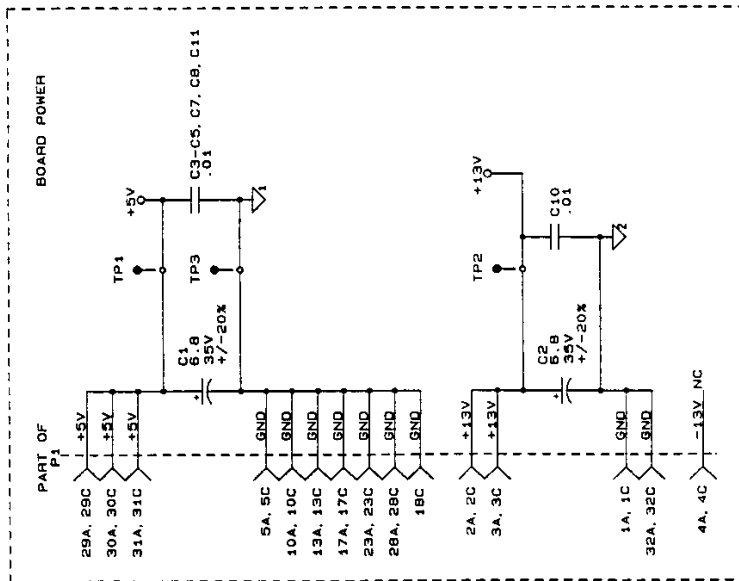
<b>RACAL-DANA Instruments Inc.</b> 1 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, H/D SWITCH			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401889	A
SCALE 1:1		SHEET 1 OF 2	

OPTION 16

2 INK STAMP SERIAL NUMBER, ASSEMBLY NAME & NUMBER ON COMPONENT SIDE APPROX. WHERE SHOWN

1. REFERENCE SCHEMATIC 431889.

NOTES UNLESS OTHERWISE SPECIFIED



REF. DES.	IC TYPE	+5V PIN NO.	+12V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9	29B1		10		9
U8	74HC240	20		10	
U7	74HCT273	20		10	
U6	339	3		12	
U5	74LS139	16		8	
U4	26LS32	16		8	
U2	74LS138	15		8	
U1, 3	74LS244	20		10	

IC POWER CONNECTIONS

Z5	
W90	
U9	
TP3	
P2	
K18	
J5	
E8	
C11	
HIGHEST REF. DES.	

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DOCUMENT TITLE

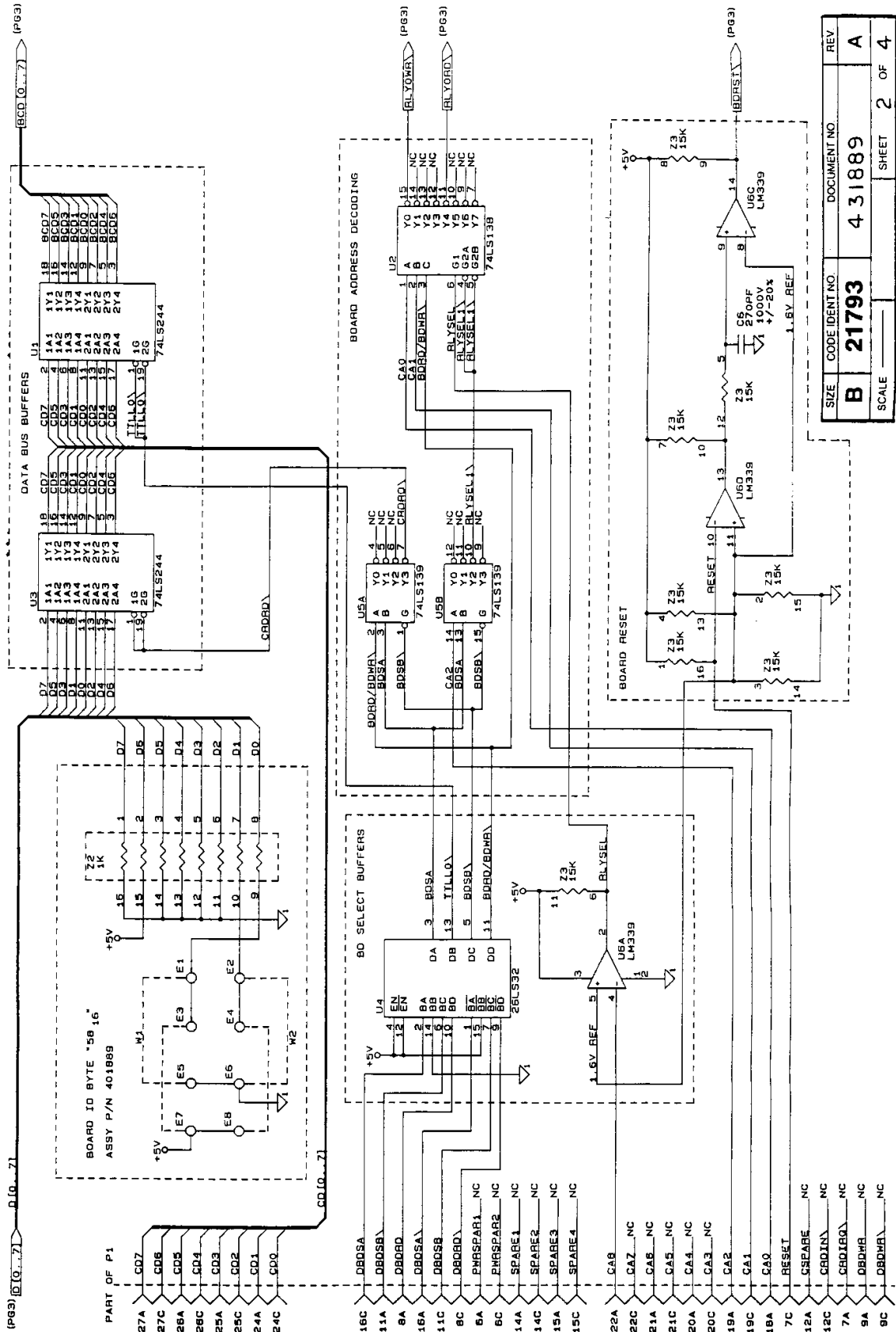
**SCHEM., H/D SWITCH**

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SCALE \_\_\_\_\_ SHEET 1 OF 4

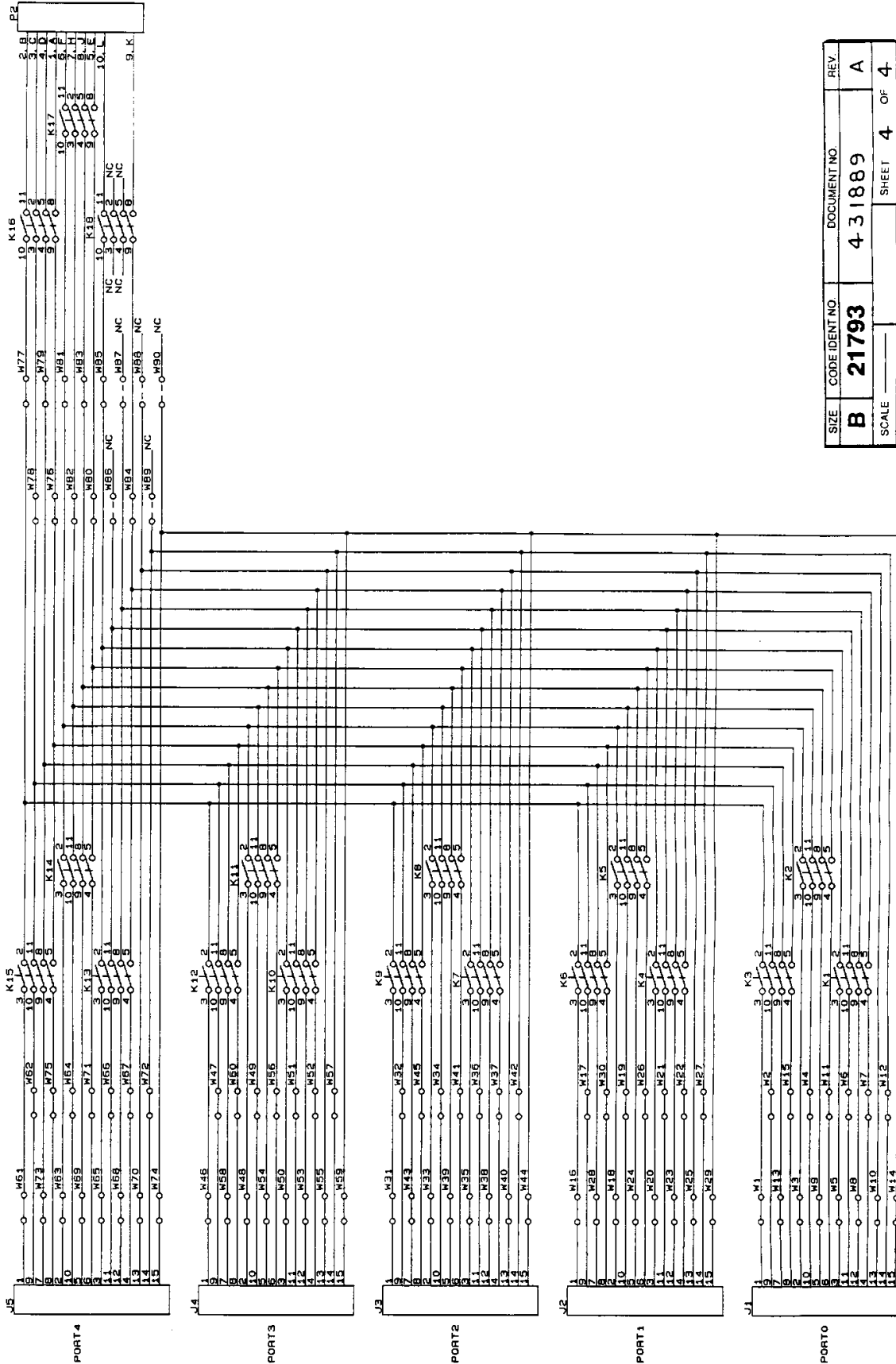
- RELAYS K1 THRU K18 ARE RACAL-DANA P/N 310188.
- ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
- RESISTOR NETWORKS ARE IN OHMS, +/-2%.
- CAPACITOR VALUES ARE IN MICROFARADS, +/-10%, 100V UNLESS OTHERWISE SPECIFIED.

NOTES: UNLESS OTHERWISE SPECIFIED

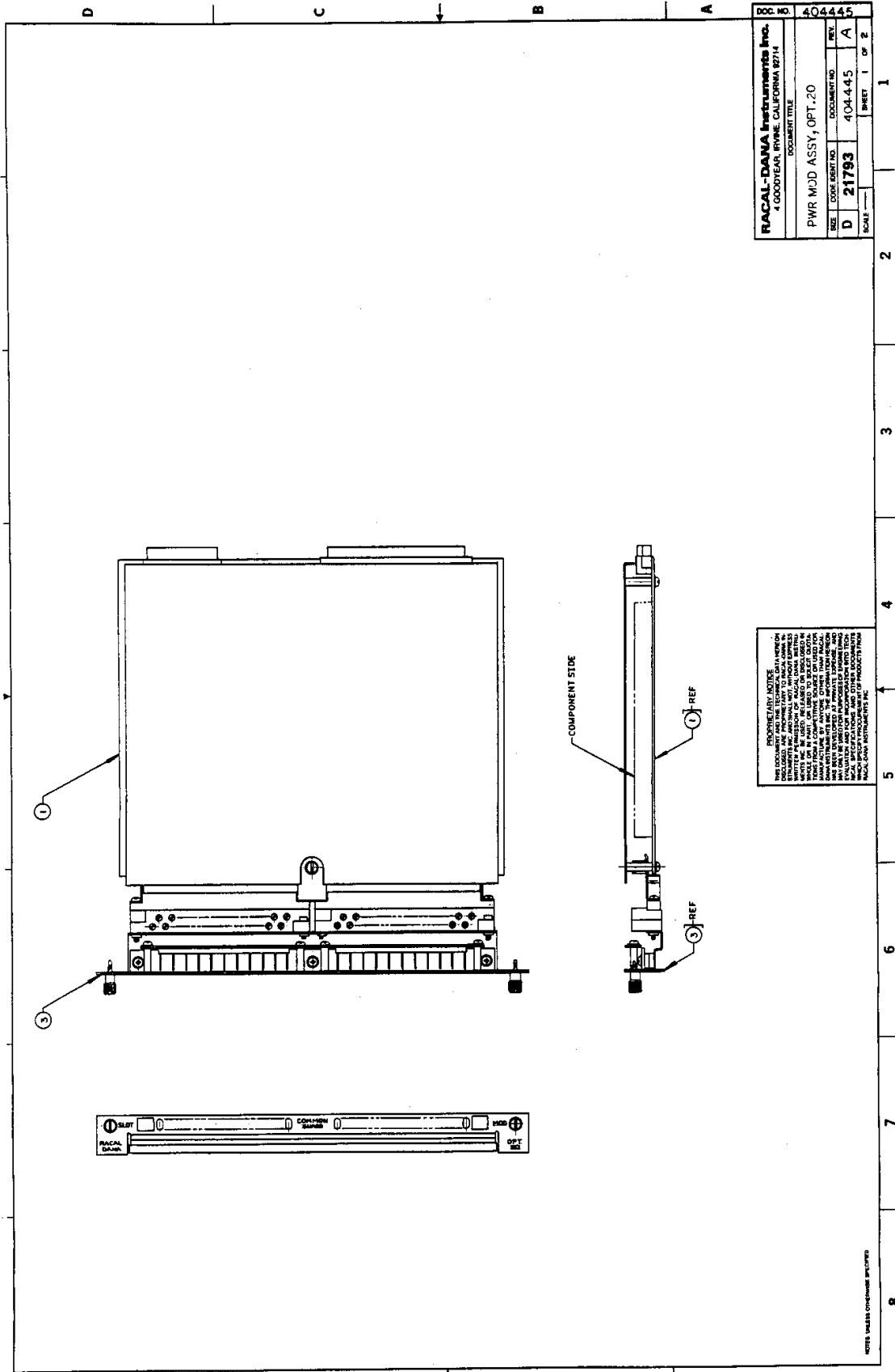


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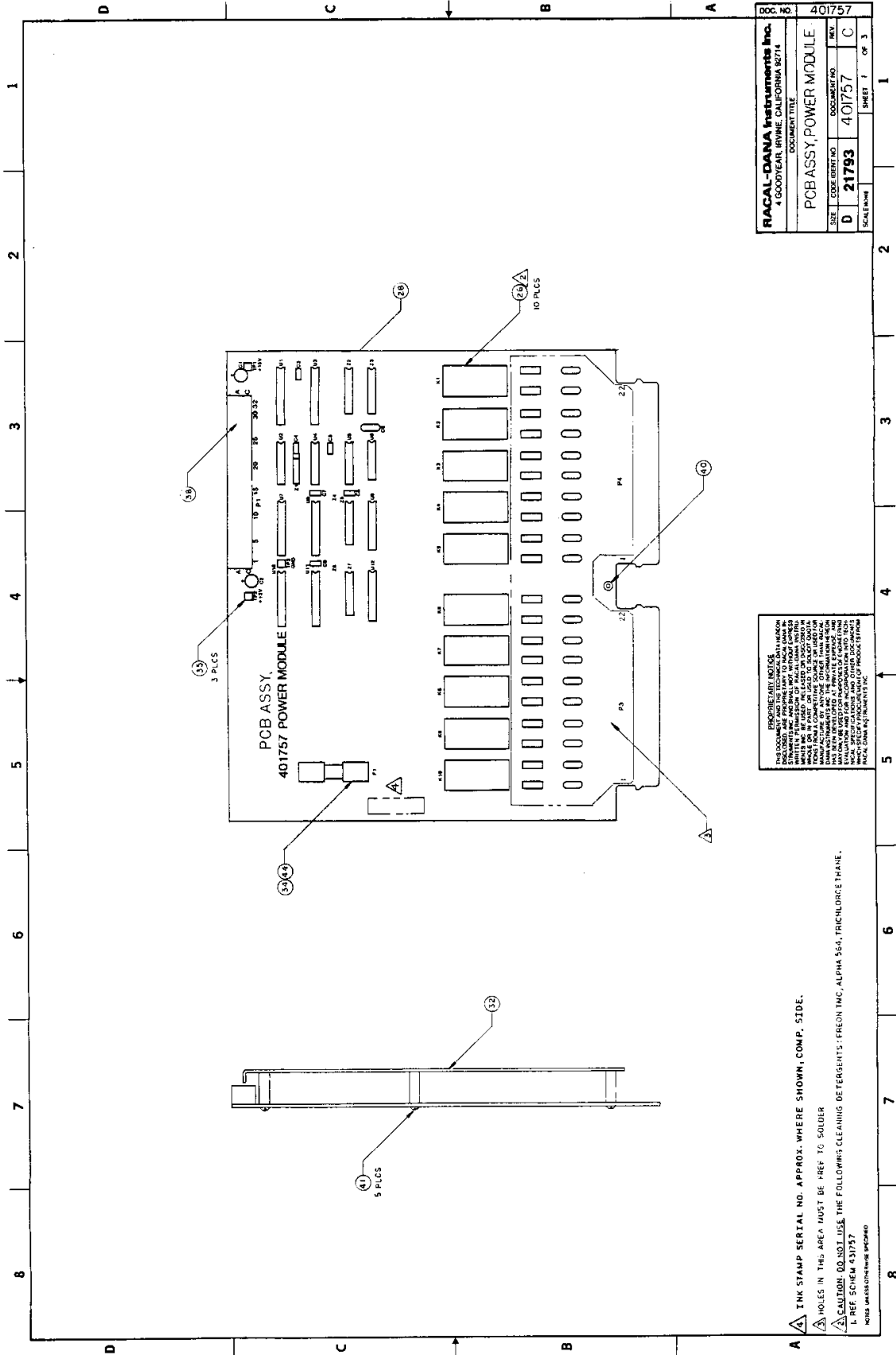
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	4-31889	A
SCALE		SHEET 4	OF 4



DOC. NO.		404445	
RACAL-DANA Instruments Inc. 4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PWR MOD ASSY, OPT. 20			
SIZE	CODE SHEET NO.	DOCUMENT NO.	REV.
D	21793	404-445	A
SCALE			SHEET 1 OF 2

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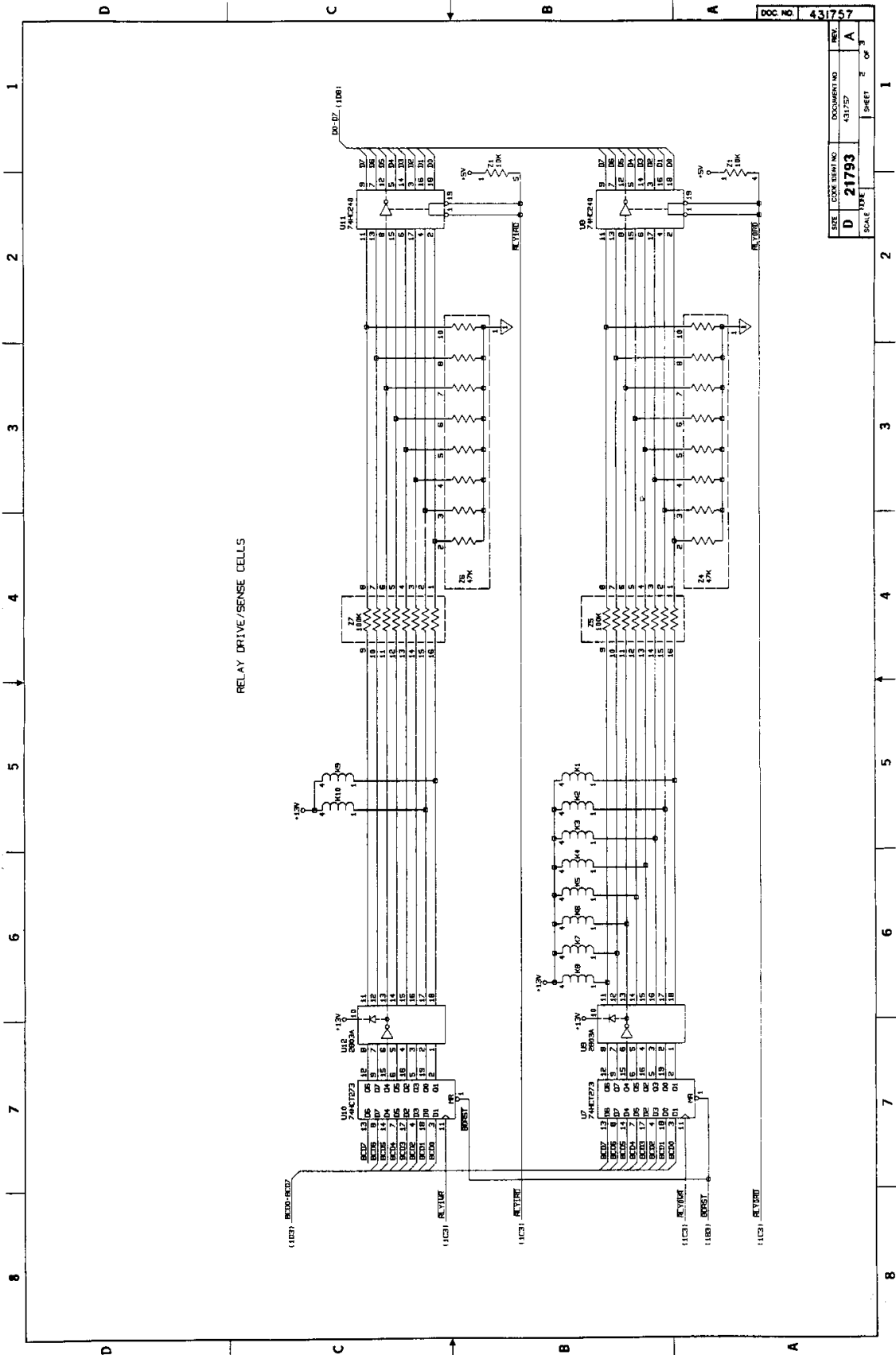
DOC. NO.	401757		
RACAL-DANA Instruments Inc. 4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, POWER MODULE			
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
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SCALE: N/A			SHEET 1 OF 3

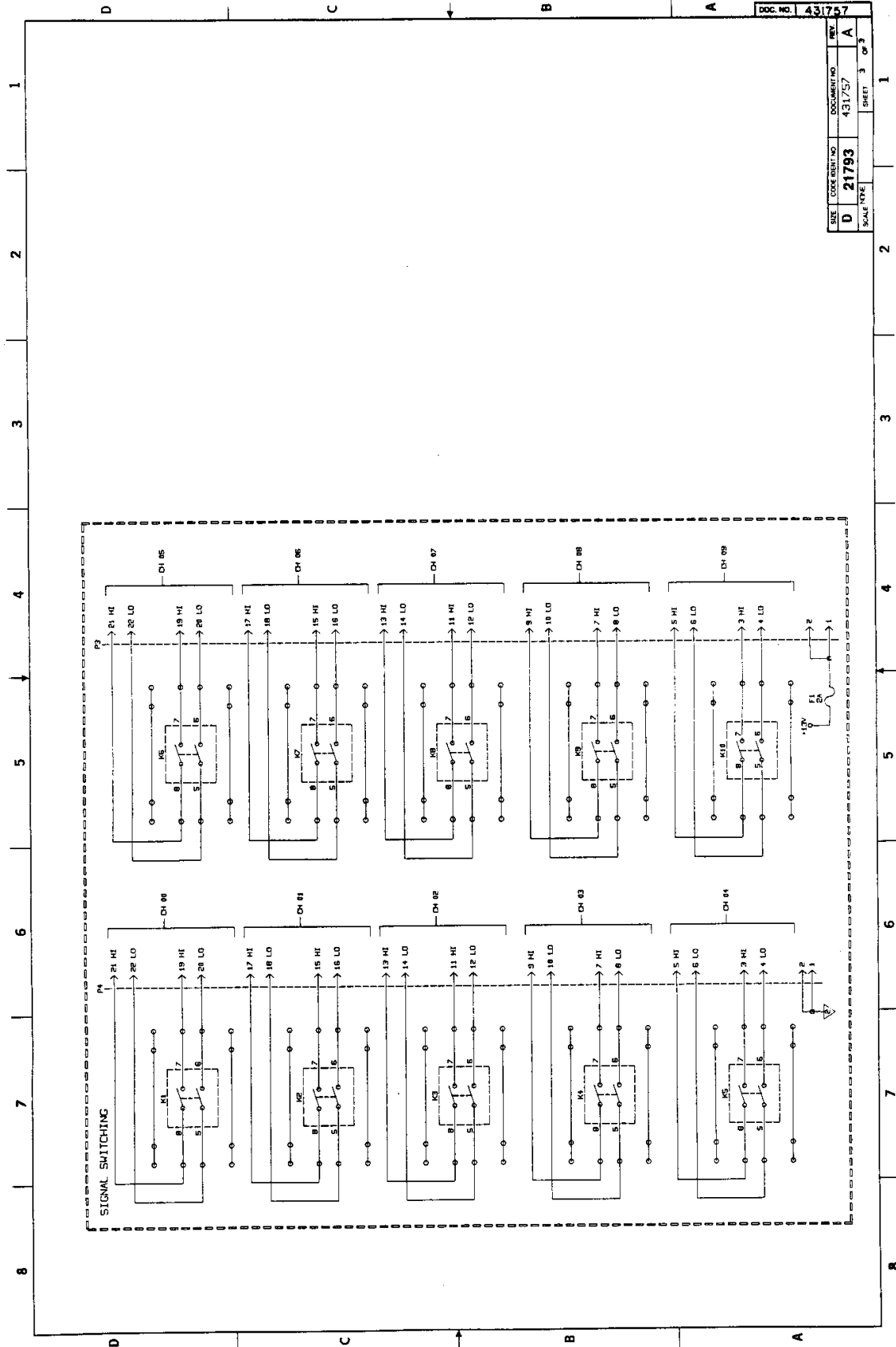
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- A TINK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.
  - △ HOLES IN THIS AREA MUST BE PREP TO SOLDER
  - △ CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE.
  - 1. REF. SCHEM 431737
- NOTES UNLESS OTHERWISE SPECIFIED

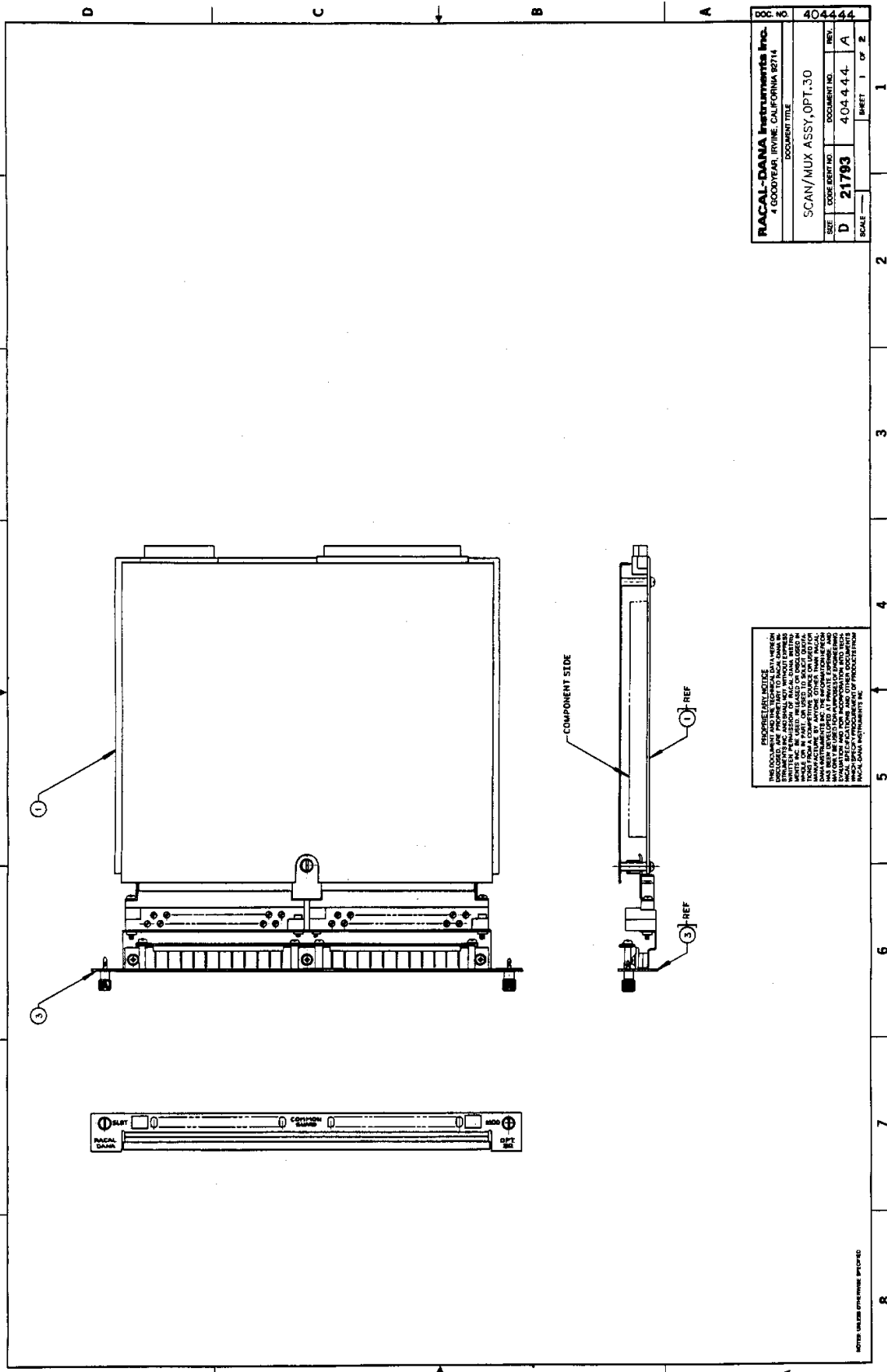


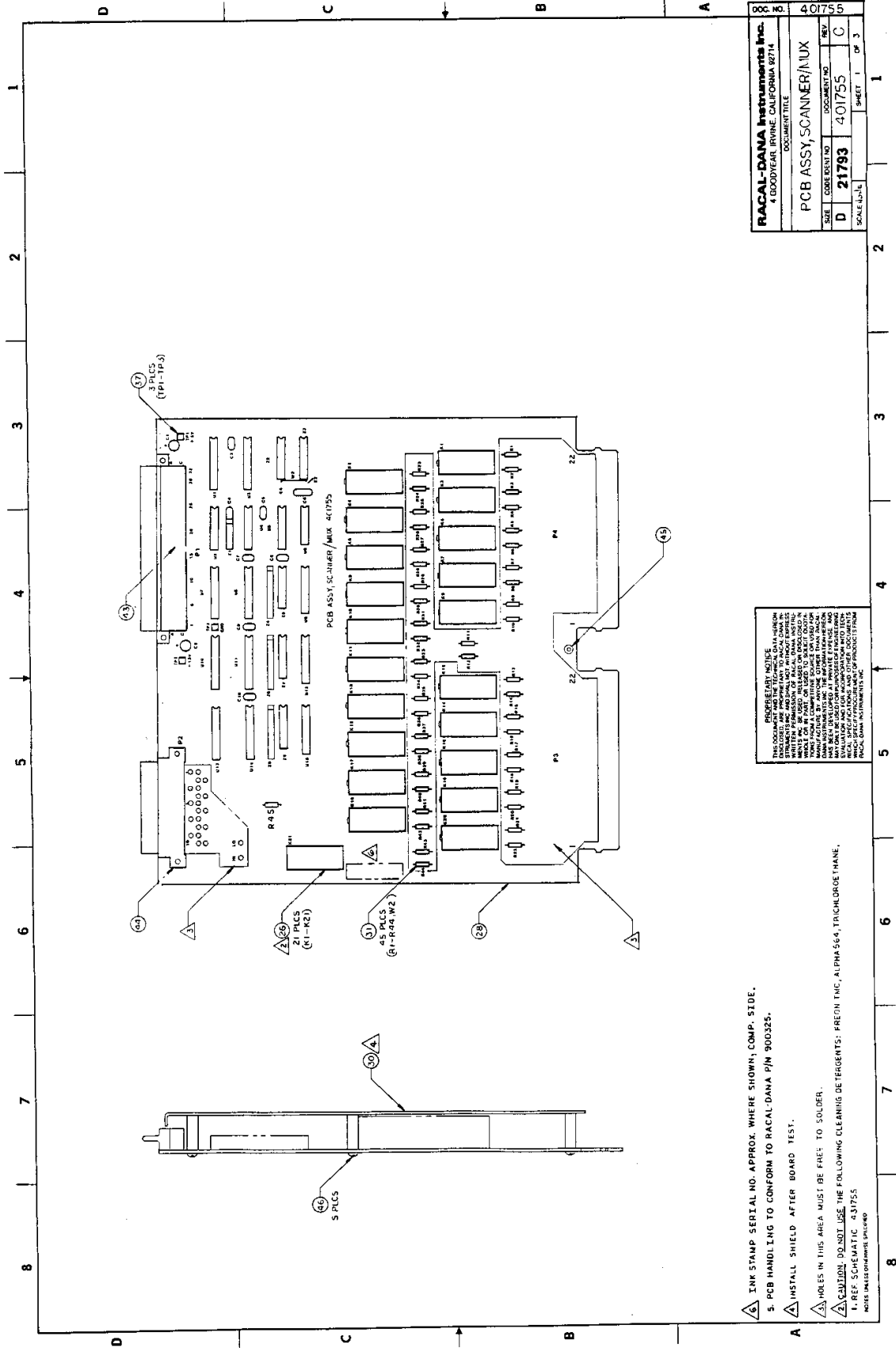




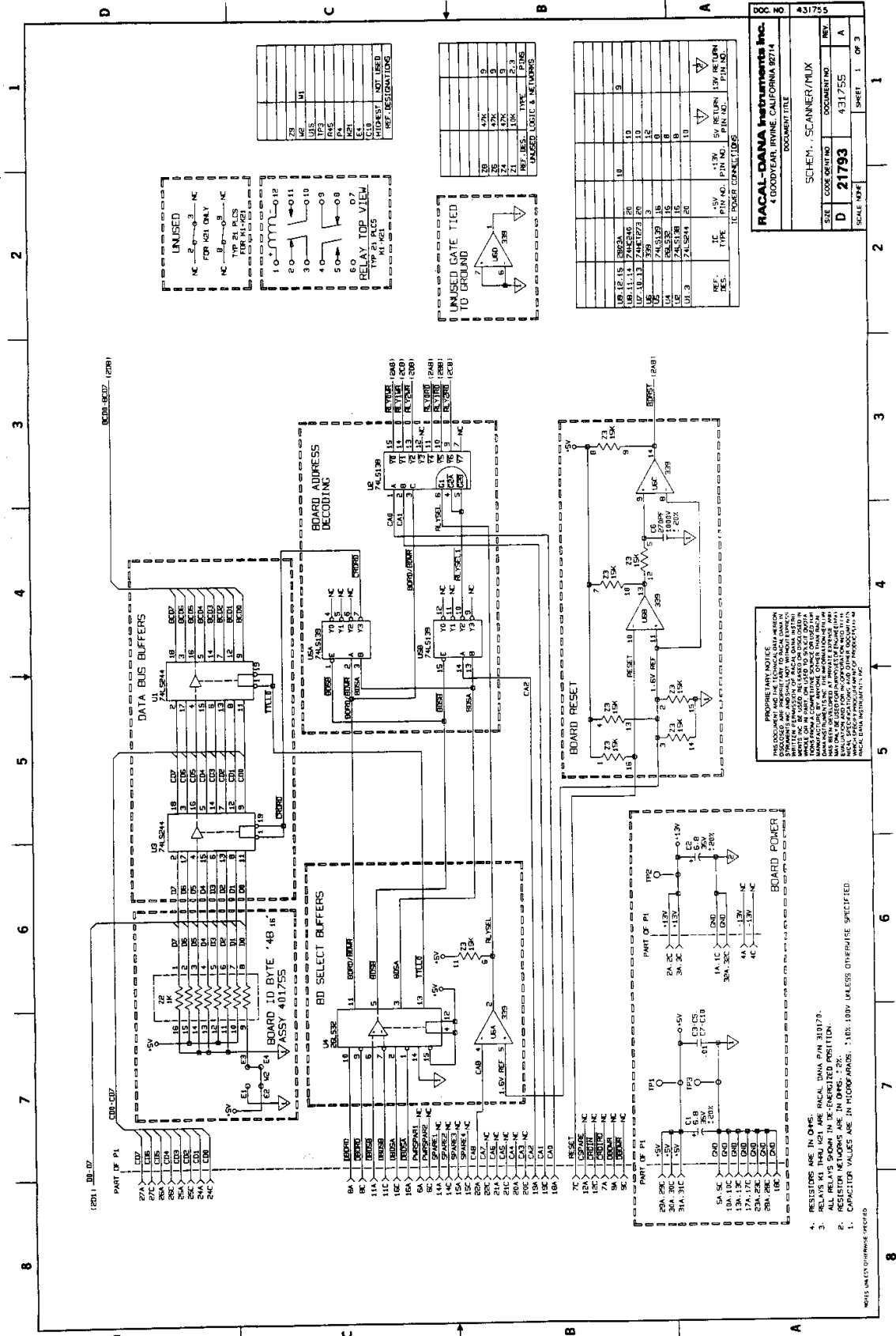


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SIZE	D
CODE IDENT. NO.	21793
DOCUMENT NO.	431757
SCALE	NONE
SHEET	3 OF 3
REV.	A





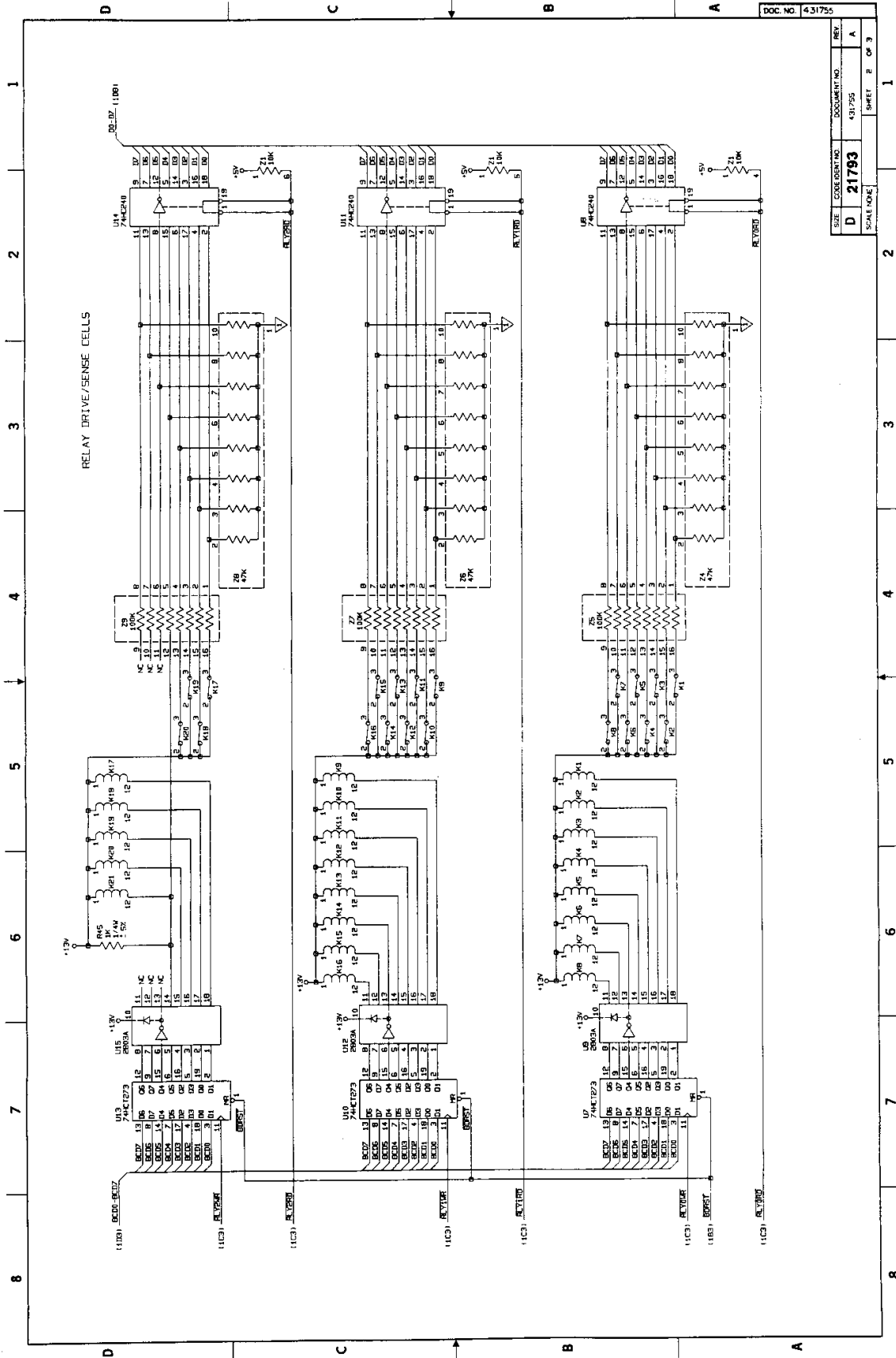
- ④ INK STAMP SERIAL NO. APPROX. WHERE SHOWN; COMP. SIDE.
- ⑤ PCB HANDLING TO CONFORM TO RACAL-DANA P/N 900325.
- ⚠ INSTALL SHIELD AFTER BOARD TEST.
- ⚠ HOLES IN THIS AREA MUST BE FREE TO SOLDER.
- ⚠ CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS: PREON TMC, ALPHA-564, TRICHLOROETHANE.
- 1 - REF. SCHEMATIC 43755
- NOTE: UNLESS OTHERWISE SPECIFIED



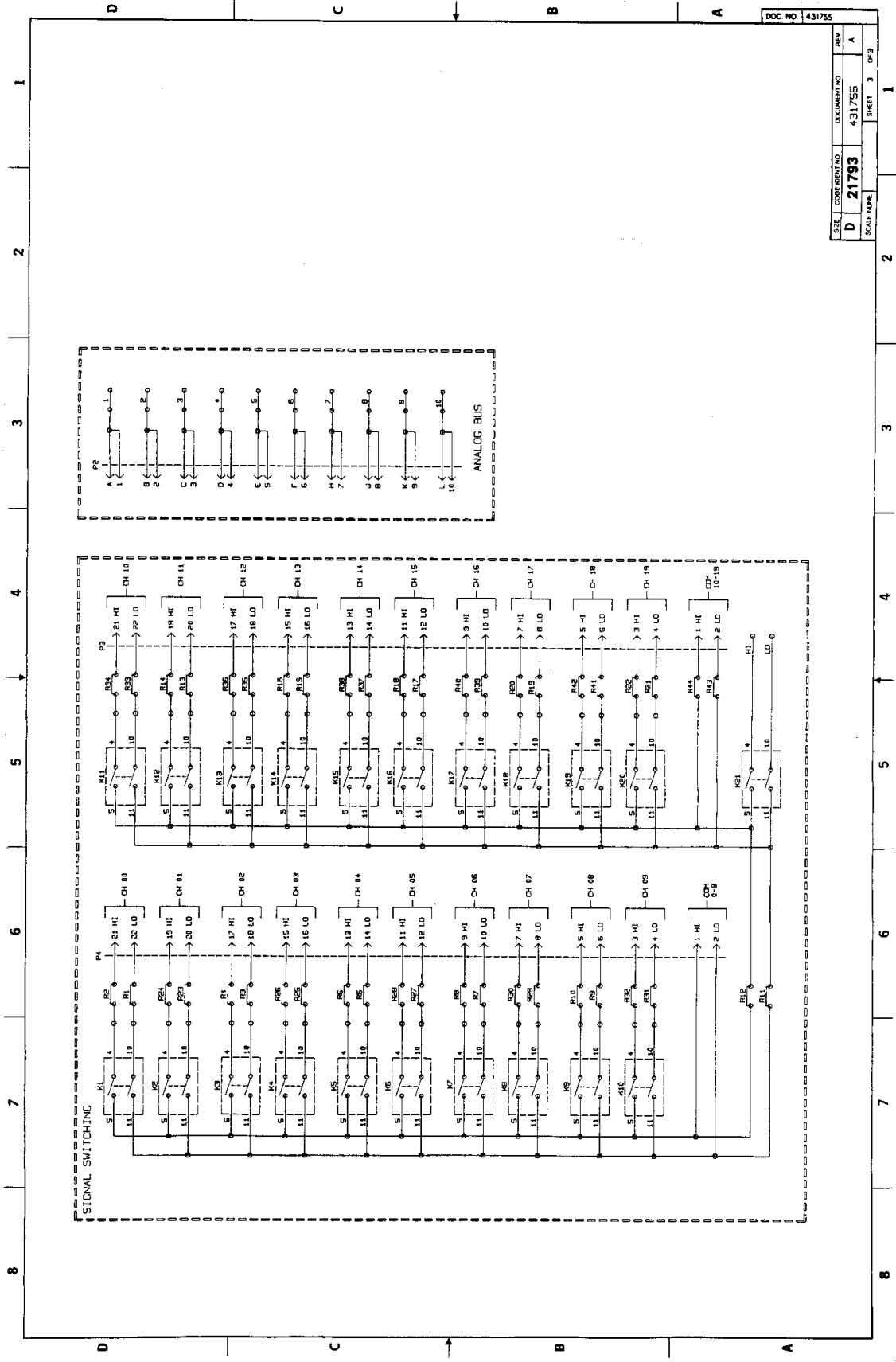
RACAL-DANA Instruments Inc.		4000 WEAR IRVINE CALIFORNIA 92714	
DOCUMENT TITLE			
SCHEM. SCANNER/MUX			
SIZE	CODE ORIGIN	DOCUMENT NO	REV
D	21793	431755	A
SCALE			SHEET 1 OF 3

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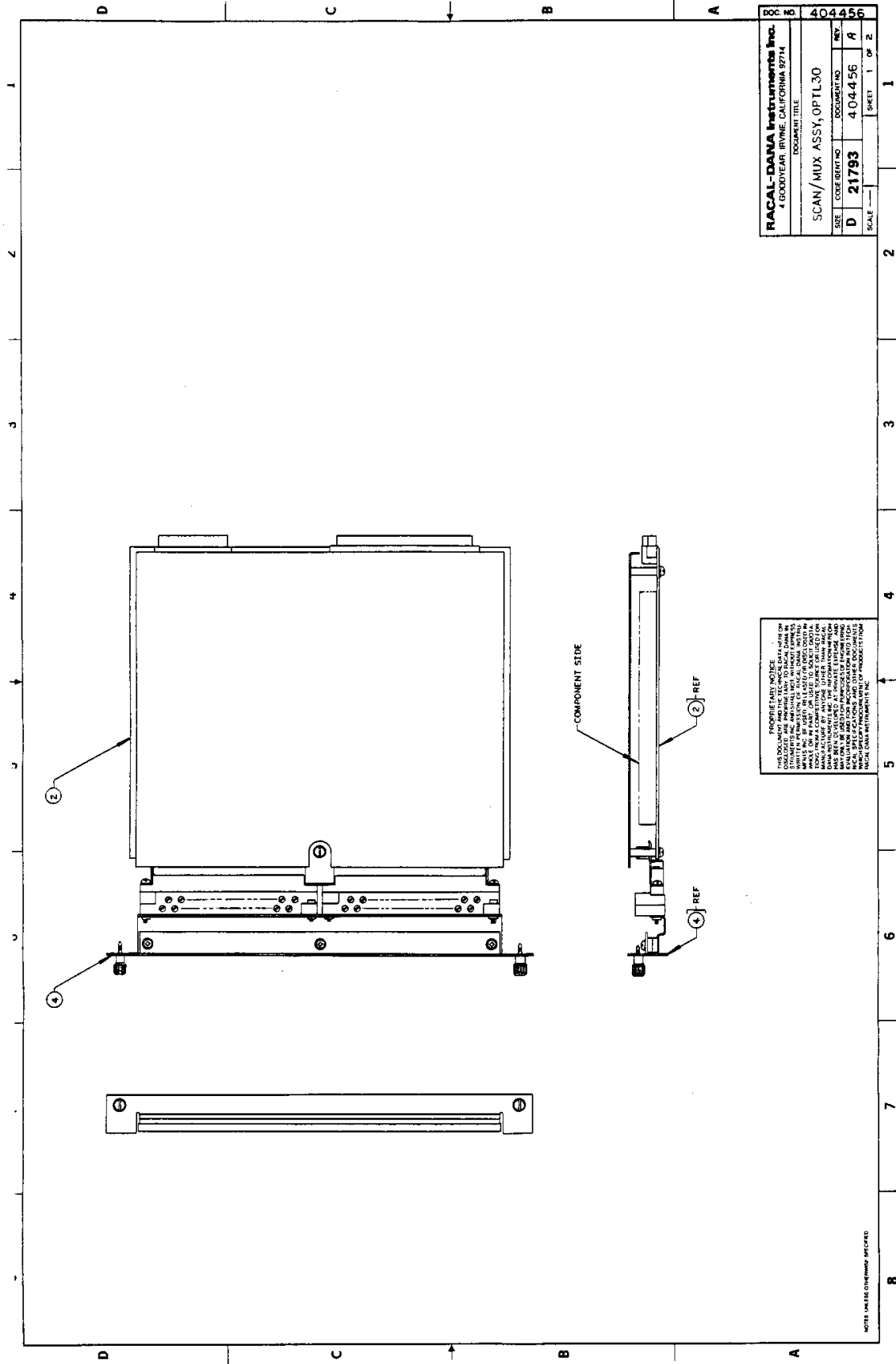
- RESISTORS ARE IN OHMS.
- RELAYS K1 THRU K61 ARE RACAL-DANA P/N 30179.
- ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
- RESISTOR NETWORKS ARE IN MICROHMS.
- CONDUCTOR VALUES ARE IN MICROHMS. 1.0K: 100K UNLESS OTHERWISE SPECIFIED.



DOC. NO.	431755
SIZE	D
CAGE/CONT. NO.	21793
DOCUMENT NO.	431755
REV.	A
SHEET	2
OF	3
SCALE	NOE



SIZE	CODE	REV	DOC NO
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SCALE		SHEET 3 OF 3	

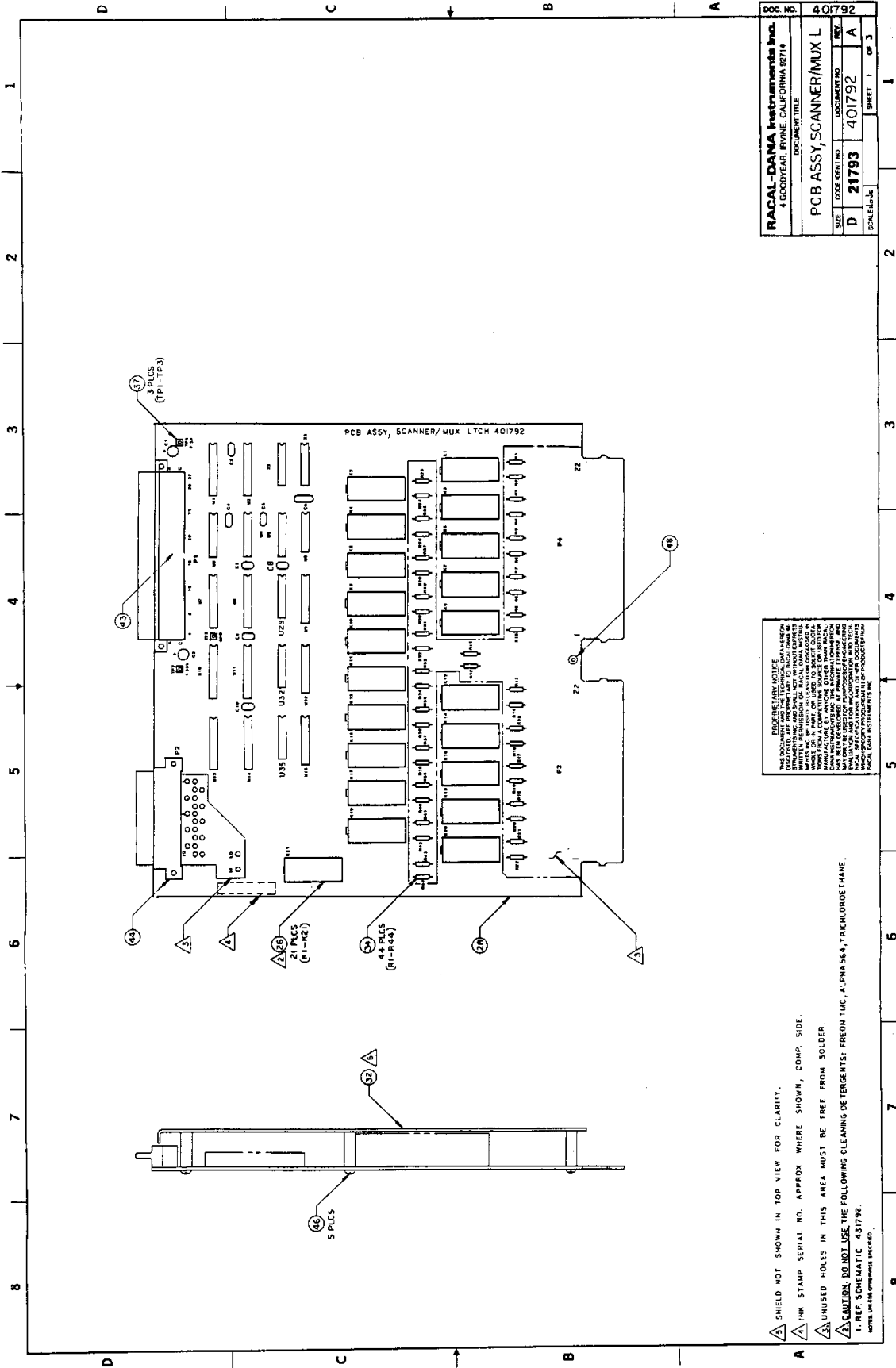


DOC NO		404456
RACAL-DANA Instruments Inc. # GOODYEAR IRVINE, CALIFORNIA 92714		
DOCUMENT TITLE		
SCAN/MUX ASSY, OPTL30		
SIZE	CODE IDENT NO	REV.
D	21793	A
SCALE		SHEET 1 OF 2

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NOTES: 1. SEE DIMENSIONS SPECIFIED

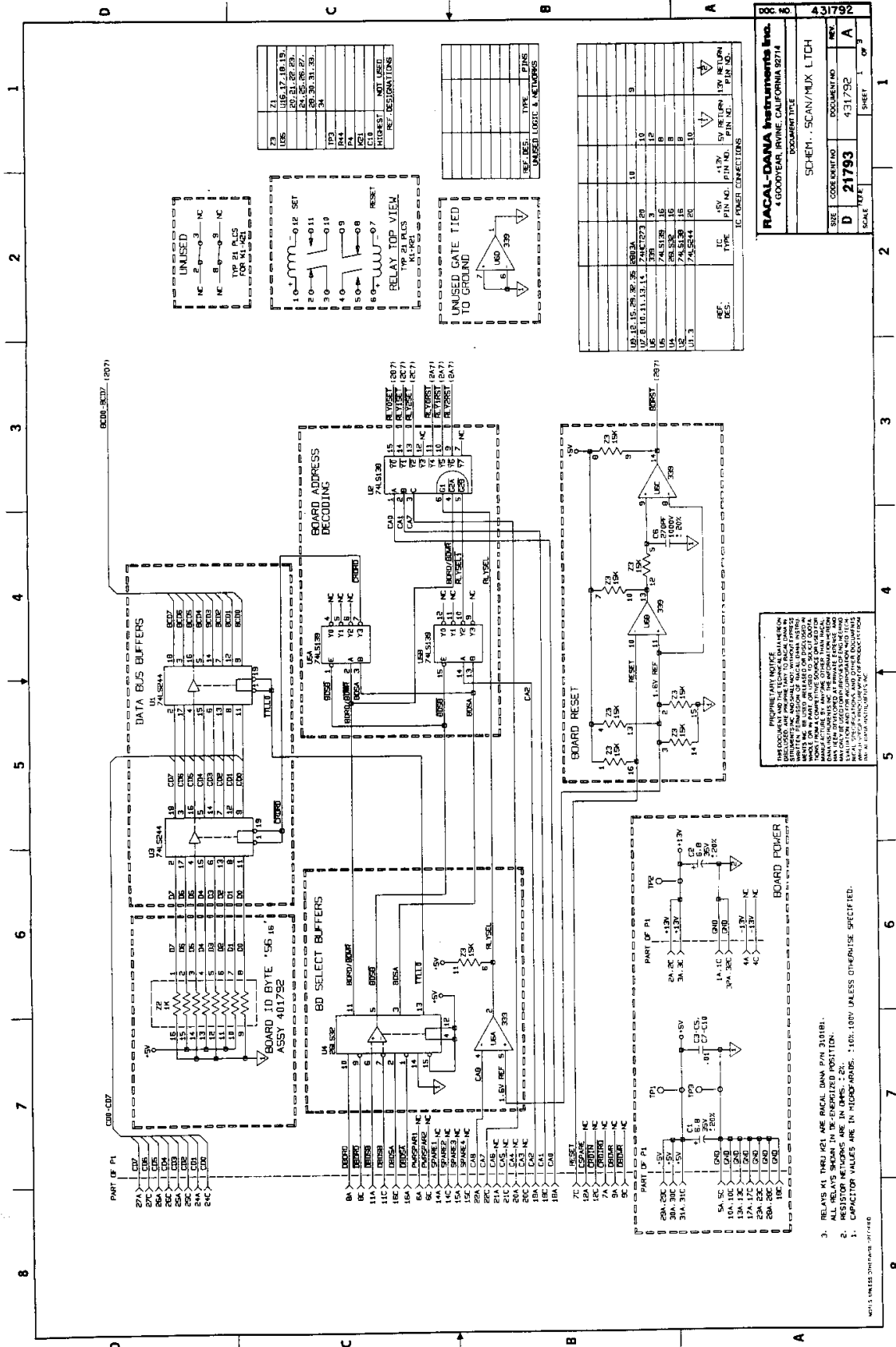




RACAL-DANA Instruments Inc.		8
4 GOODYEAR IRVINE, CALIFORNIA 92714		8
DOCUMENT TITLE		
PCB ASSY, SCANNER/MUX L		
DOC NO	DOCUMENT NO	REV
D 21793	401792	A
SCALE: 1/8"		SHEET 1 OF 3

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SHIELD NOT SHOWN IN TOP VIEW FOR CLARITY.  
 INK STAMP SERIAL NO. APPROX WHERE SHOWN, COMP. SIDE.  
 UNUSED HOLES IN THIS AREA MUST BE FREE FROM SOLDER.  
**CAUTION: DO NOT USE THE FOLLOWING CLEANING AGENTS: FROTH T.M.C. ALPHA 564, TRICHLORO ETHANE.**  
 1. REF SCHEMATIC 431792.  
 NOTES USE THE CORRECTING DEVICE.

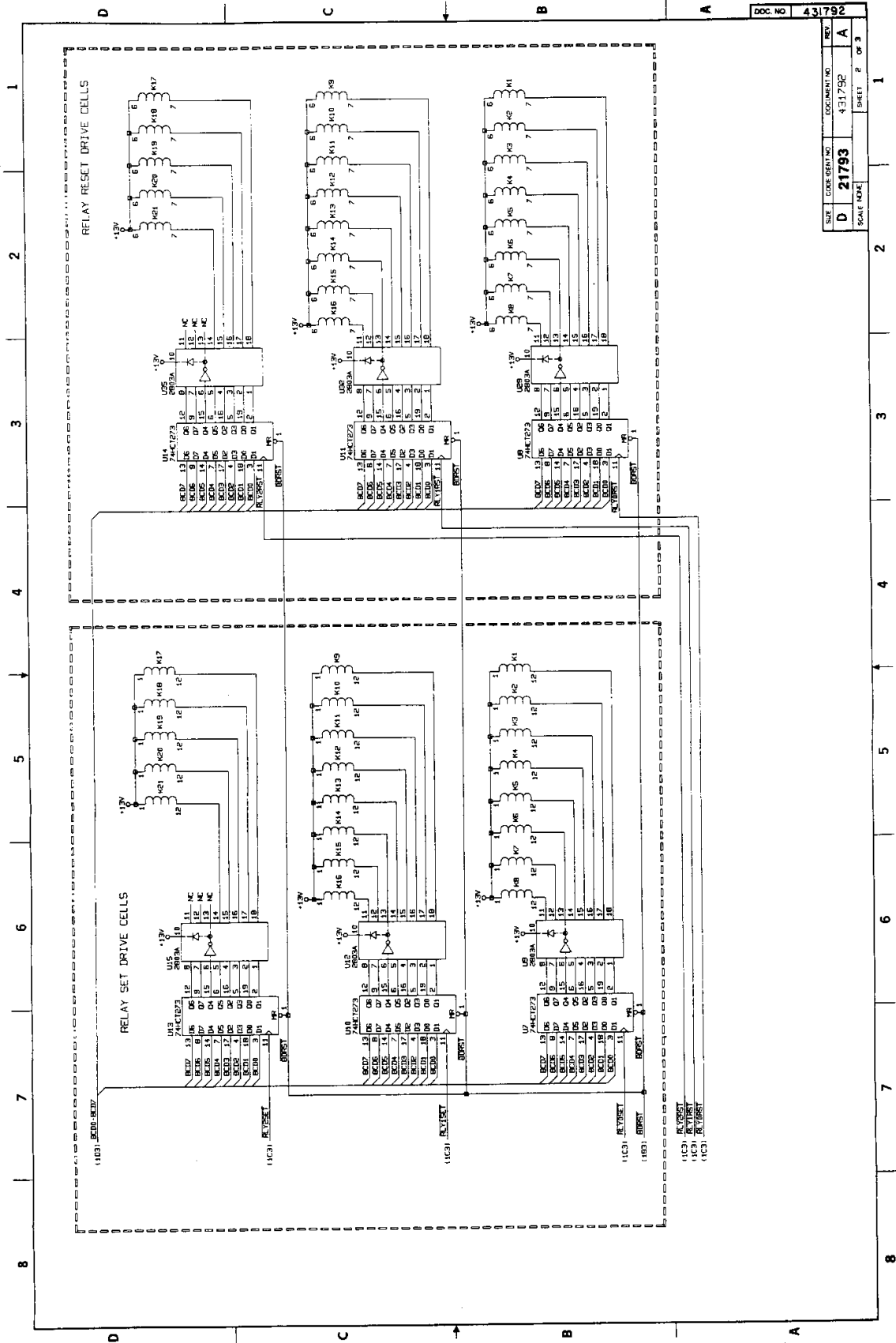


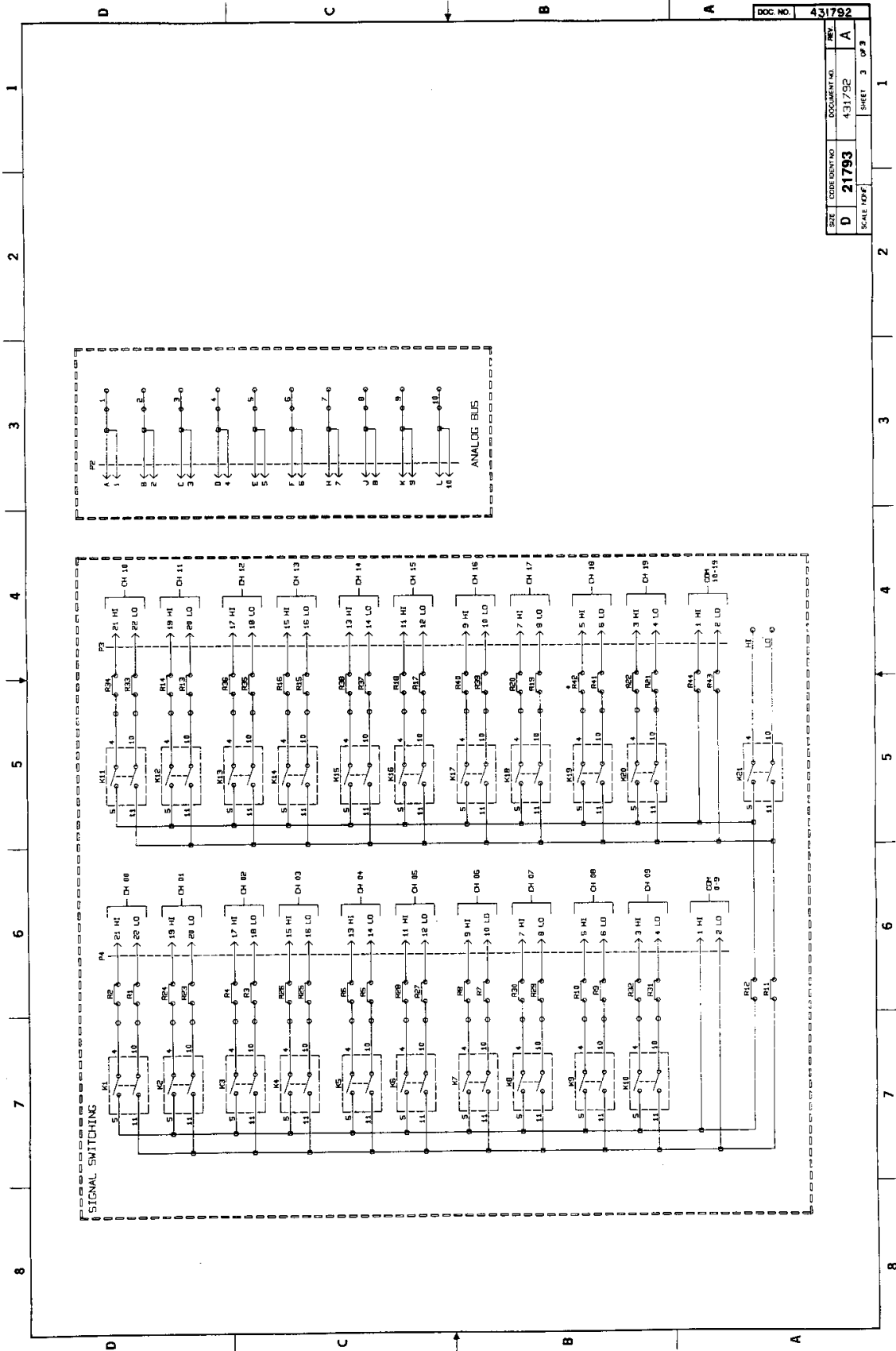
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ISSUE	REV
DATE	4/17/92
SCALE	1 OF 3
SHEET	
DOCUMENT TITLE	
SCHEM. SCAN/MUX L1CH	
10000YEAR BOWNE CALIFORNIA 92714	
DOCUMENT TYPE	
SIC CODE	DOCUMENT NO
D 21793	431792
REV	A

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 PROPERTY ARISING FROM THE USE  
 OF THIS DOCUMENT.

- RELAYS K1 THRU K4 ARE RSCAL DATA P/N 31081B.
- ALL RELAYS SHOULD BE IN THE CLOSED POSITION.
- CAPACITOR VALUES ARE IN MICROFARADS. 10K=10KV UNLESS OTHERWISE SPECIFIED.

REV. 1.0 UNLESS OTHERWISE SPECIFIED

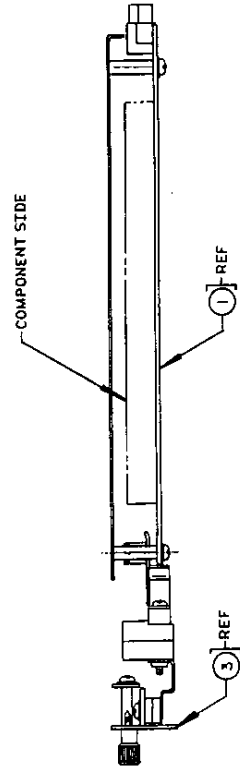
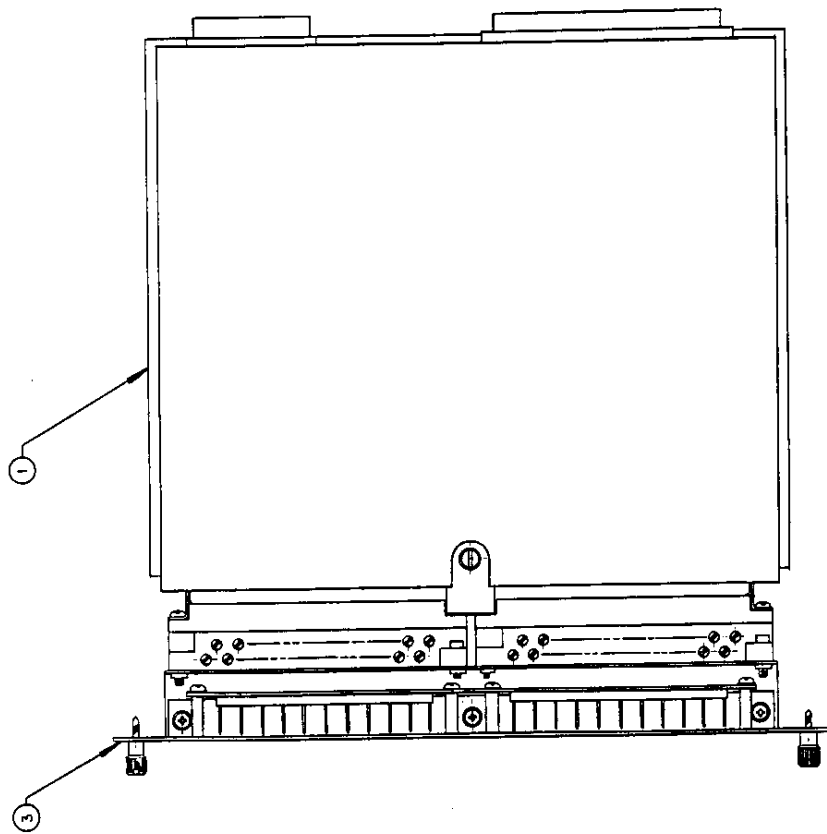




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SIZE	D
CODE IDENT. NO.	21793
DOCUMENT NO.	431792
REV.	A
SCALE	100%
SHEET	3 OF 3

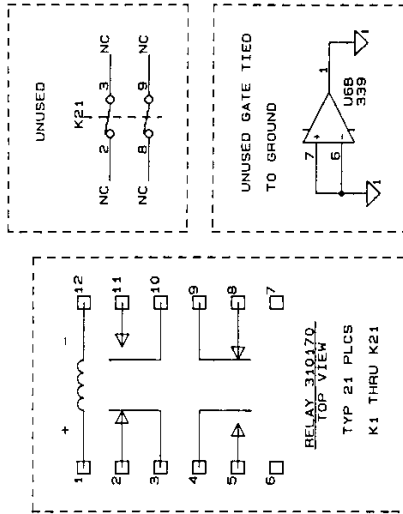
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<b>RACAL-DANA Instruments Inc.</b>			
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
SCAN/MUX ASSY, OPT. 30B			
SIZE	CODE IDENT NO	DOCUMENT NO	REV.
D	21793	404707	A
SCALE		SHEET	1 OF 2









REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
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U2	74LS244	20	10	10	9
U3	74LS244	20	10	10	9
U4	74LS244	20	10	10	9
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U19	74LS244	20	10	10	9
U20	74LS244	20	10	10	9

HIGHEST REF. DES.
U20
U19
U18
U17
U16
U15
U14
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U12
U11
U10
U9
U8
U7
U6
U5
U4
U3
U2
U1

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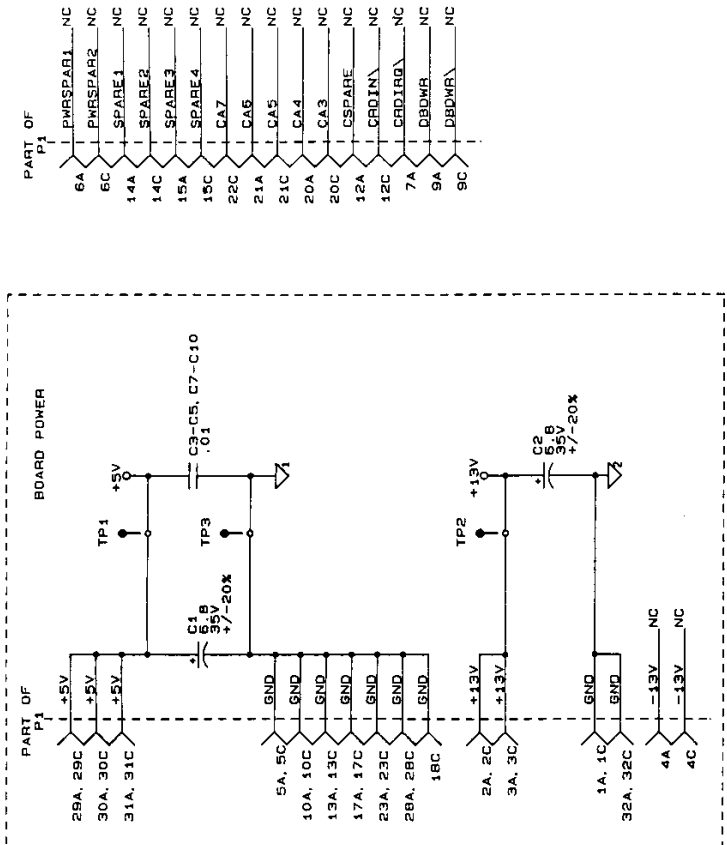
**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE

**SCHEM., SCANNER/MUX**

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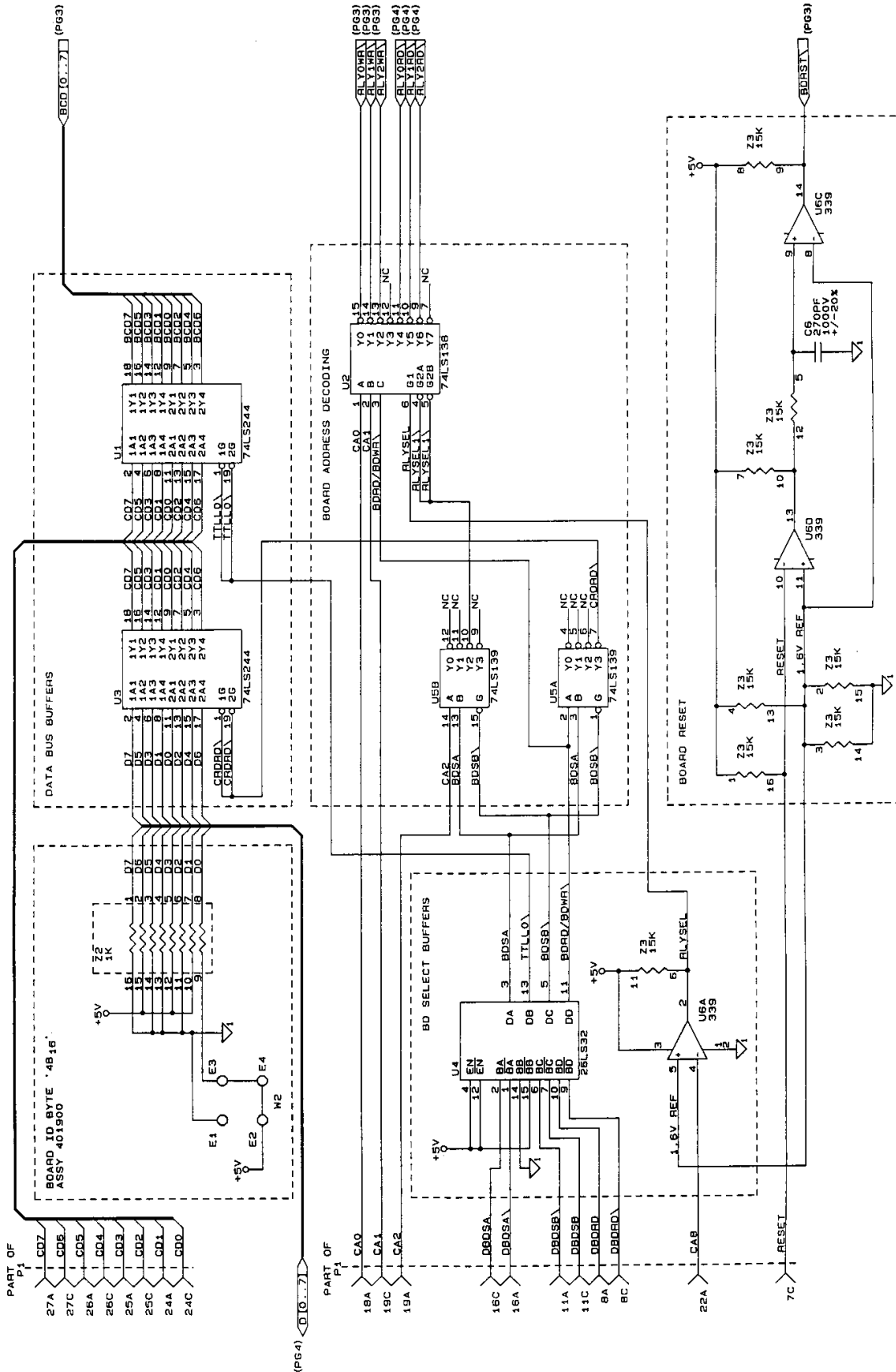
SCALE \_\_\_\_\_ SHEET | OF 6



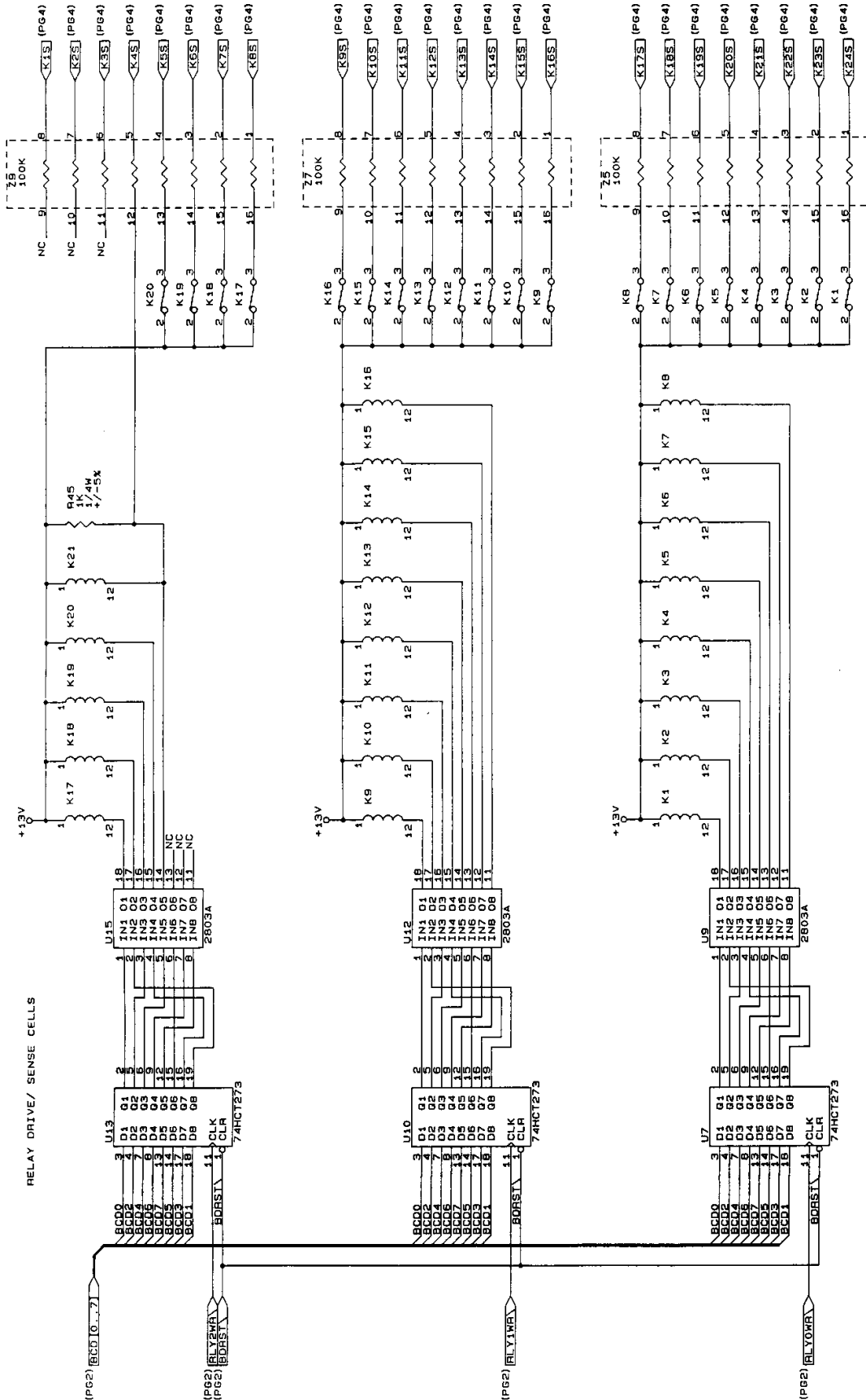
1. CAPACITOR VALUES ARE IN MICROFARADS. +/-10%. 100V UNLESS OTHERWISE SPECIFIED.
2. RESISTOR NETWORKS ARE IN OHMS. +/-2%.
3. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
4. RESISTORS ARE IN OHMS.
5. R46 THRU R55, R57 THRU R61 AND R64 THRU R66 TO BE INSTALLED BY USER.

NOTES: UNLESS OTHERWISE SPECIFIED



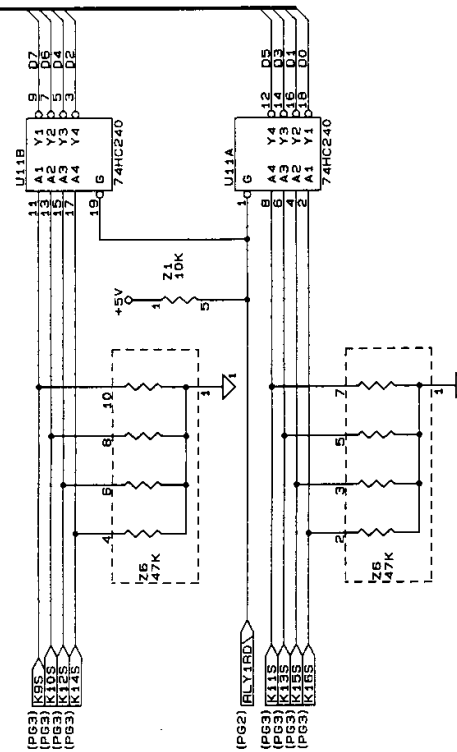
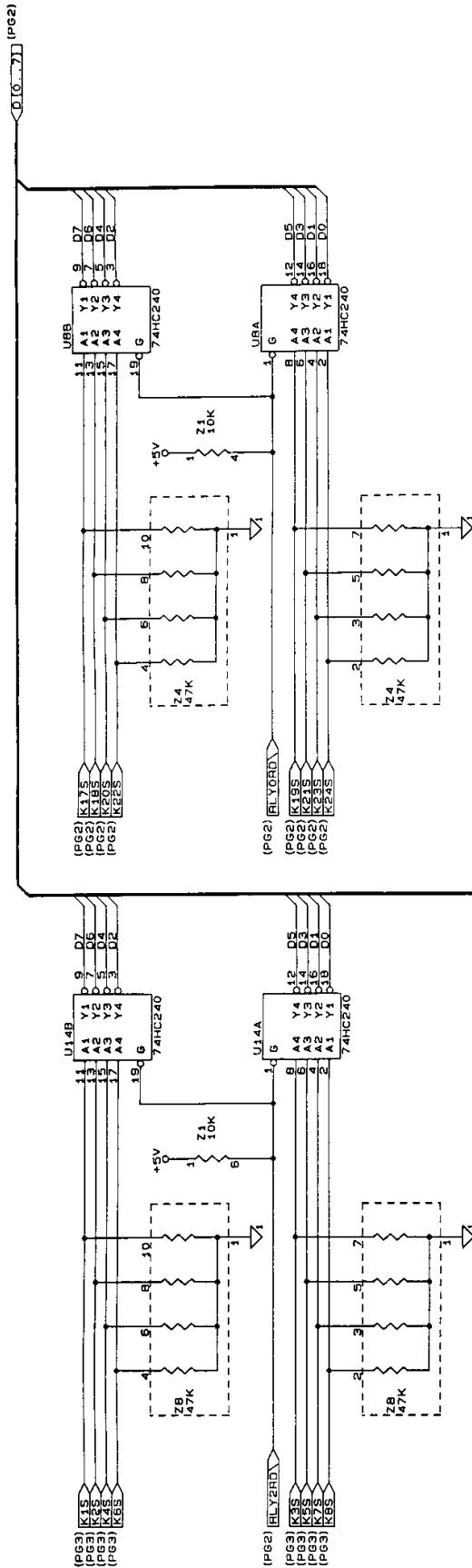


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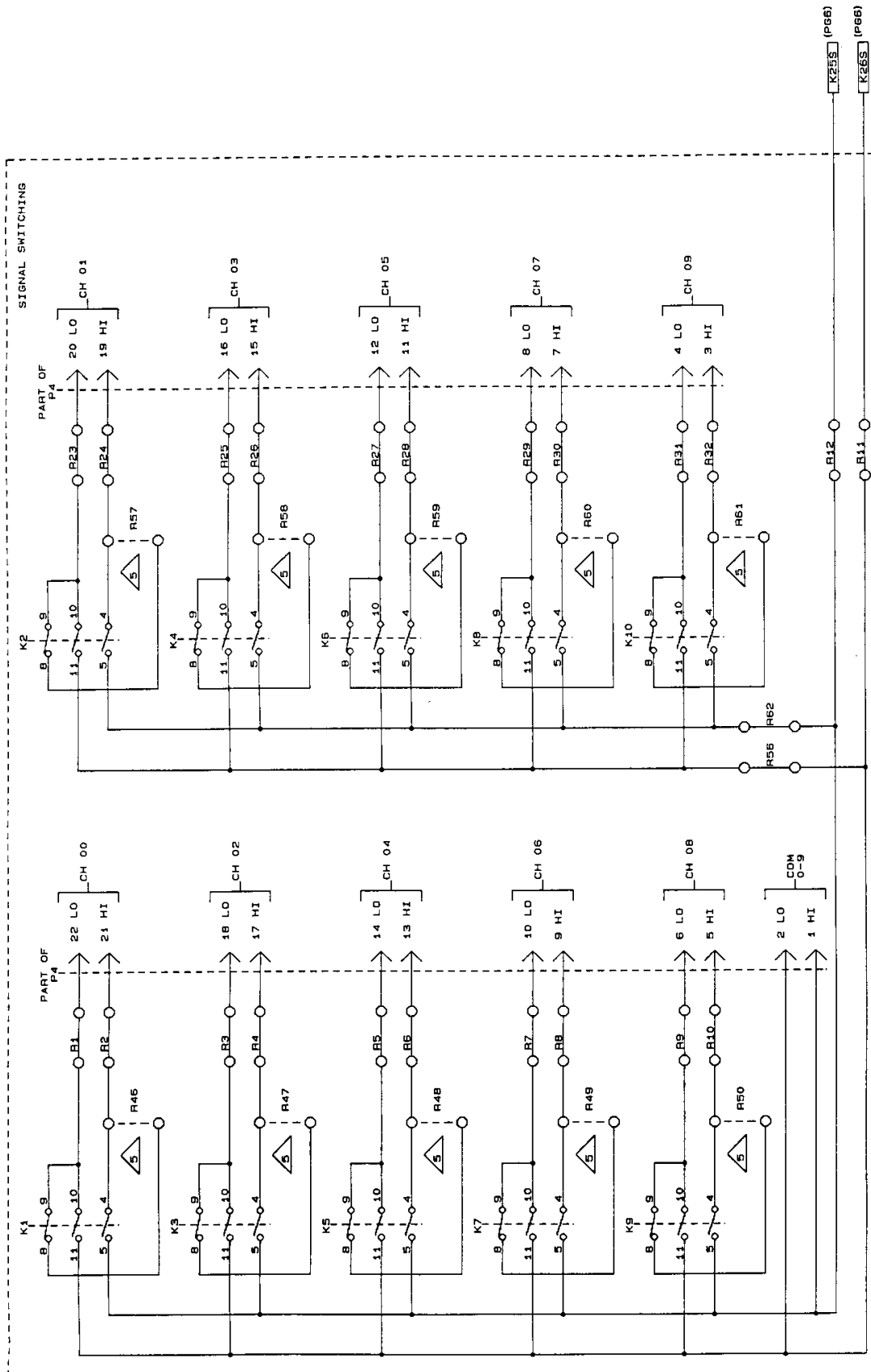


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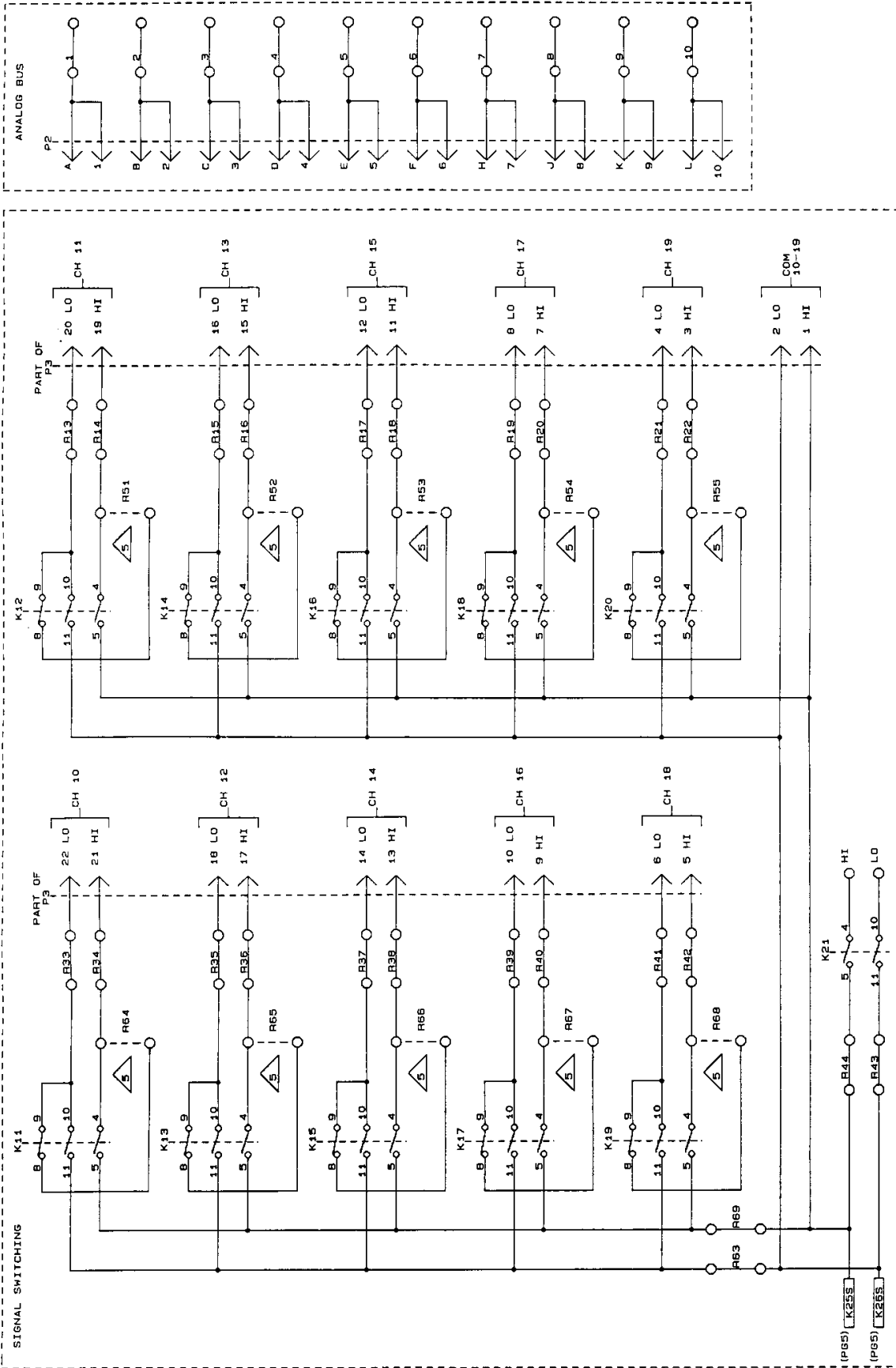
RELAY DRIVE/ SENSE CELLS



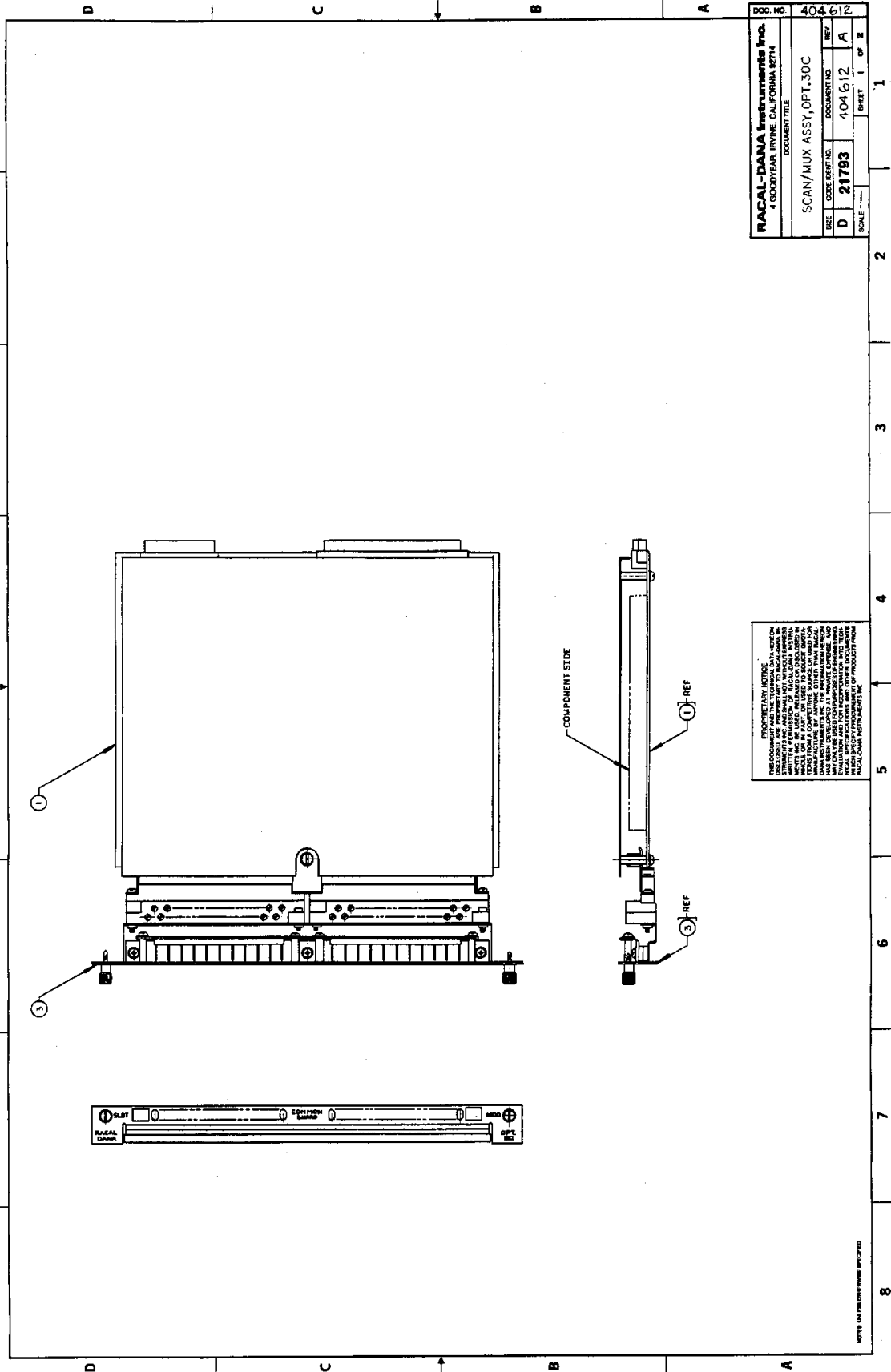
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SCALE		SHEET 4	OF 6



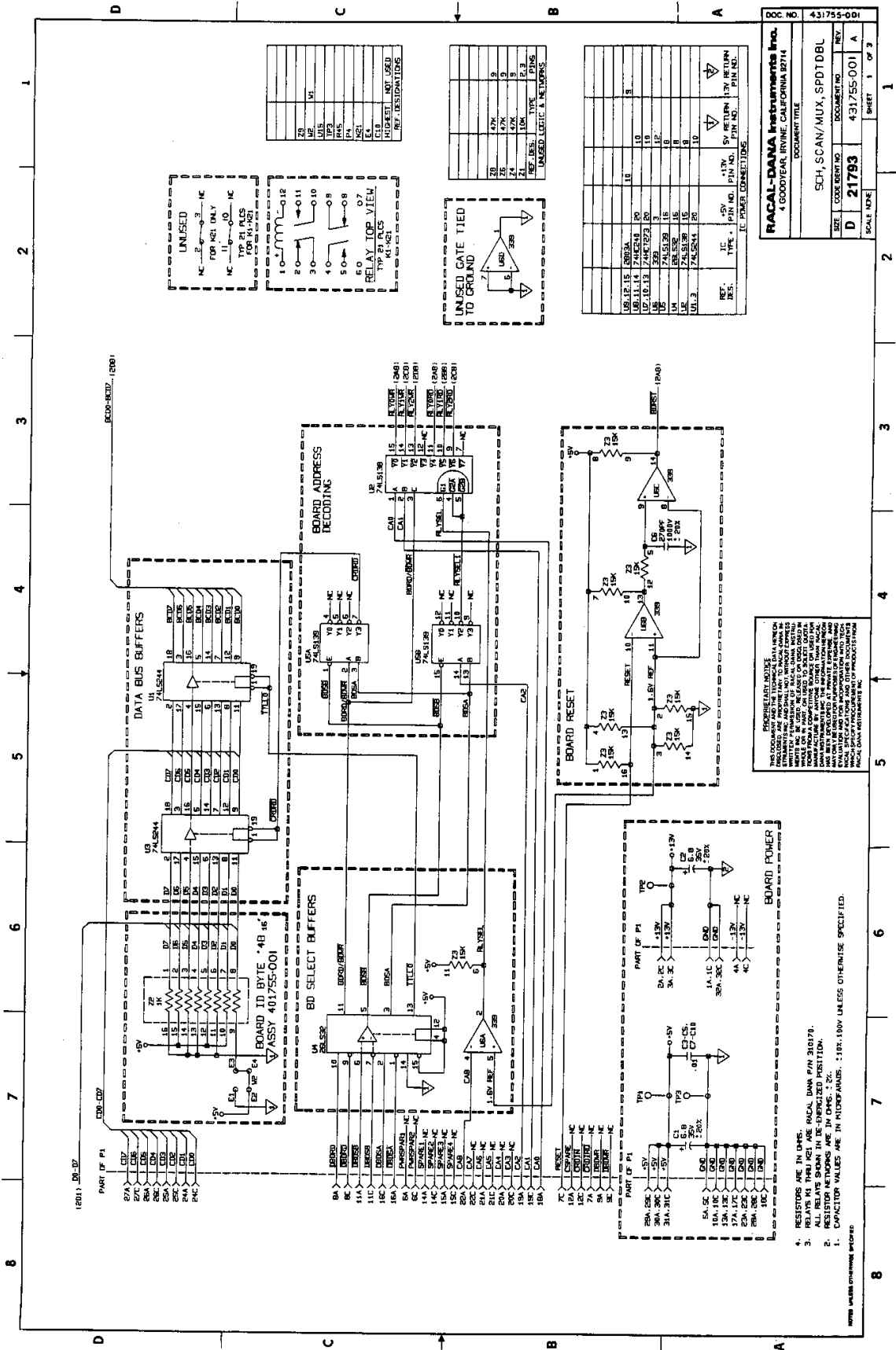
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B	21793	431900	A
SCALE	SHEET 5 OF 6		



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431900	A
SCALE		SHEET 6	OF 6







DOC NO	43175-001
REV	A
DATE	11/15/88
BY	...
CHKD	...
APP'D	...
REV	...
DATE	...
BY	...
CHKD	...
APP'D	...
REV	...
DATE	...
BY	...
CHKD	...
APP'D	...

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		U. NUMBER	...				

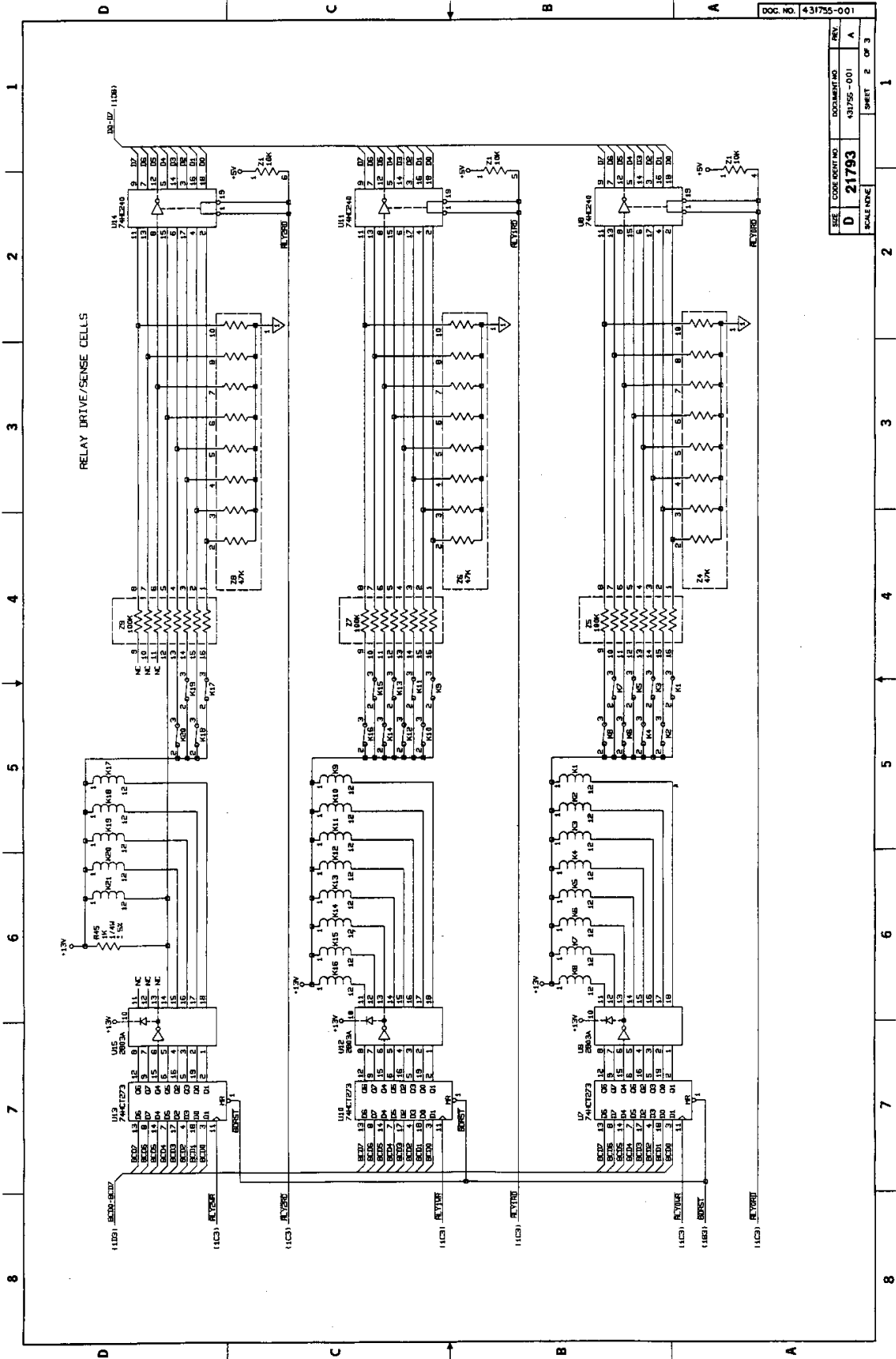
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		U. NUMBER	...				

REF. DES.	IC	SY. NO.	120	SV. RETURN	13V	RETURN	
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		U. NUMBER	...				

RESISTORS ARE IN OHMS.  
 CAPACITORS ARE IN MICROFARADS.  
 UNLESS OTHERWISE SPECIFIED.

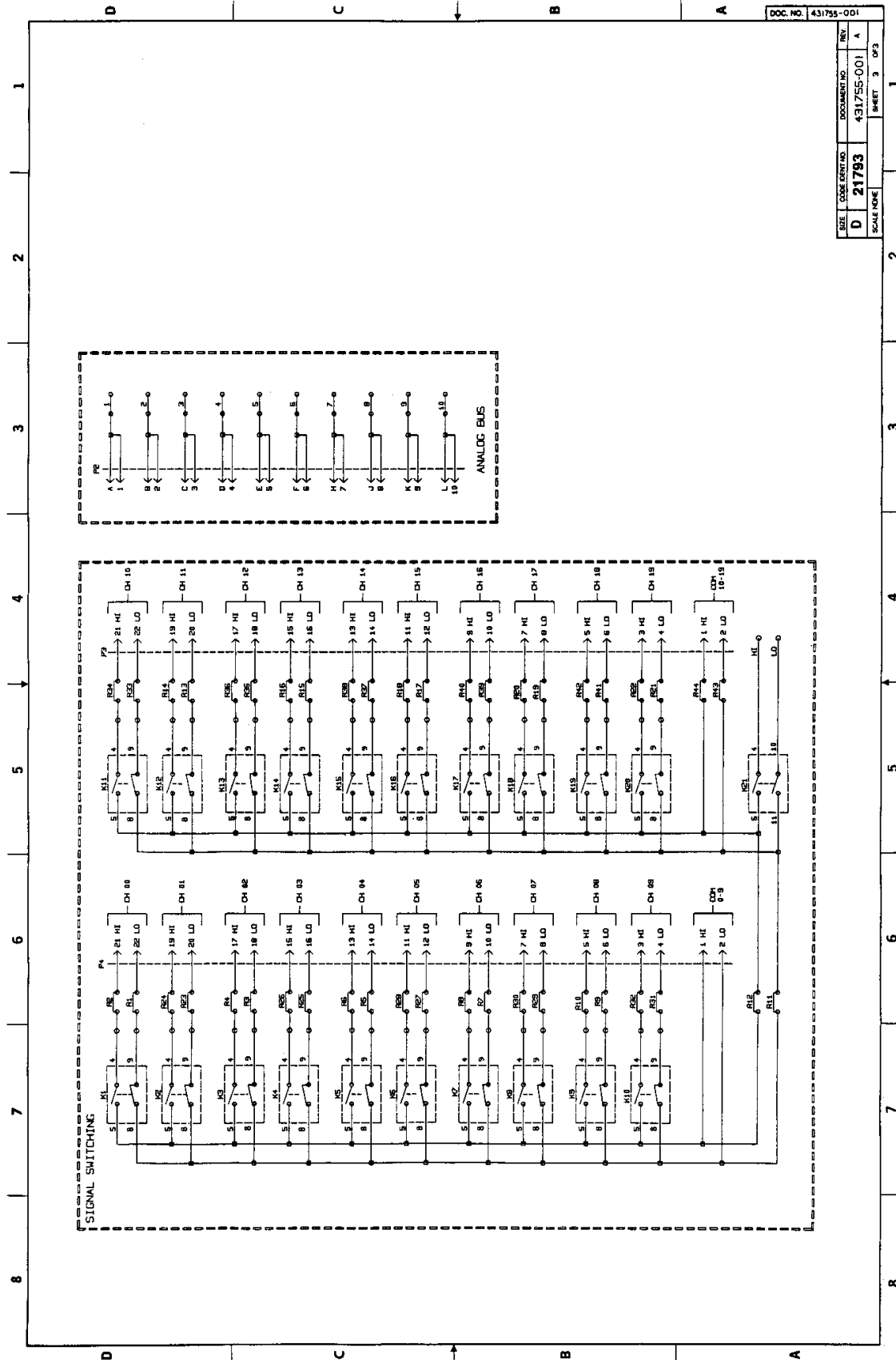




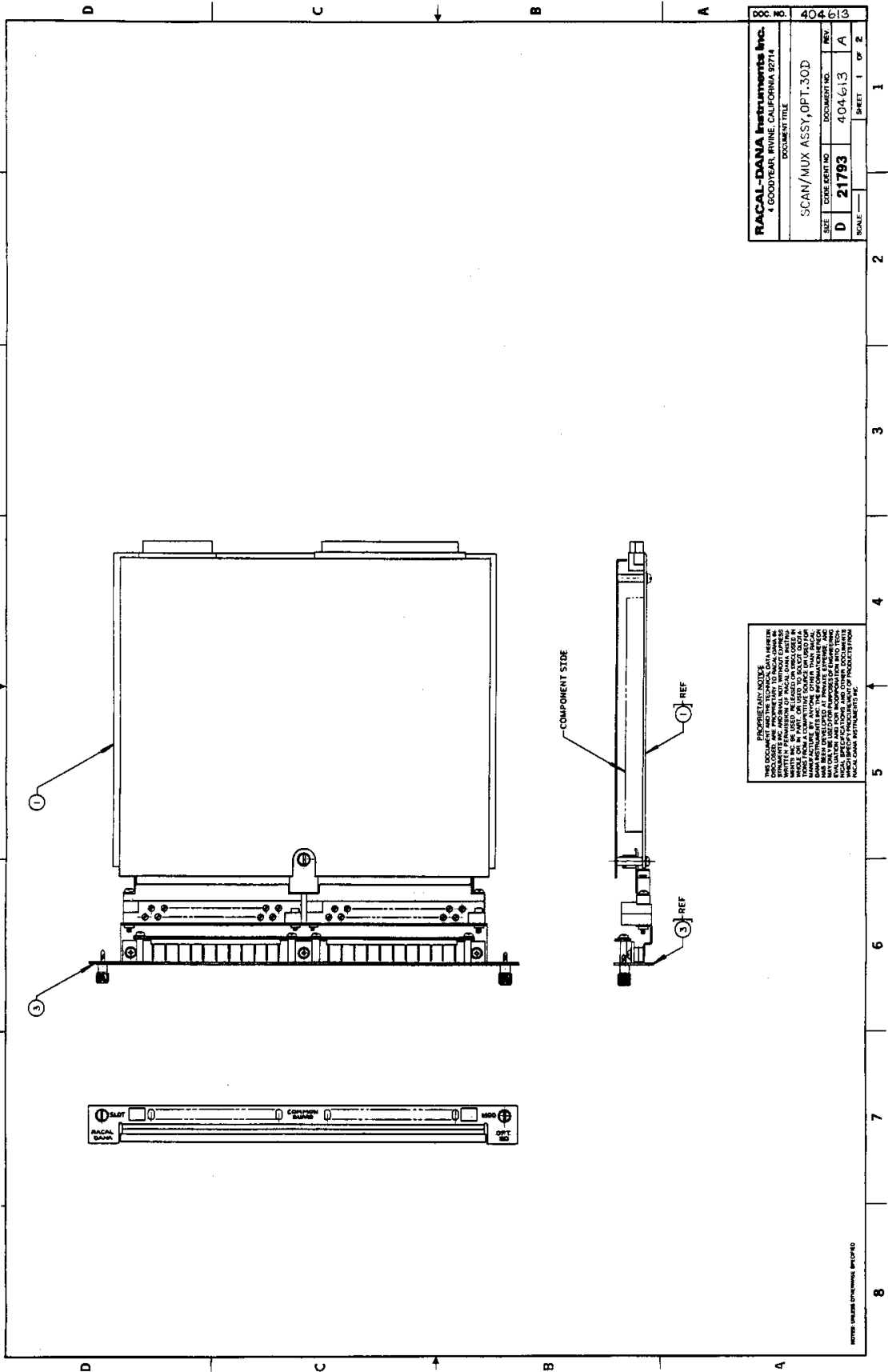
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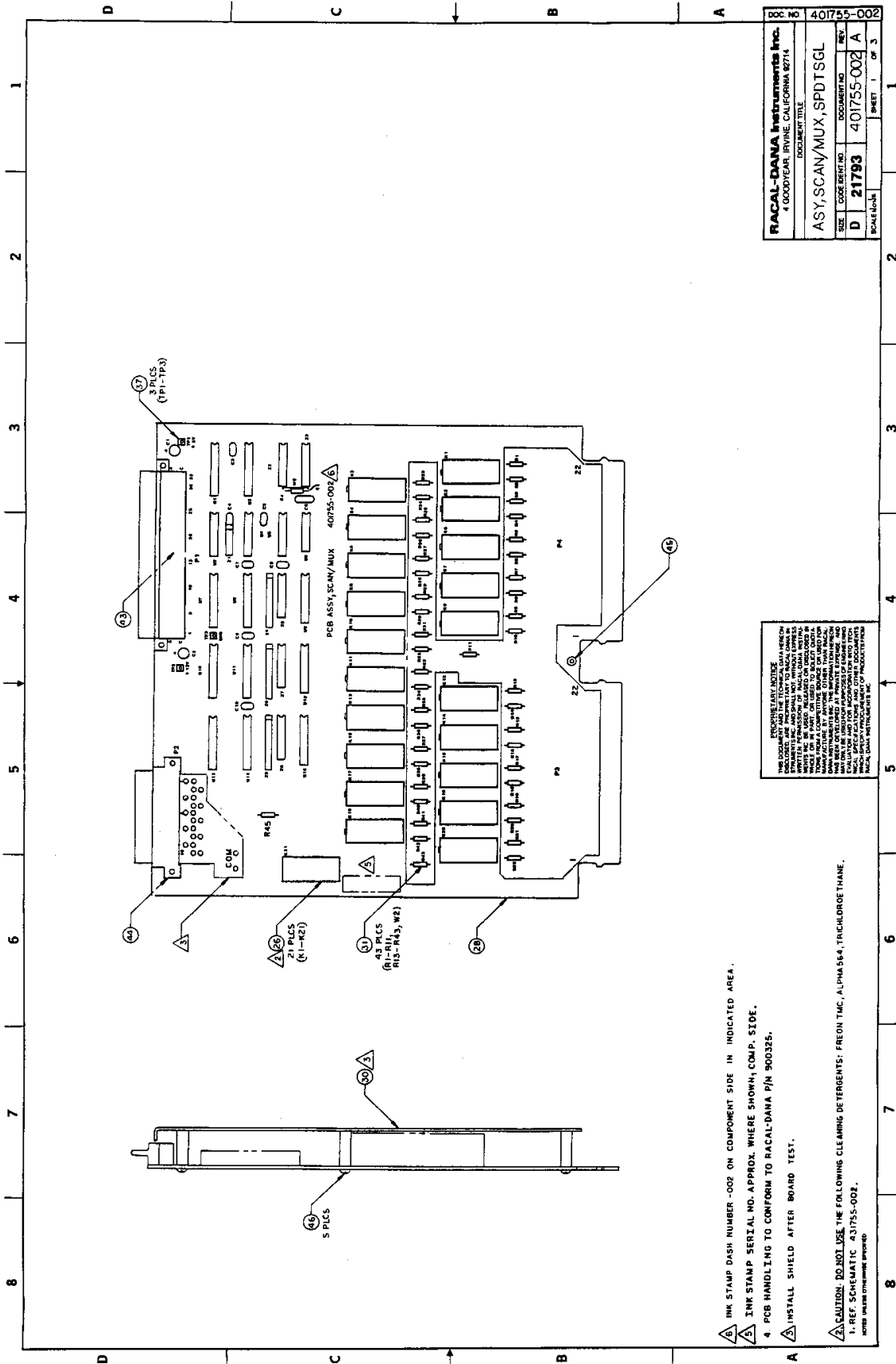
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SCALE NONE SHEET 2 OF 3



DOC. NO. 431755-001	
DATE	REV
D	A
21793	431755-001
SCALE NONE	SHEET 3 OF 3

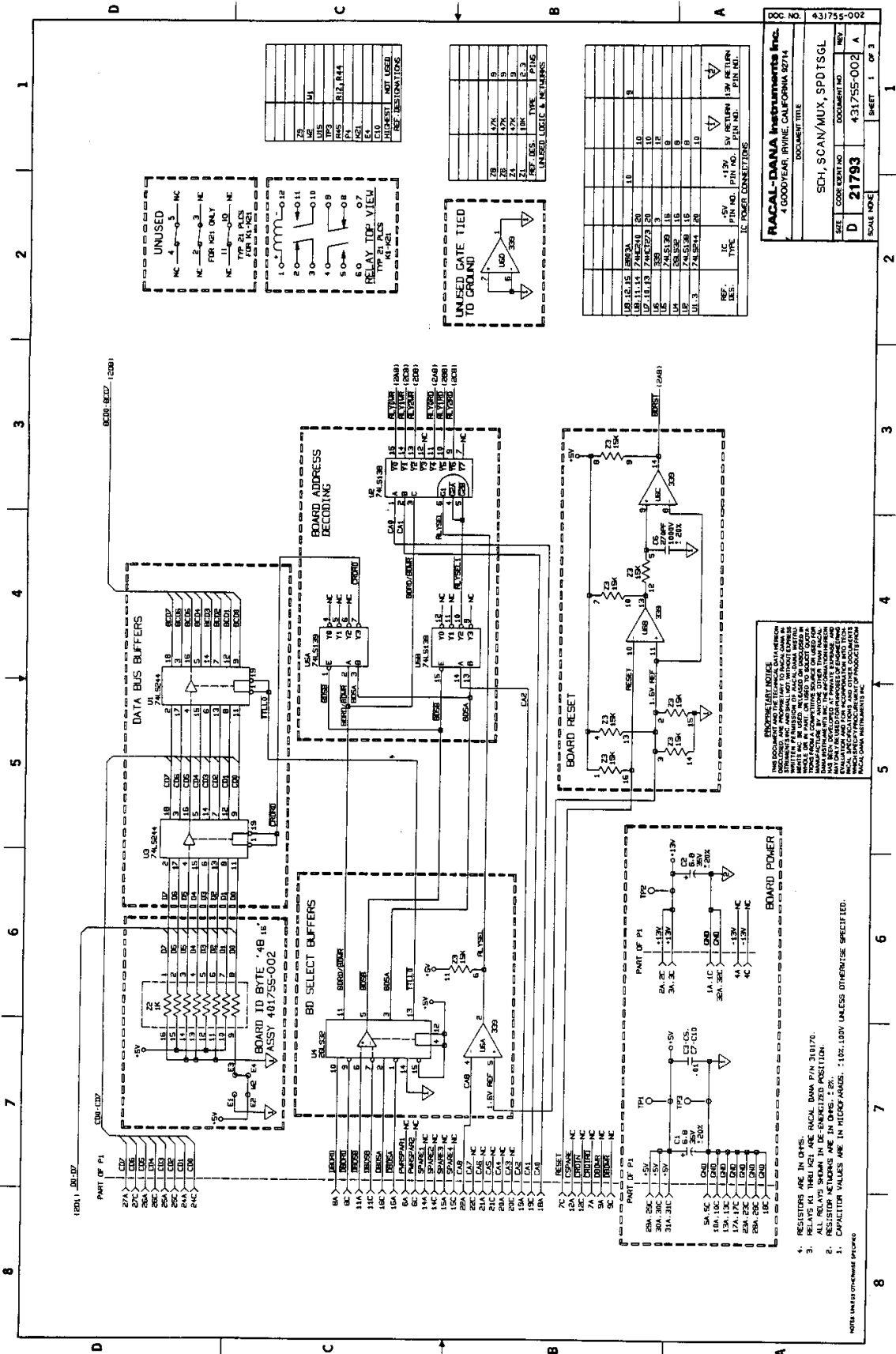




RACAL-DANA Instruments Inc.		401755-002	
1 GOODYEAR, IRVINE, CALIFORNIA 92714		DOCUMENT NO.	
DOCUMENT TITLE		DOCUMENT NO.	
ASSEMBLY, SCANY/MUX, SPDT SGL		401755-002 A	
SIZE	CODE	REV	SHEET
D	21793		1 OF 3
SCALE 1:1			

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- 4. INK STAMP DASH NUMBER -002 ON COMPONENT SIDE IN INDICATED AREA.
- 5. INK STAMP SERIAL NO. APPROX. WHERE SHOWN COMP. SIDE.
- 6. PCB HANDLING TO CONFORM TO RACAL-DANA P/N 900325.
- 7. INSTALL SHIELD AFTER BOARD TEST.
- 8. CAUTION: DO NOT USE THE FOLLOWING CLEANING DE TERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE.



**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR IRVINE, CALIFORNIA 92714

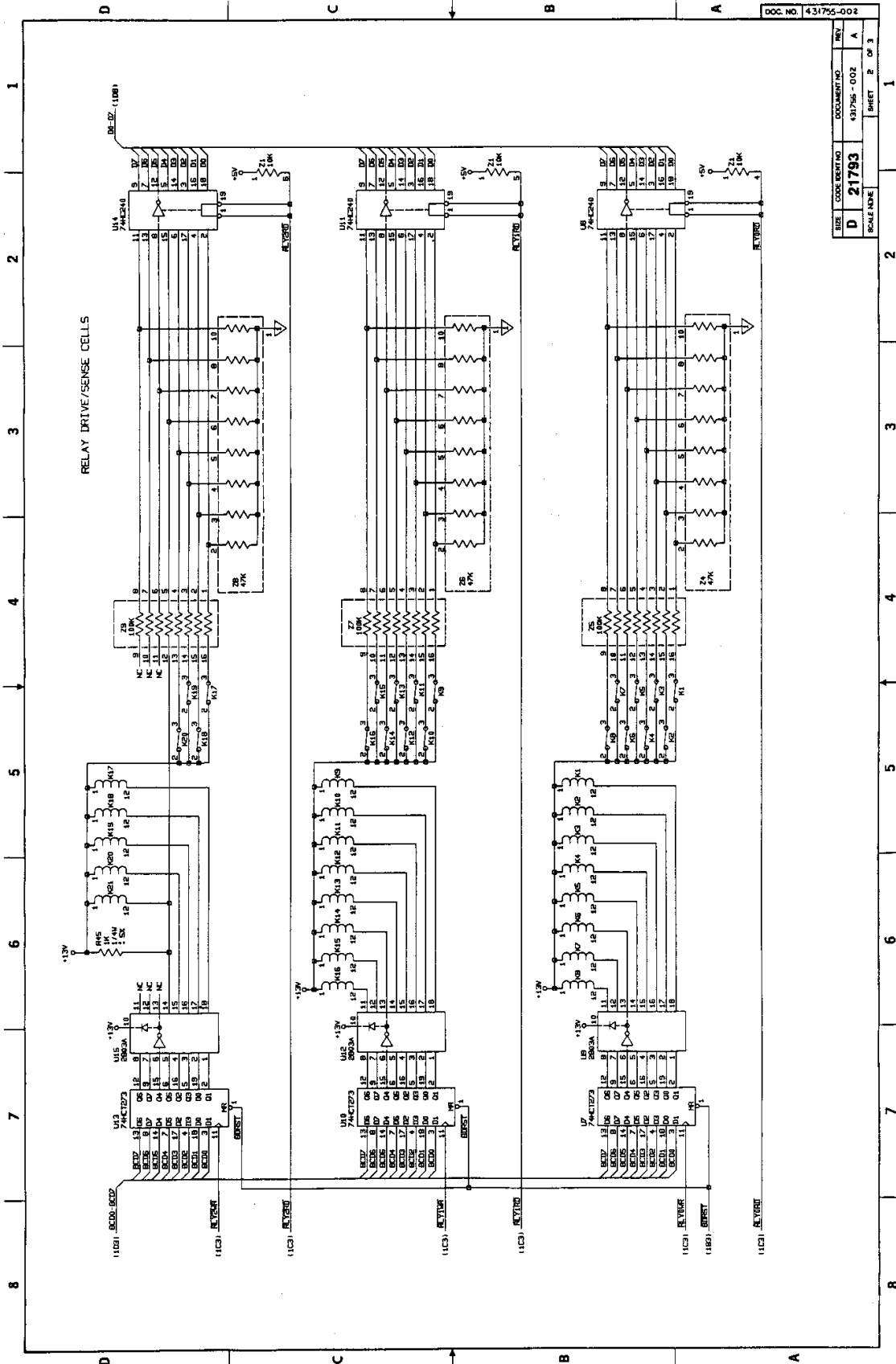
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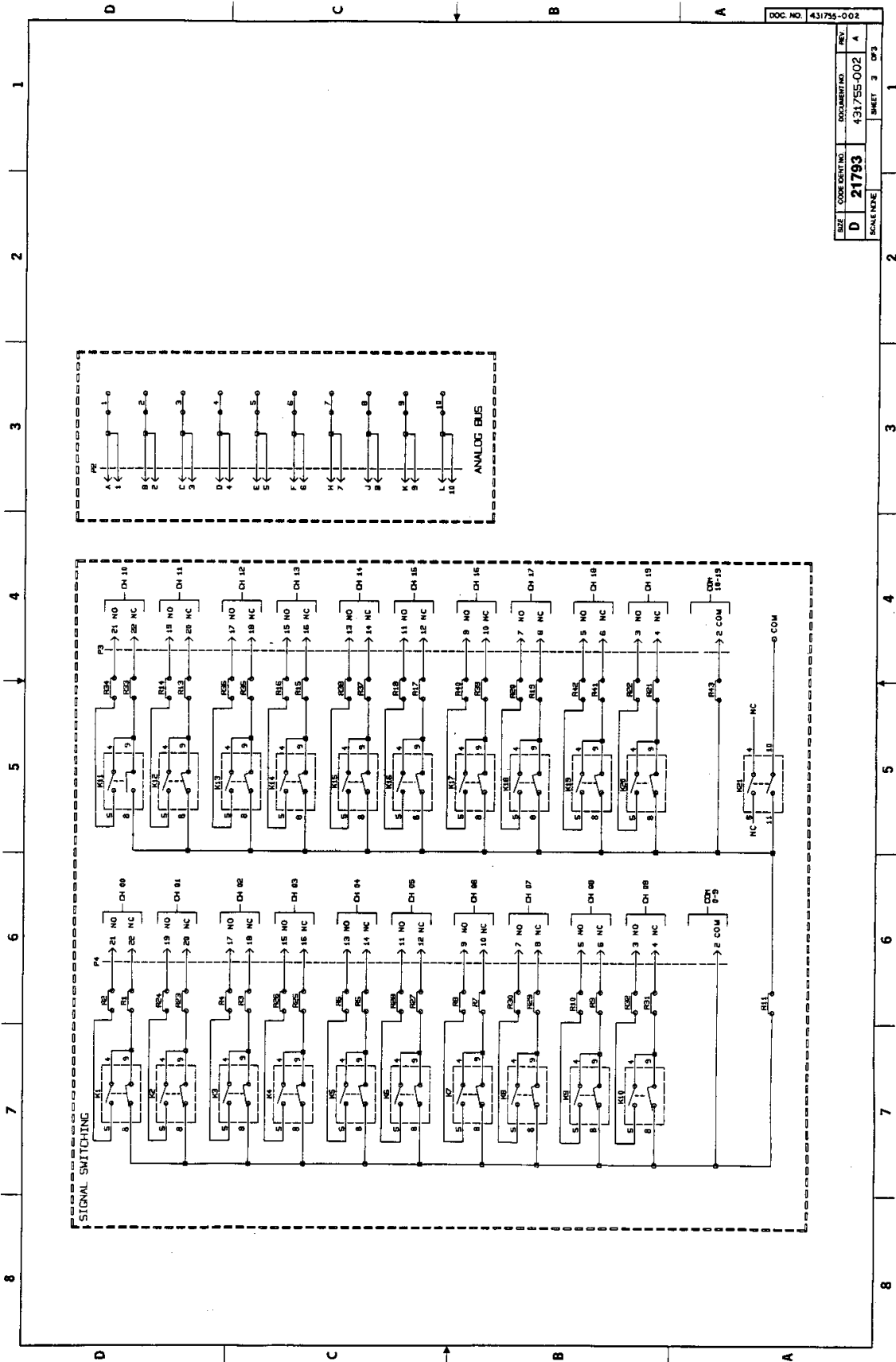
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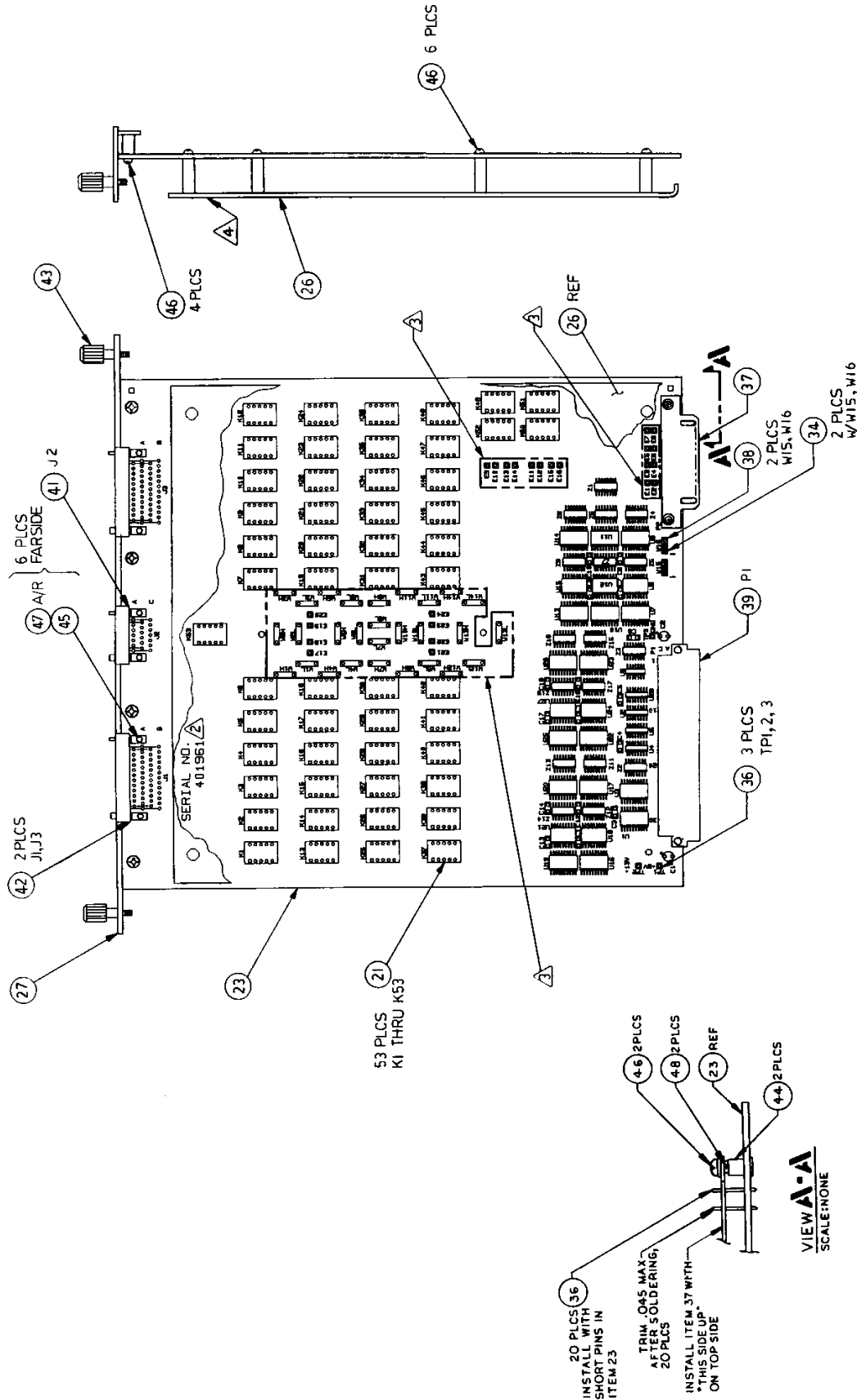
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1. RESISTOR VALUES ARE IN OHMS.
  2. ALL RELAYS SHOWN ARE RACAL DANA P/N 310776.
  3. RESISTOR NETWORKS ARE IN DESIGN POSITION.
  4. CAPACITOR VALUES ARE IN MICROGRAMS. .10% .100V UNLESS OTHERWISE SPECIFIED.





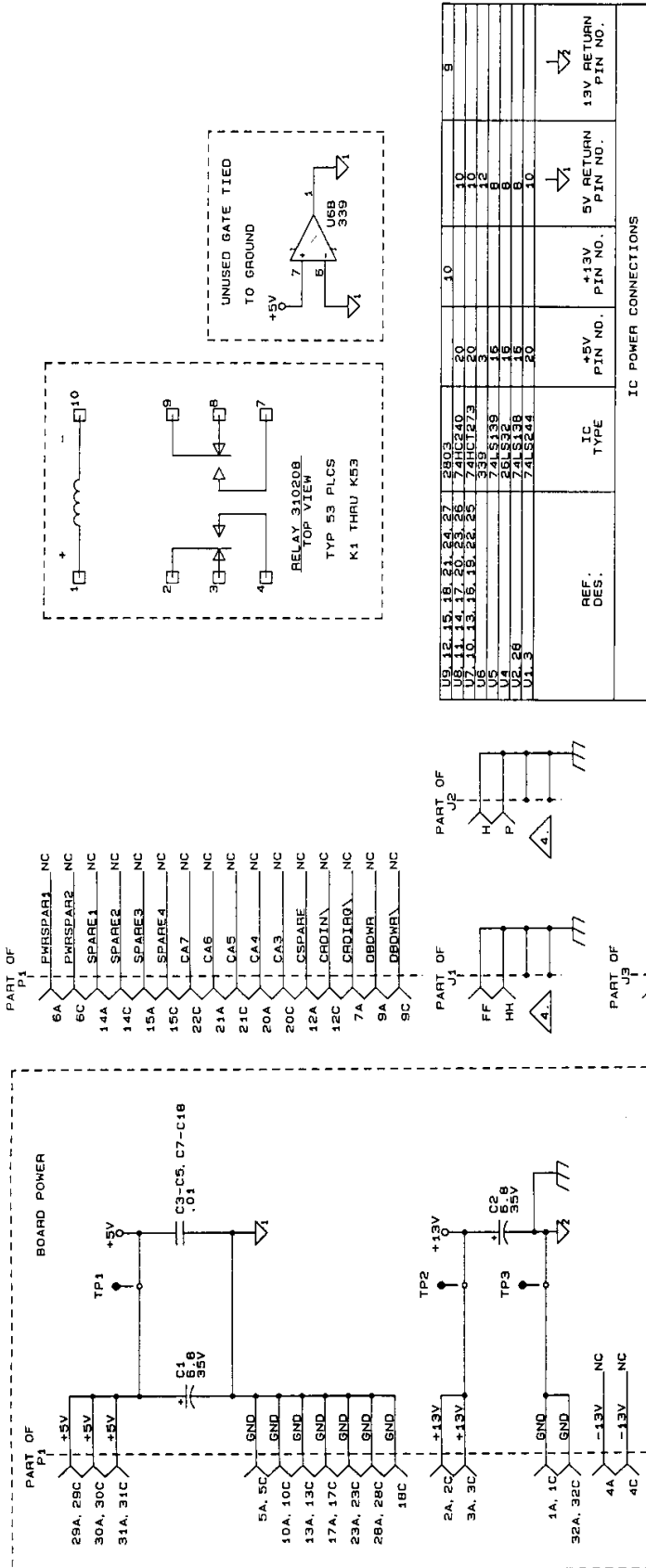


<b>Racal Instruments, Inc.</b> 4 Goodyear St., Irvine, CA 92718-2002			
DOCUMENT TITLE			
PCB ASSY, 1250-35 OPT			
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D	21793	401961	E
SCALE			SHEET OF 2

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- ▲ AFFIX WHITE PAPER LABEL MARKED WITH MODEL # ON OUTSIDE SURFACE.
  - ▲ HOLES IN THIS AREA MUST BE FREE FROM SOLDER.
  - ▲ INK STAMP SERIAL NO. ON COMPONENT SIDE IN INDICATED AREA.
1. REFERENCE SCHEMATIC 431961.
- NOTES UNLESS OTHERWISE SPECIFIED





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**RACAL-DANA Instruments Inc.**  
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE  
**SCHEM., 1250-35-0PT**

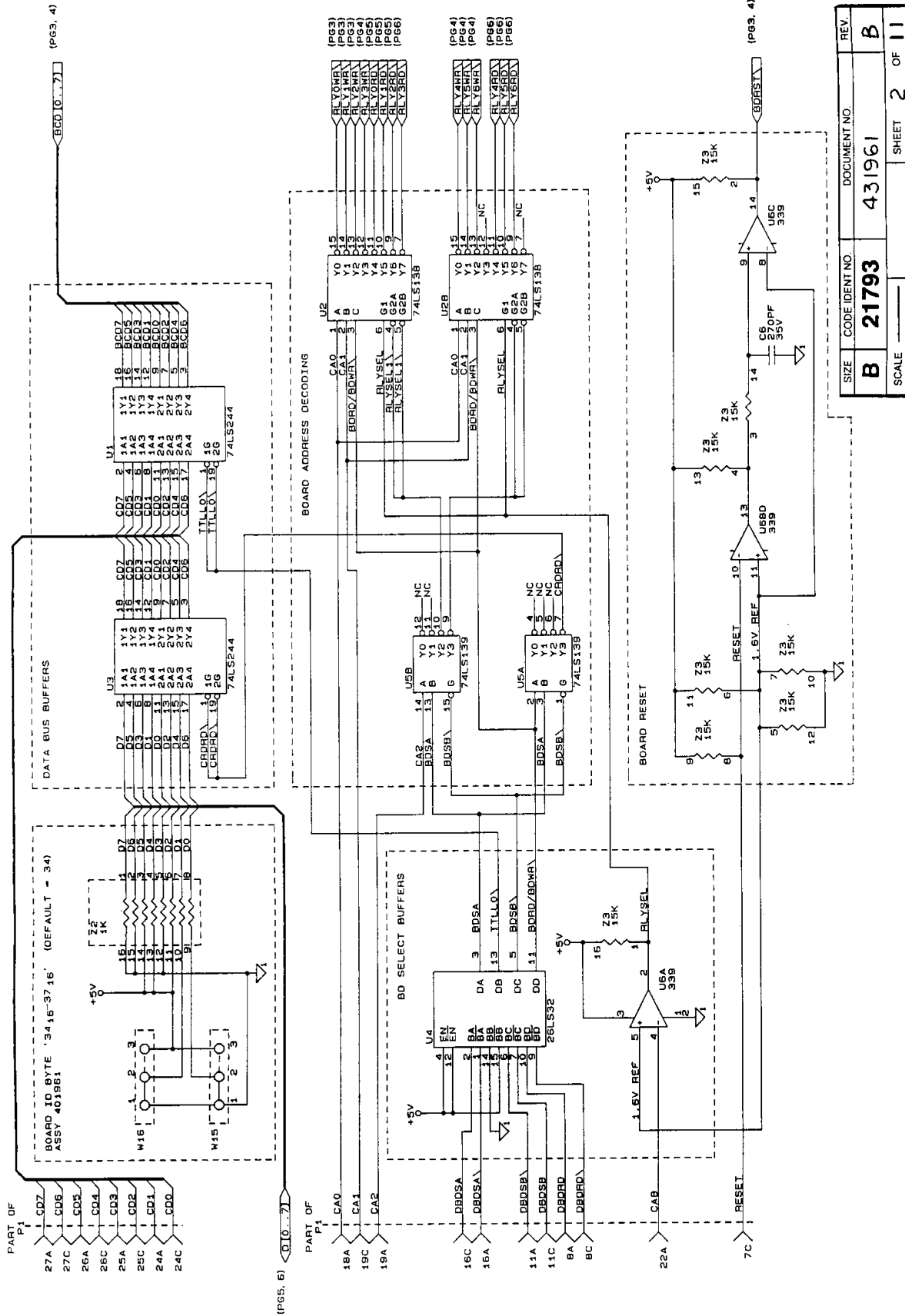
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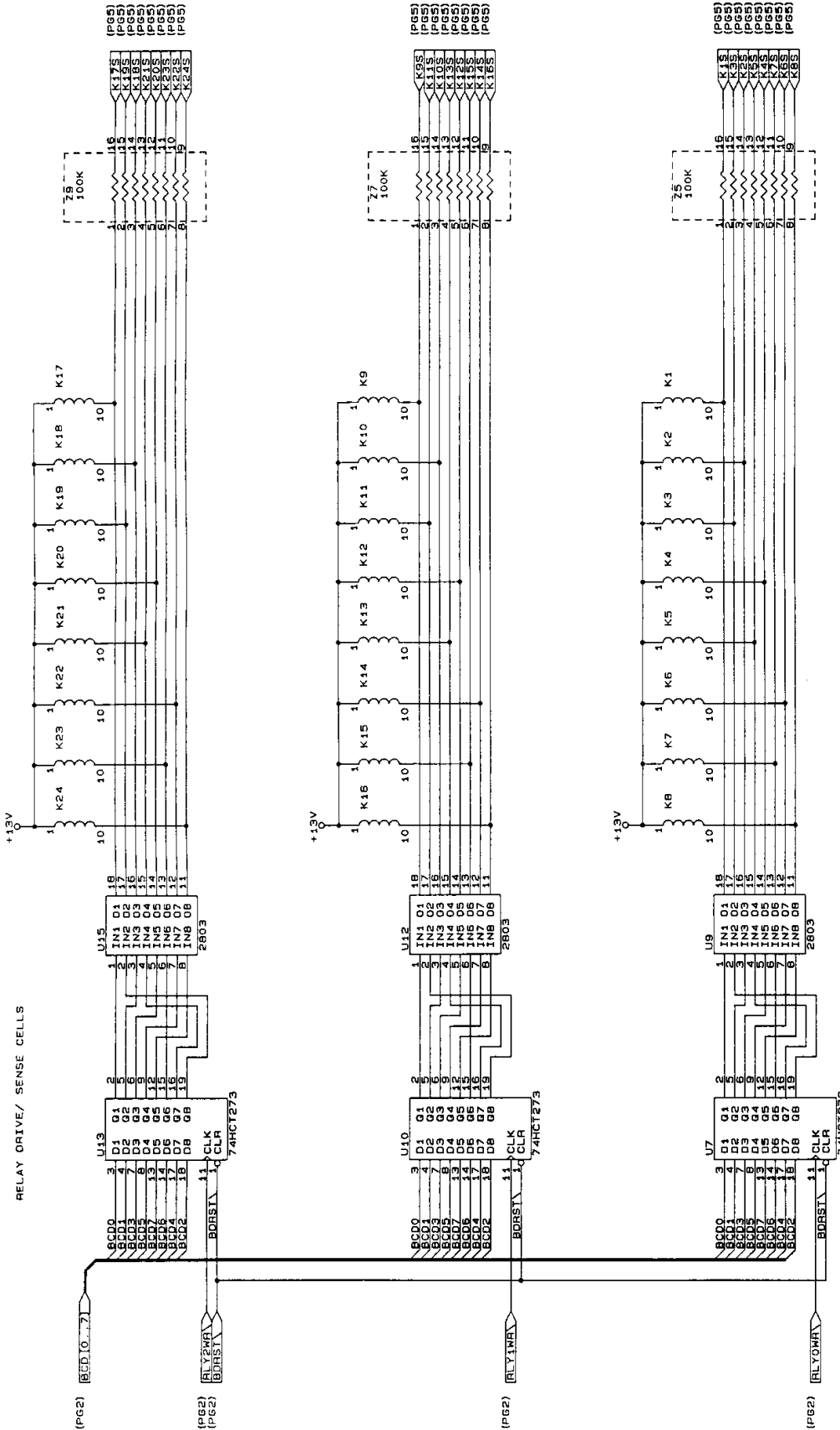
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HIGHEST REF. DES.

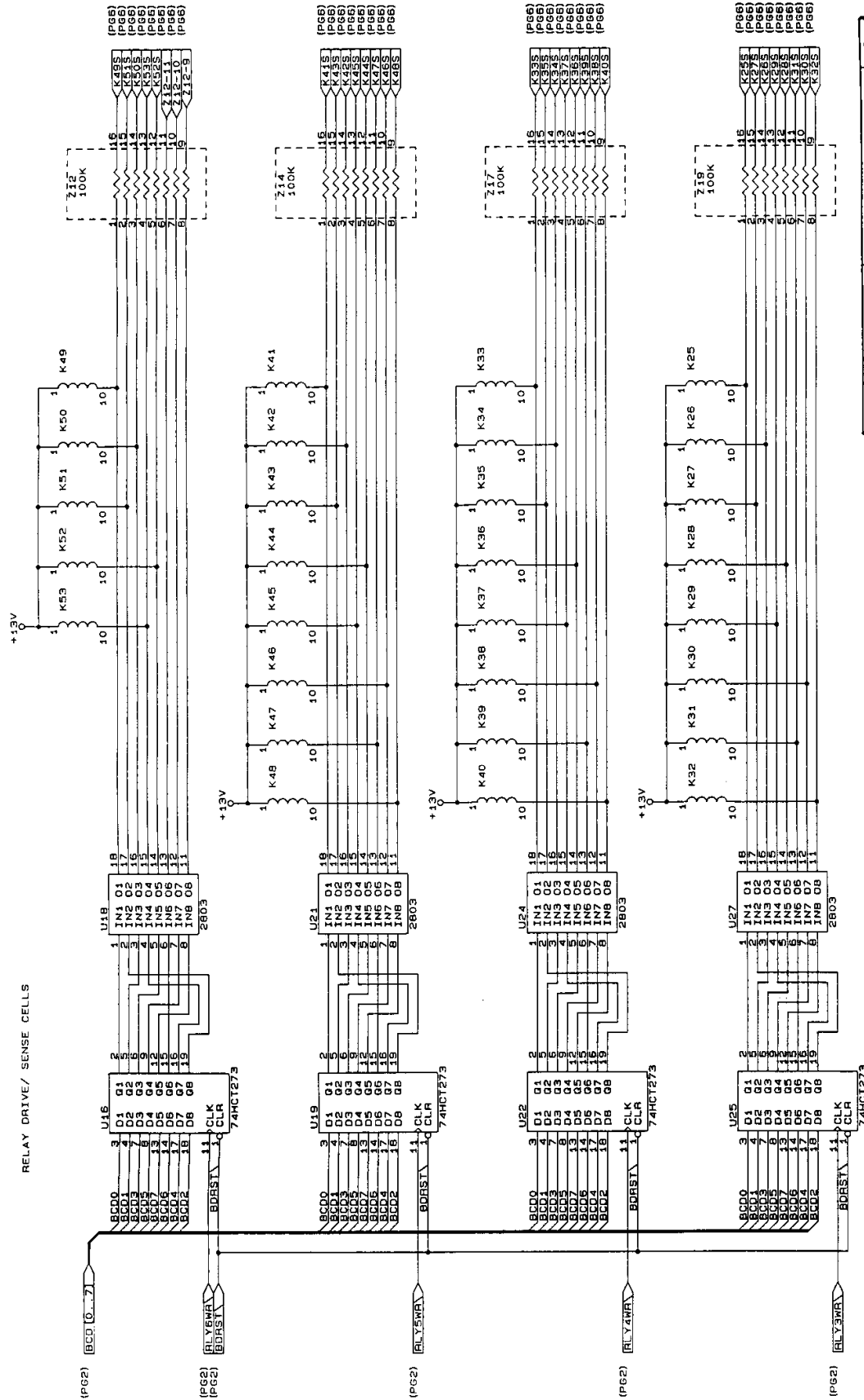
- 5. PARTS ARE NOT INSTALLED, USER SELECTABLE.
  - 4. CONNECTOR BODIES FOR J1-J3 TIED TO CHASSIS GROUND.
  - 3. RELAYS K1 THRU K53 ARE RACAL-DANA P/N 310208. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
  - 2. RESISTOR NETWORKS ARE IN OHMS.
  - 1. CAPACITOR VALUES ARE IN MICROFARADS, +/-20%, 50V UNLESS OTHERWISE SPECIFIED.
- NOTES: UNLESS OTHERWISE SPECIFIED



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
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SCALE		SHEET	2 OF 11

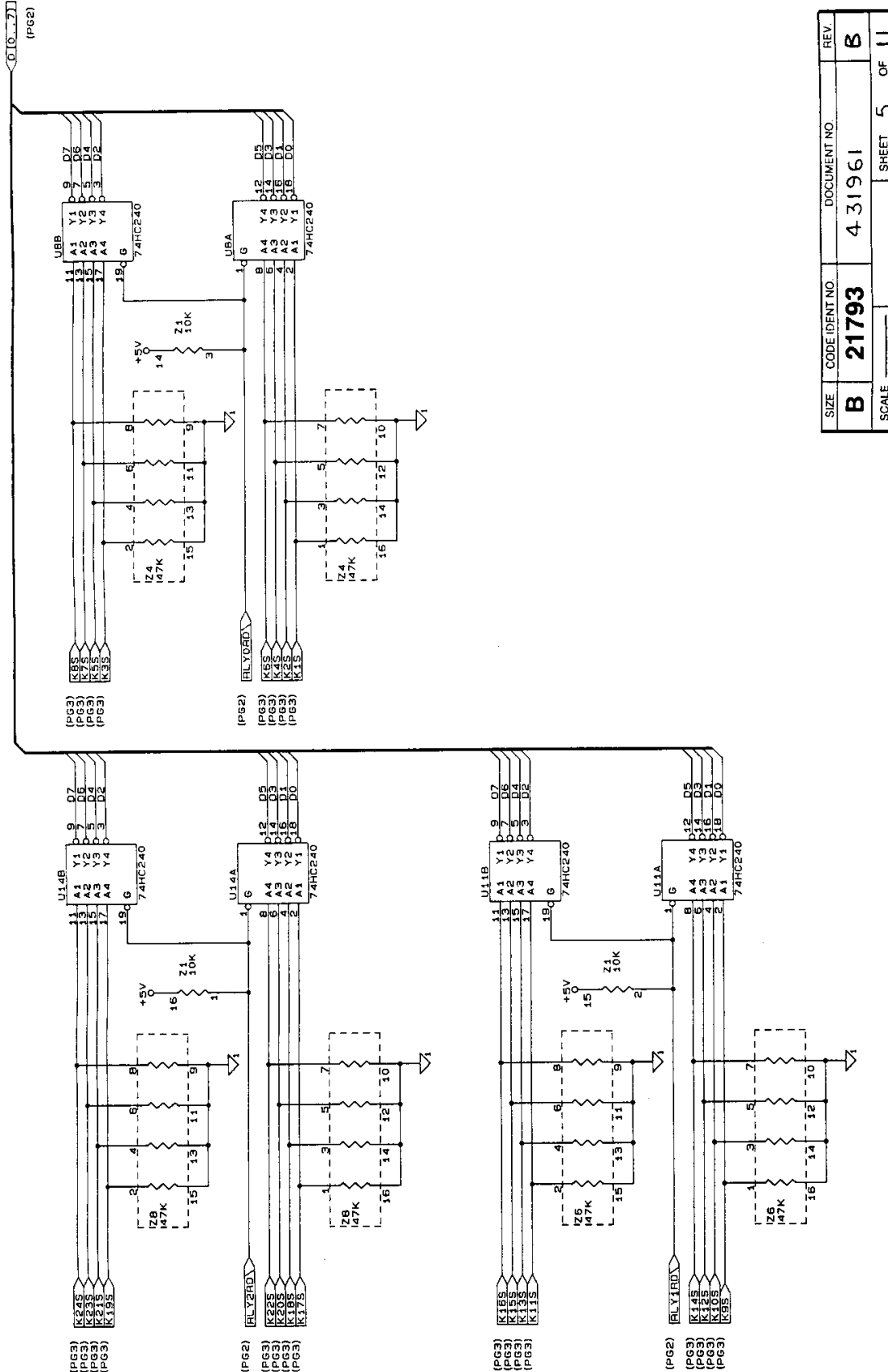


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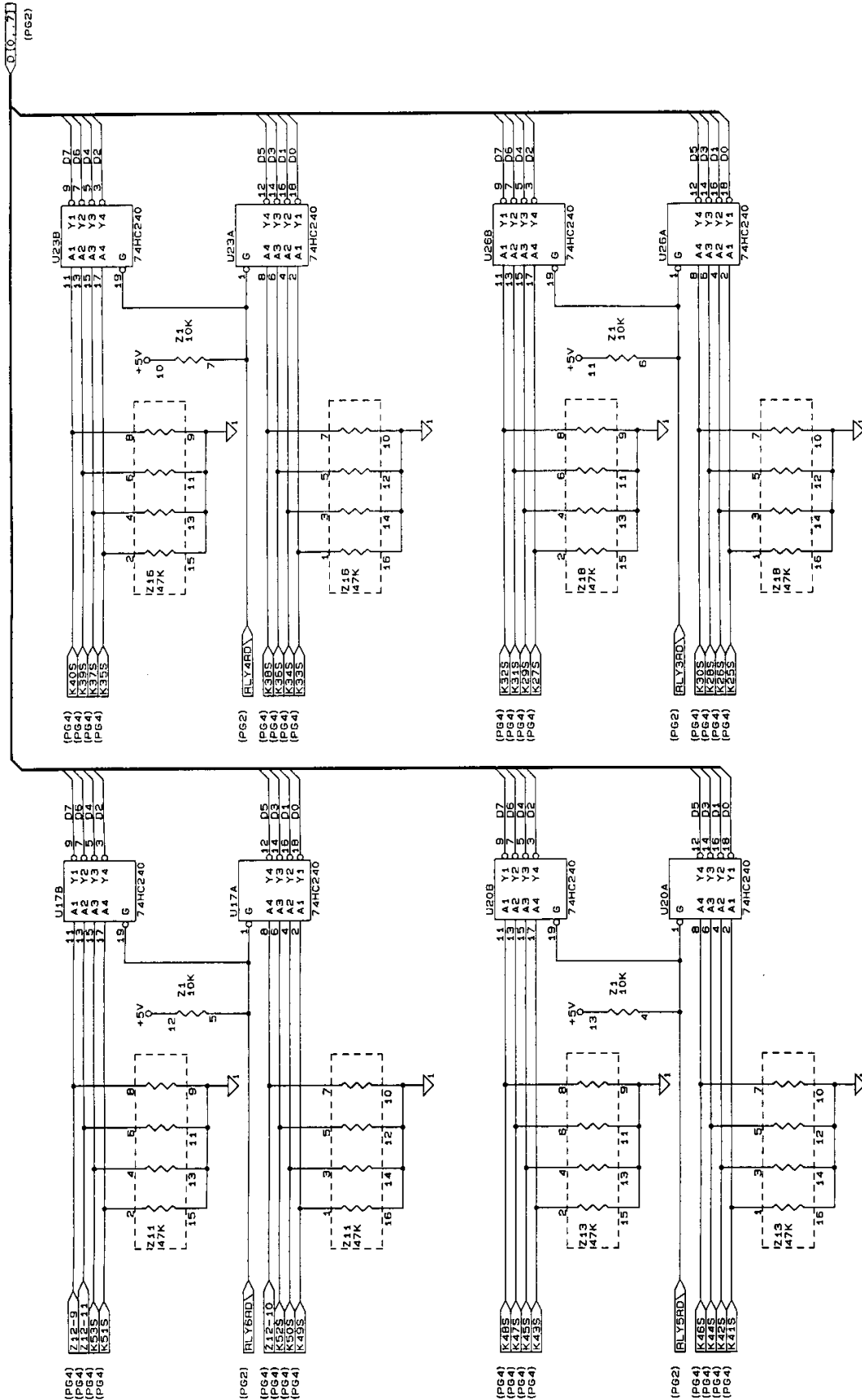
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SCALE		SHEET 4 OF 11	

RELAY DRIVE/ SENSE CELLS

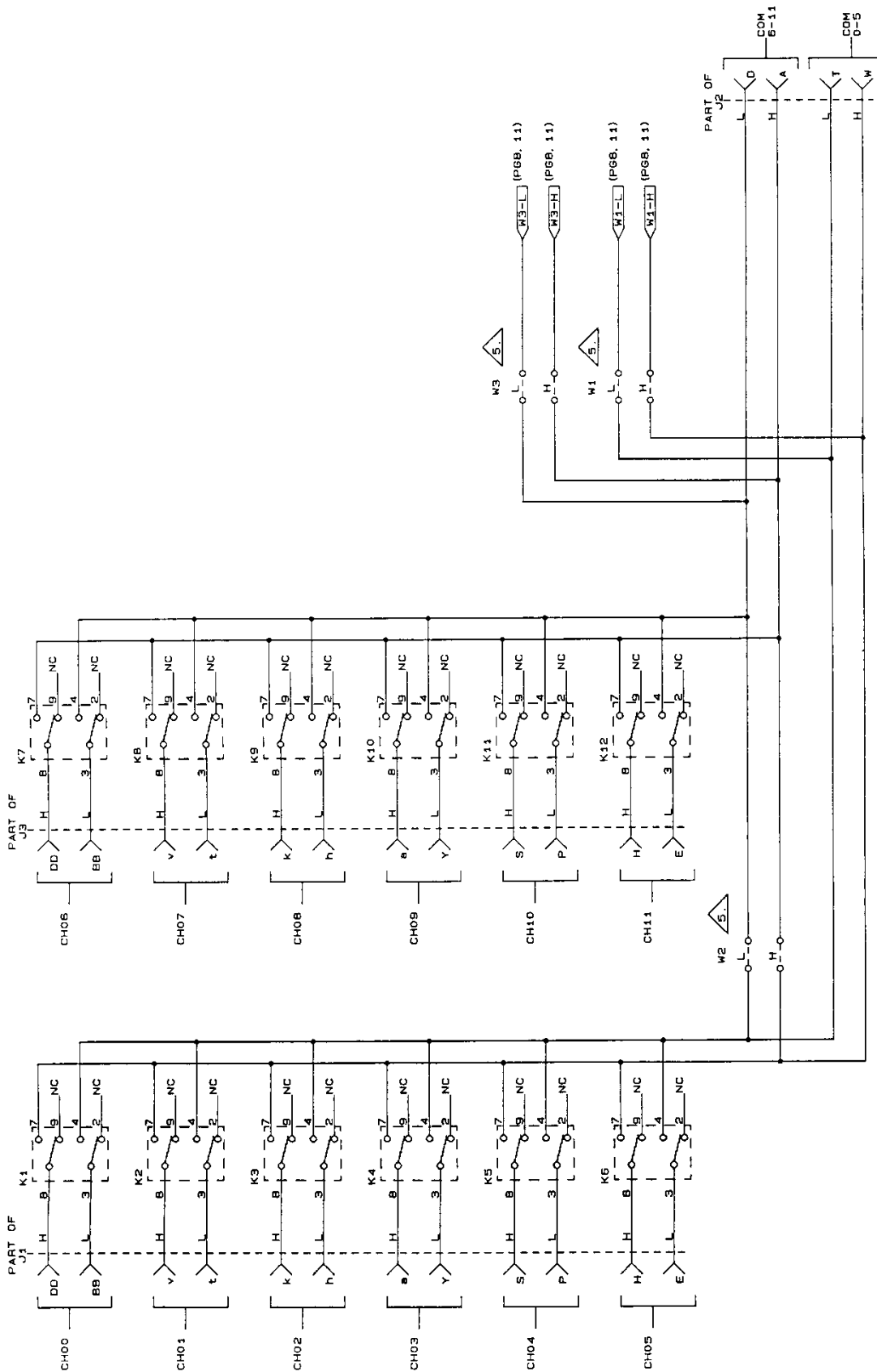


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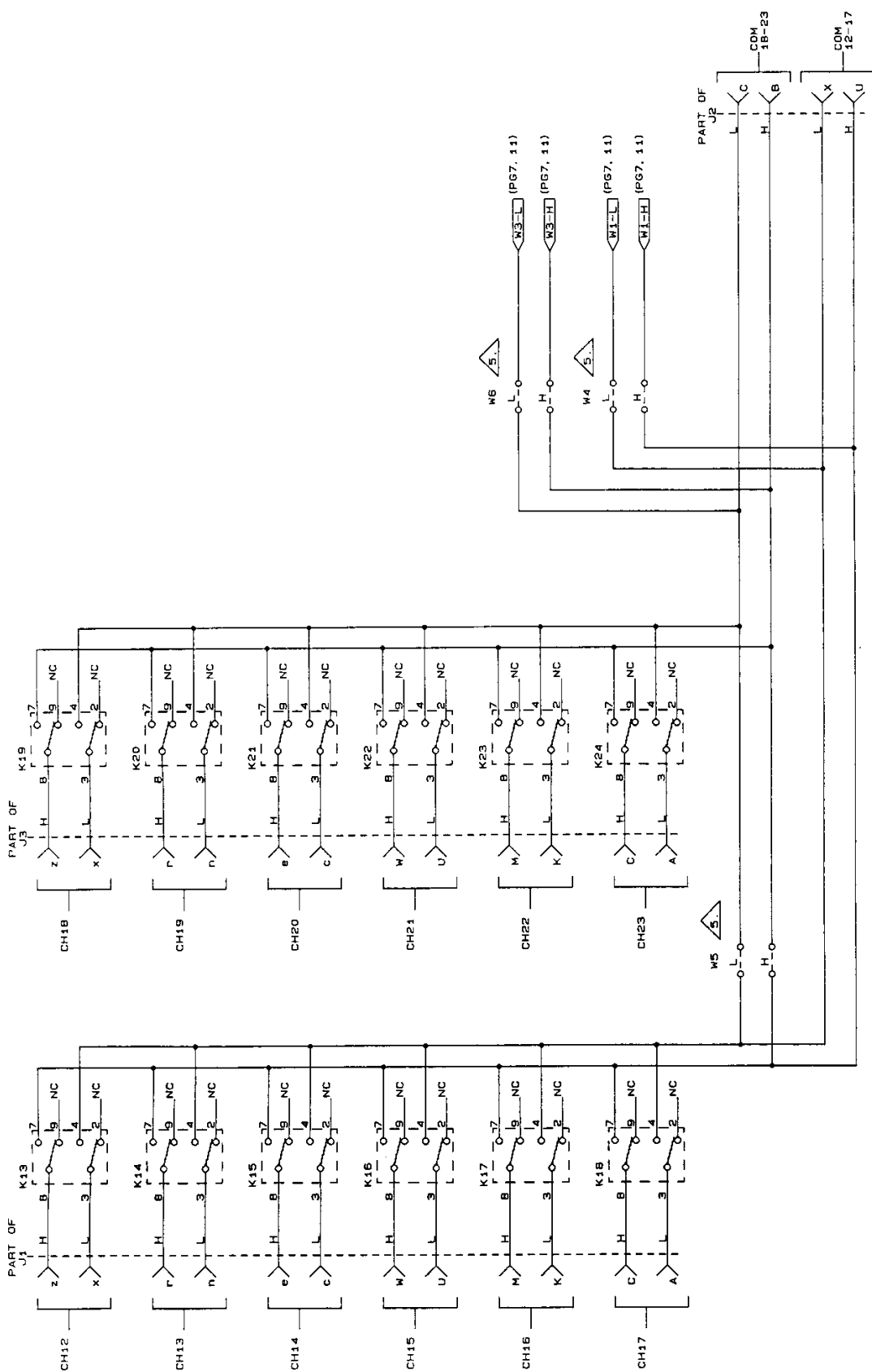
RELAY DRIVE/ SENSE CELLS



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV
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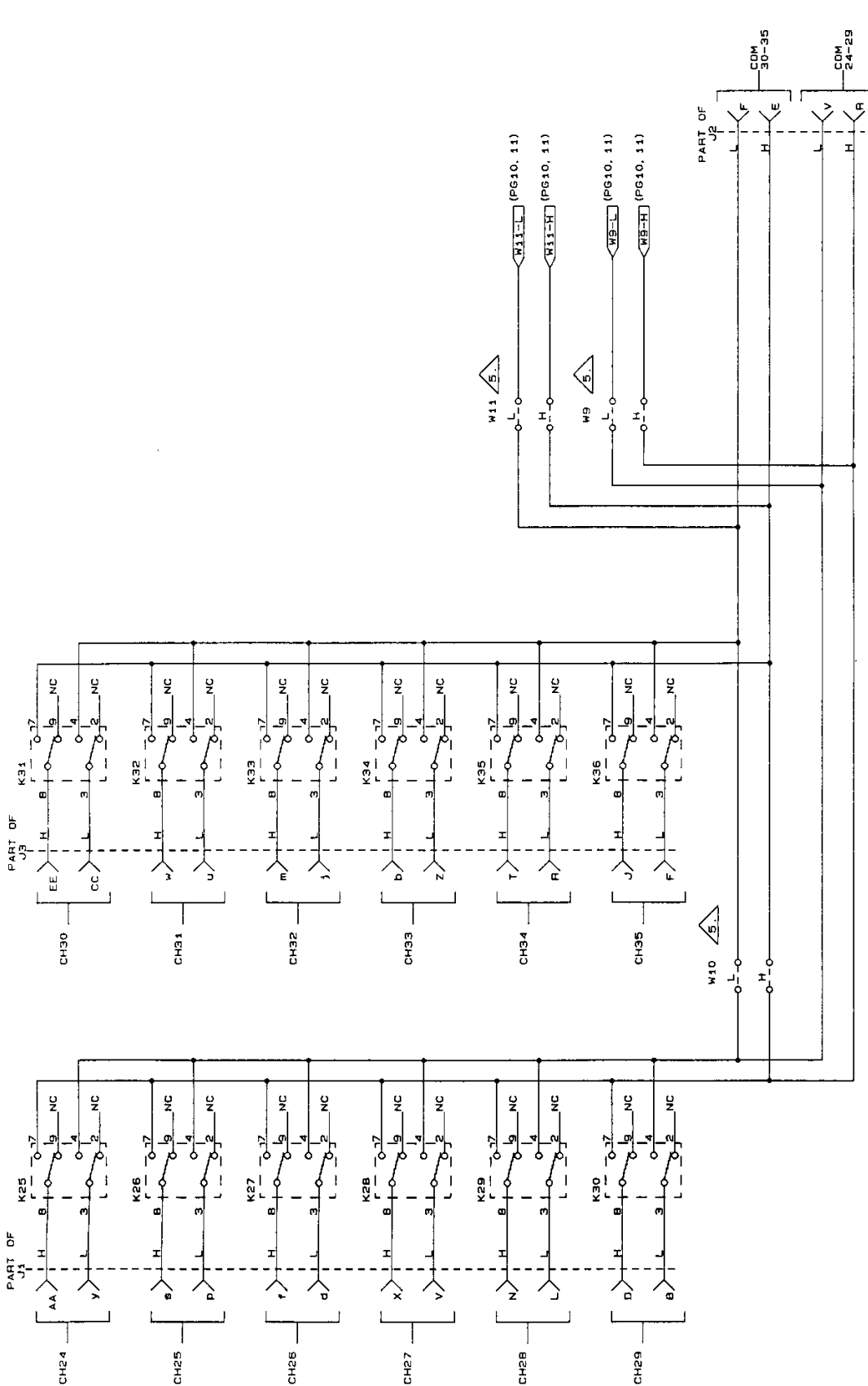


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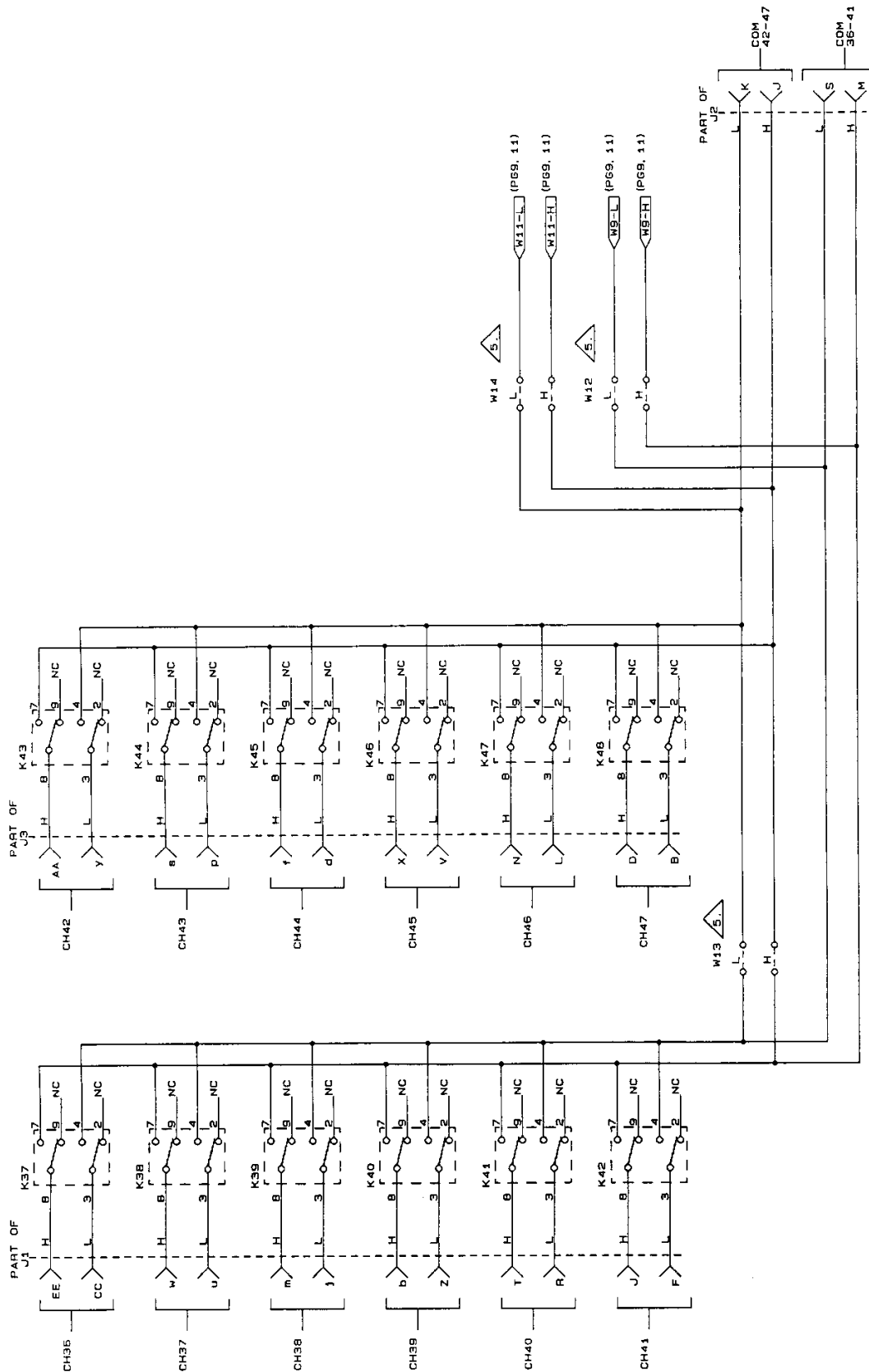


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SCALE	SHEET 8 OF 11		

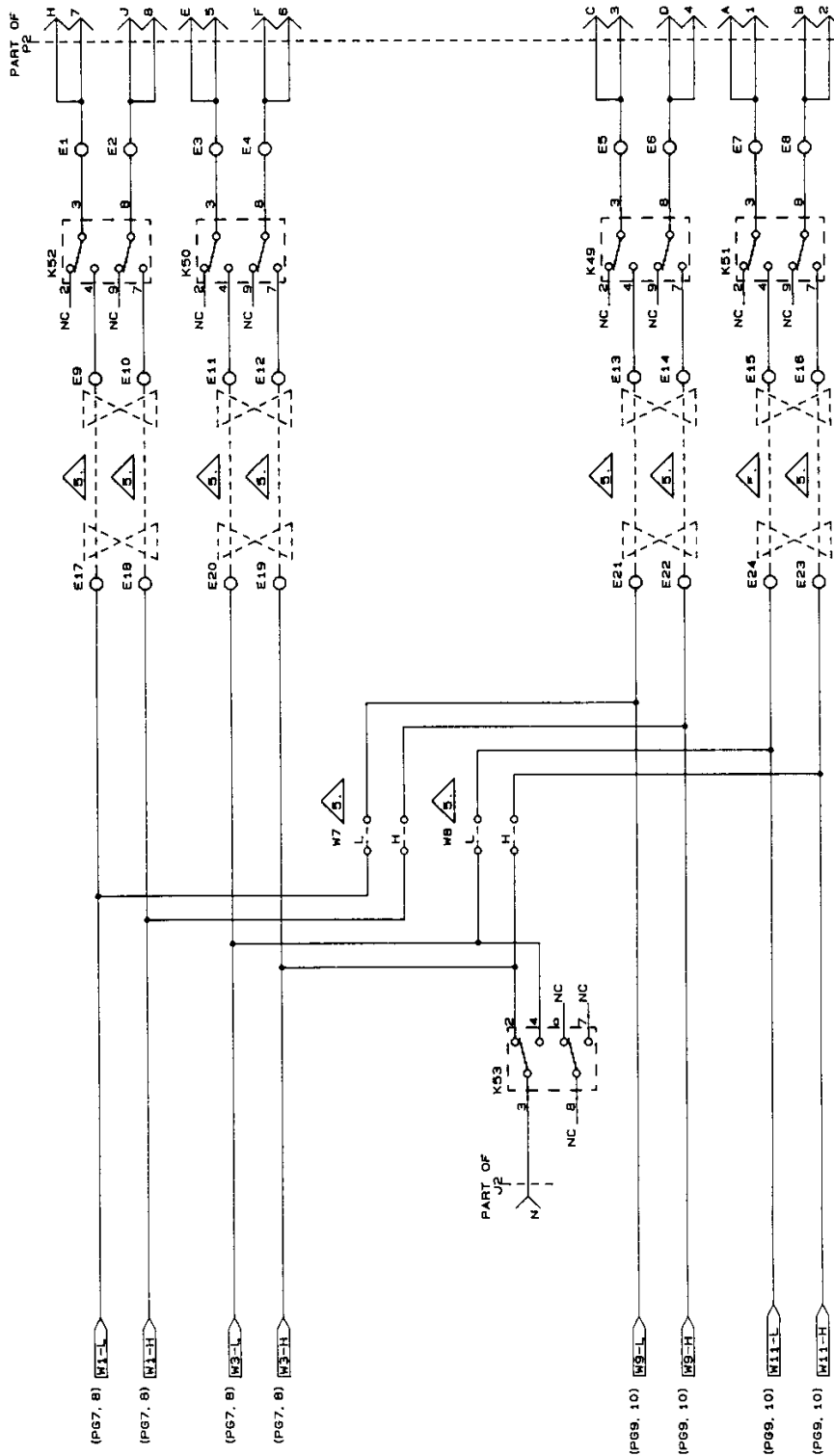




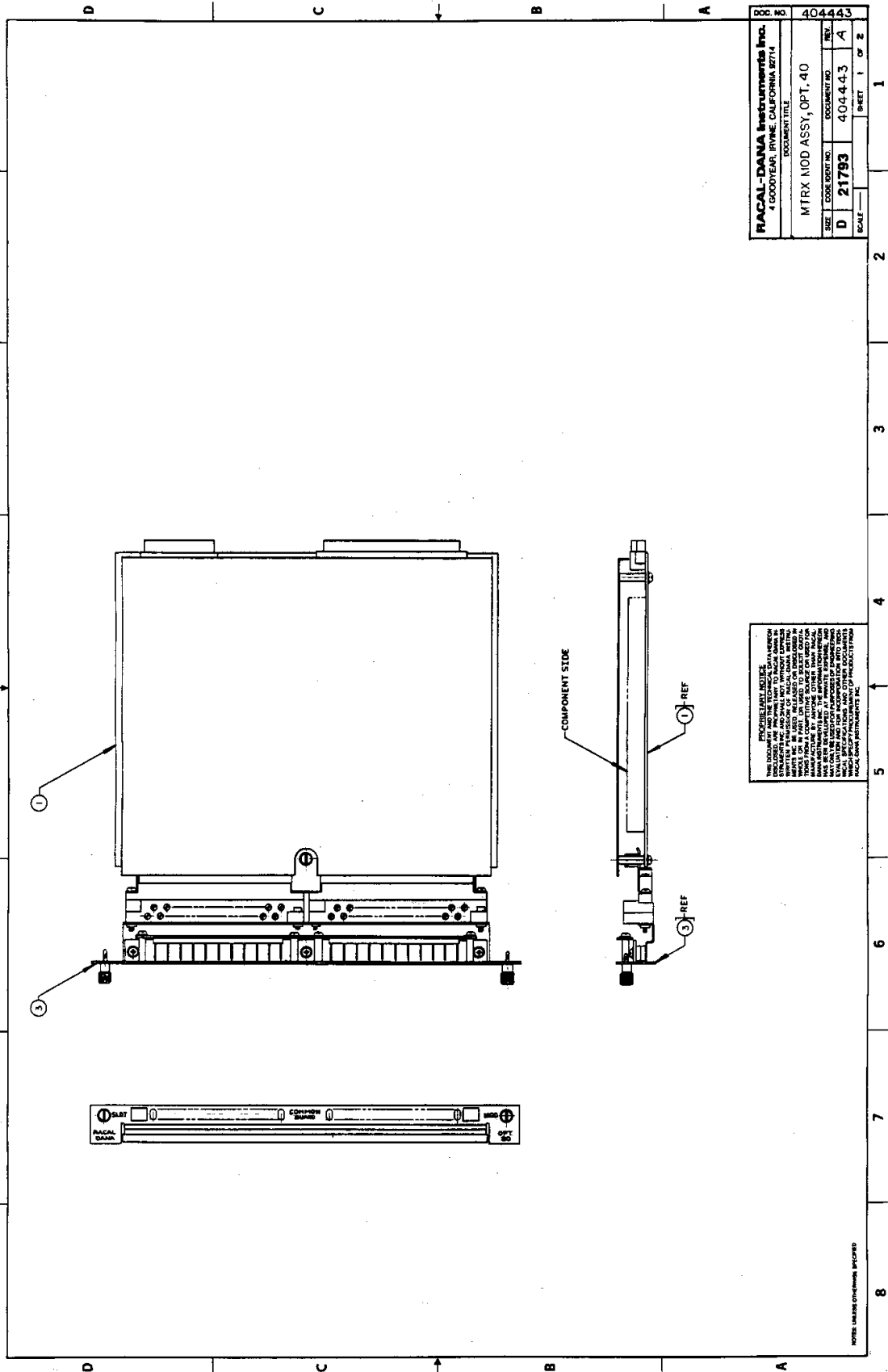
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SCALE		SHEET 9	OF 11



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
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SCALE		SHEET 10	OF 11



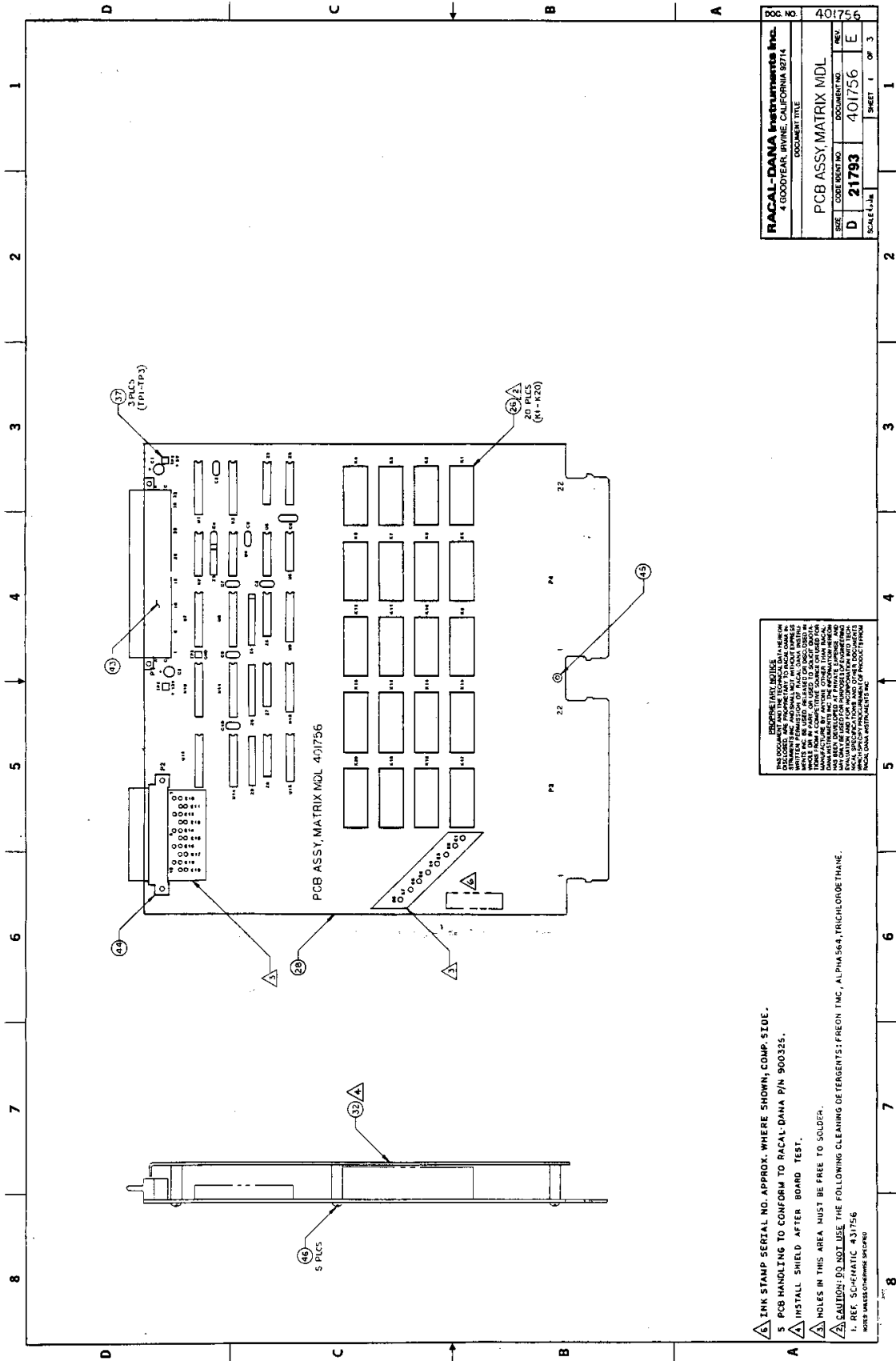
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SCALE		SHEET	OF
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DOC. NO.		404443	
RACAL-DANA Instruments Inc. 4 GOODYEAR IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
MTRX MOD ASSY, OPT. 40			
SIZE	CODE	DOC. NO.	REV.
D	21793	404443	A
SCALE			SHEET 1 OF 2

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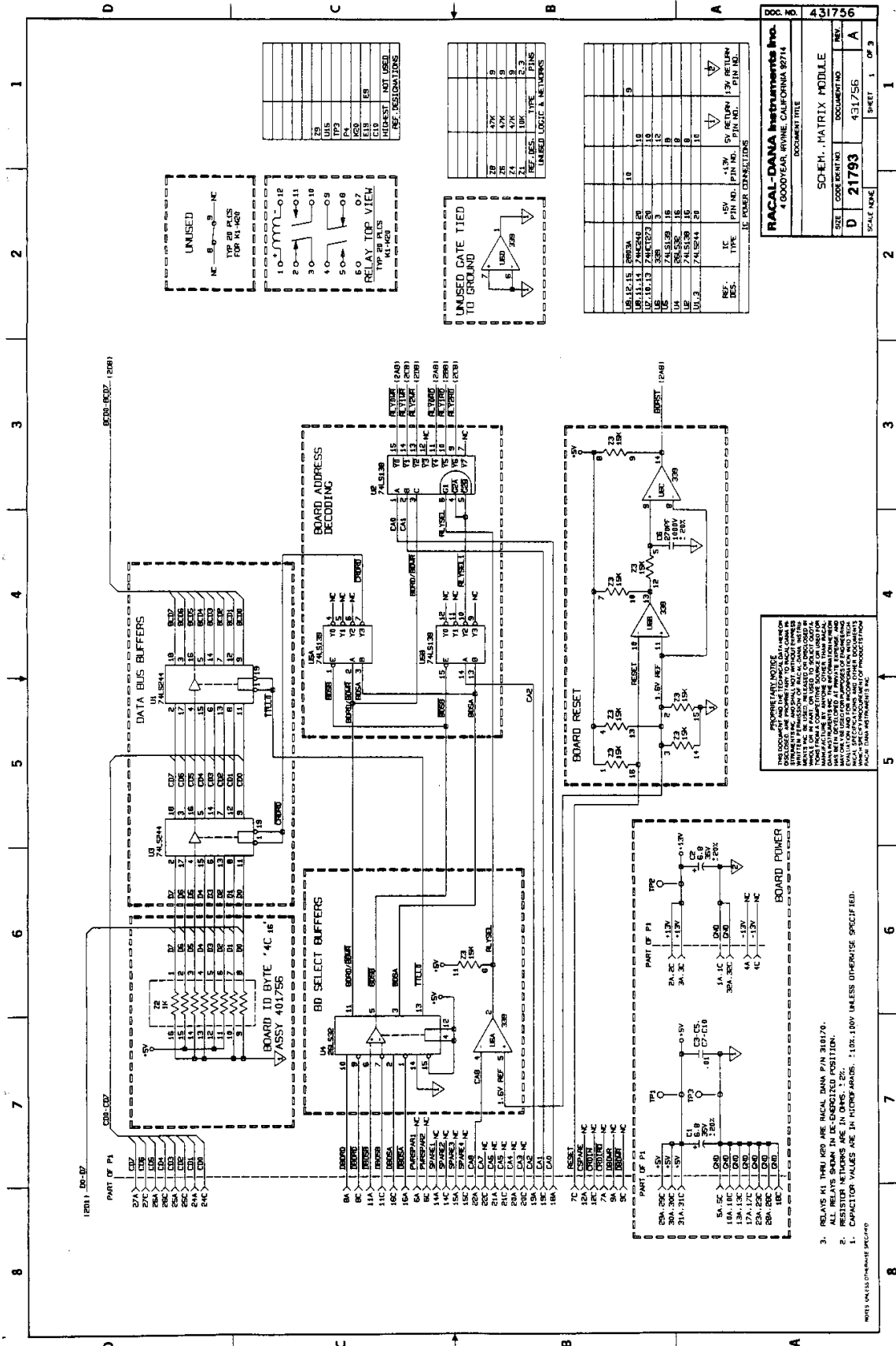
NOTE: UNLESS OTHERWISE SPECIFIED



RACAL-DANA Instruments Inc.		DOC NO.	401756
4 GOODFAR, IRVINE, CALIFORNIA 92714		DOCUMENT TITLE	
PCB ASSY, MATRIX MDL		DOCUMENT NO.	REV.
SIZE	CODE	NO.	
D	21793	401756	E
SCALE 1:1		SHEET 1 OF 3	

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- △ INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.
  - 5 PCB HANDLING TO CONFORM TO RACAL-DANA P/N 900325.
  - △ INSTALL SHIELD AFTER BOARD TEST.
  - △ HOLES IN THIS AREA MUST BE FREE TO SOLDER.
  - CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 564, TRICHLOROETHANE.
  - 1. REF. SCHEMATIC 431756
- NOTES UNLESS OTHERWISE SPECIFIED



SIZE	DATE	REV. NO.	DOCUMENT NO.	REV.
D		21793	431756	A
SCALE NAME				1 OF 3

**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR IRVINE, CALIFORNIA 92714

DES.	IC	15V	11V	12V	RETURN	17V	RETURN
DES.	TYPE	PIN NO.	PIN NO.	PIN NO.	PIN NO.	PIN NO.	PIN NO.
DES.	TYPE	PIN NO.	PIN NO.	PIN NO.	PIN NO.	PIN NO.	PIN NO.

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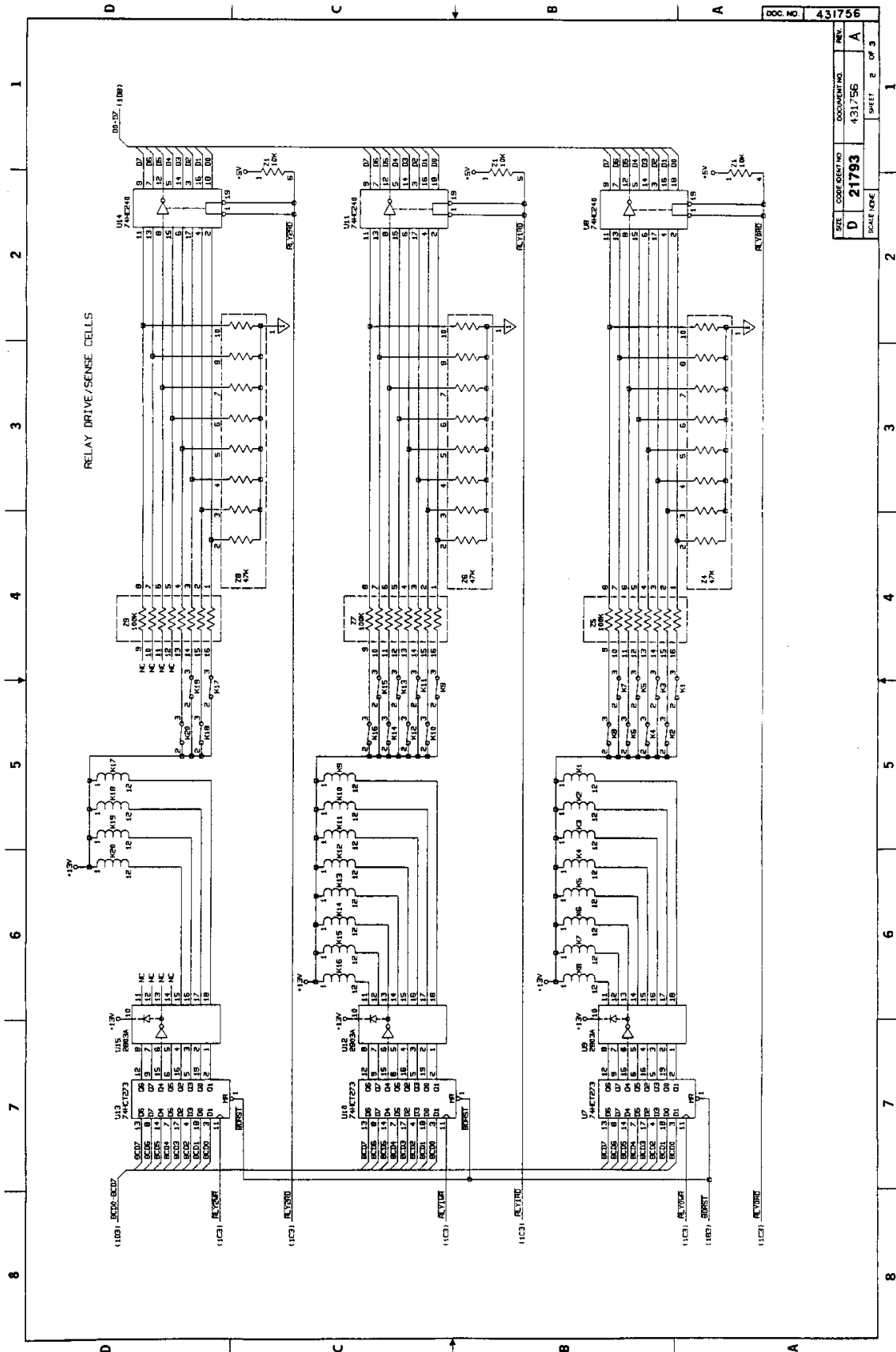
1. CAPACITOR VALUES ARE IN MICROFARADS. 1.00 = 1.00V UNLESS OTHERWISE SPECIFIED.

2. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.

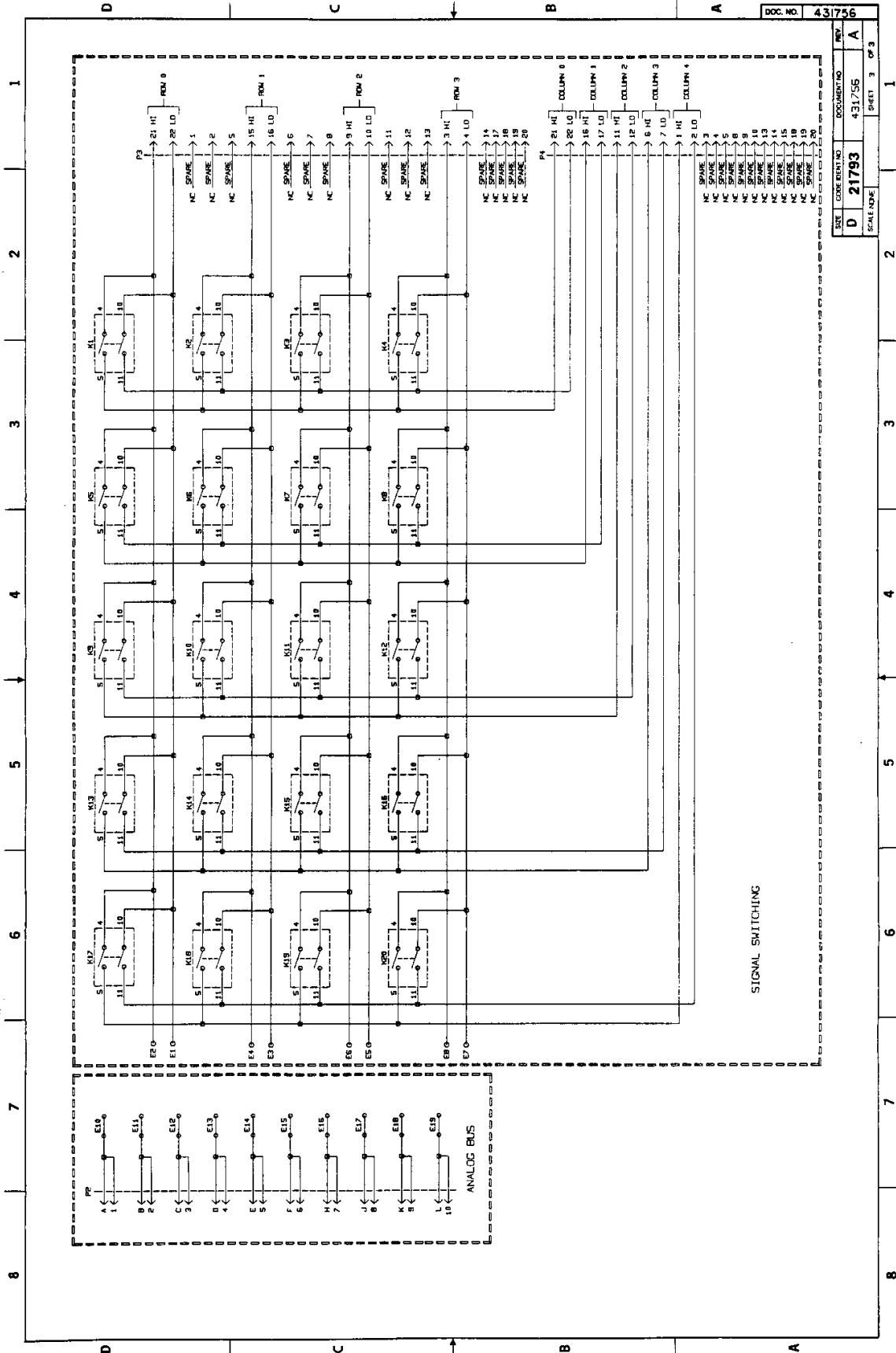
3. RELAYS K1 THRU K20 ARE RACAL-DANA P/N 230170.

RESISTOR VALUES ARE IN OHMS. 1.0K = 1.0K UNLESS OTHERWISE SPECIFIED.

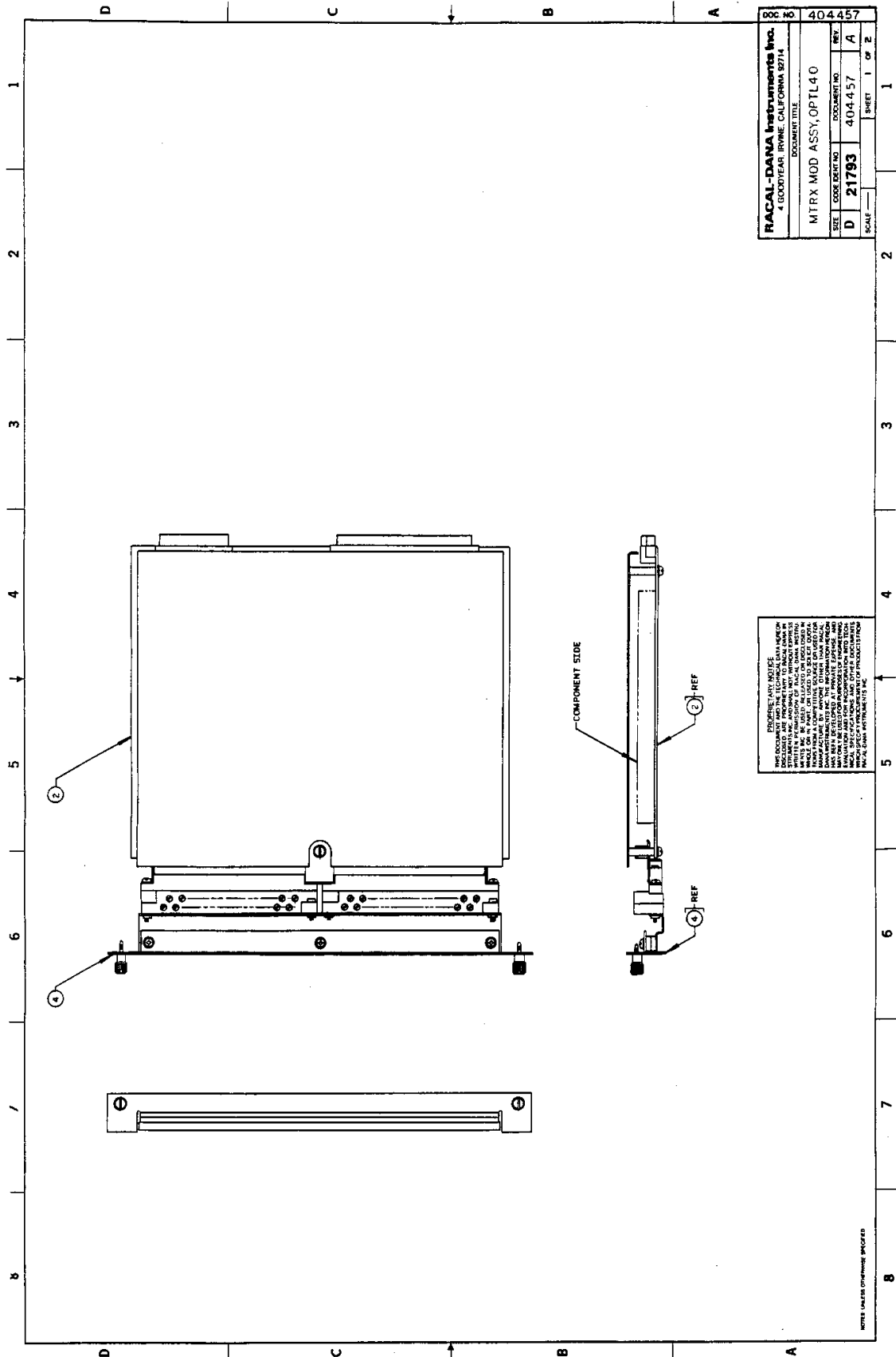
RESISTOR VALUES ARE IN OHMS. 1.0K = 1.0K UNLESS OTHERWISE SPECIFIED.

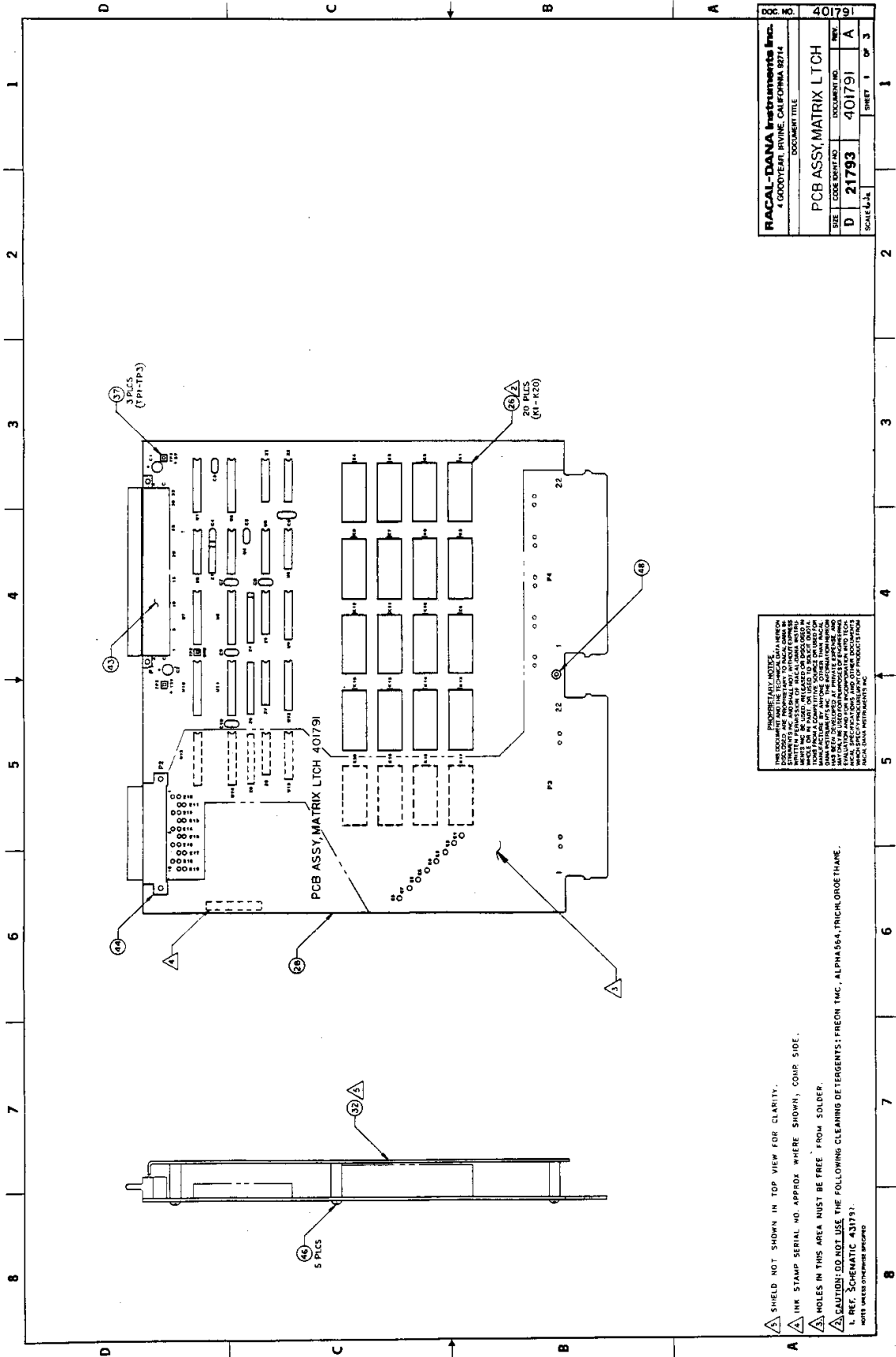


DOC. NO.	431756
REV.	A
SCALE	NONE
SHEET	2 OF 3
LOGIC NO.	21793
DOCUMENT NO.	431756





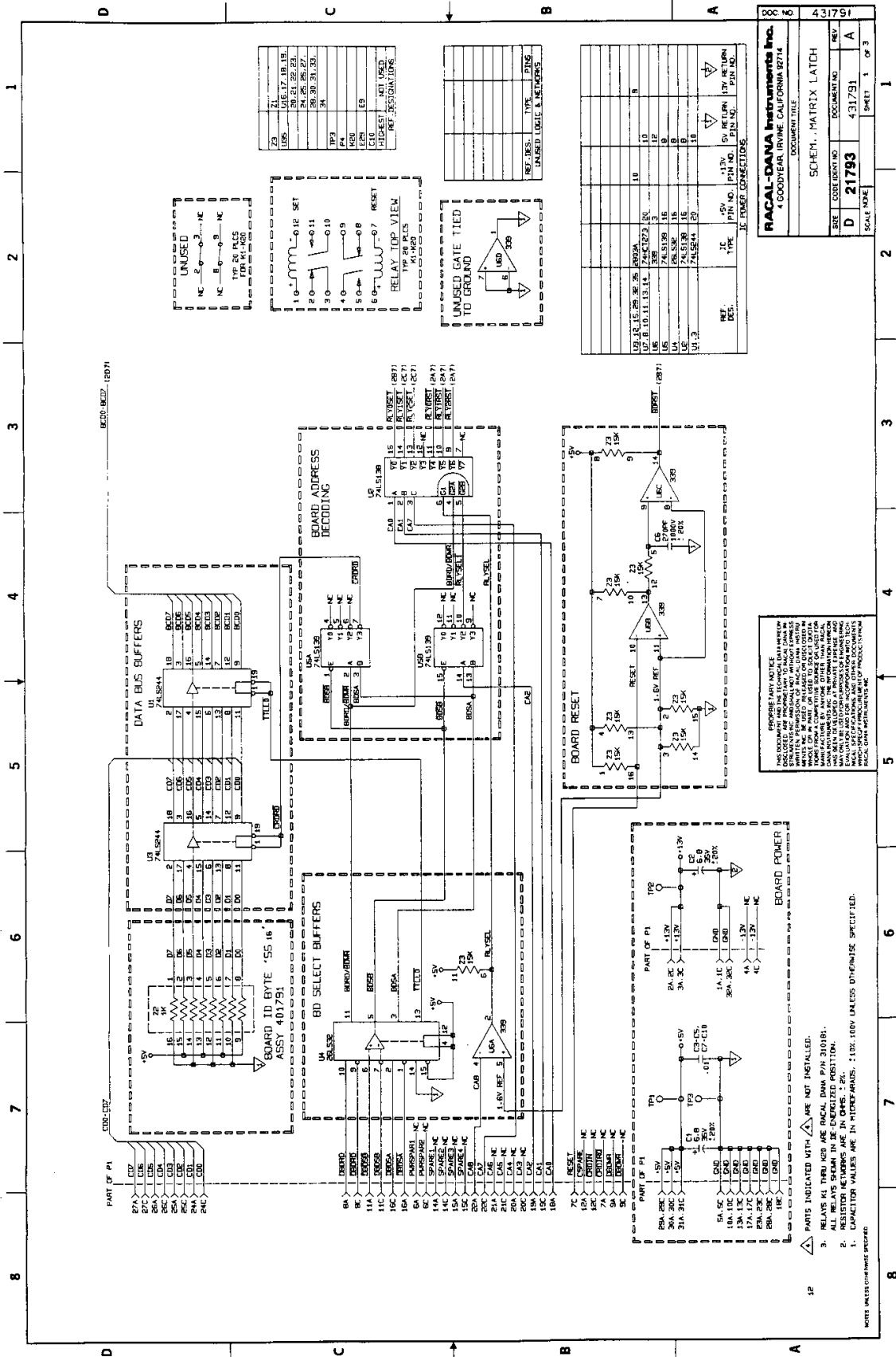




RACAL-DANA Instruments Inc.		401791	
4 GOODYEAR, IRVINE, CALIFORNIA 92714		DOCUMENT TITLE	
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SIZE	CODE	NO.	REV.
D	21793	401791	A
SCALE: 1:1		SHEET 1 OF 3	

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- △ SHED NOT SHOWN IN TOP VIEW FOR CLARITY.
- △ INK STAMP SERIAL NO. APPROX WHERE SHOWN; COMP. SIDE.
- △ HOLES IN THIS AREA MUST BE FREE FROM SOLDER.
- △ CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS: FREON TMC, ALPHA 56-1, TRICHLOROETHANE.
- △ REF. SCHEMATIC 431791.



**RACAL-DANA Instruments Inc.**  
4 GOODPASTER DRIVE, CALIFORNIA 92714

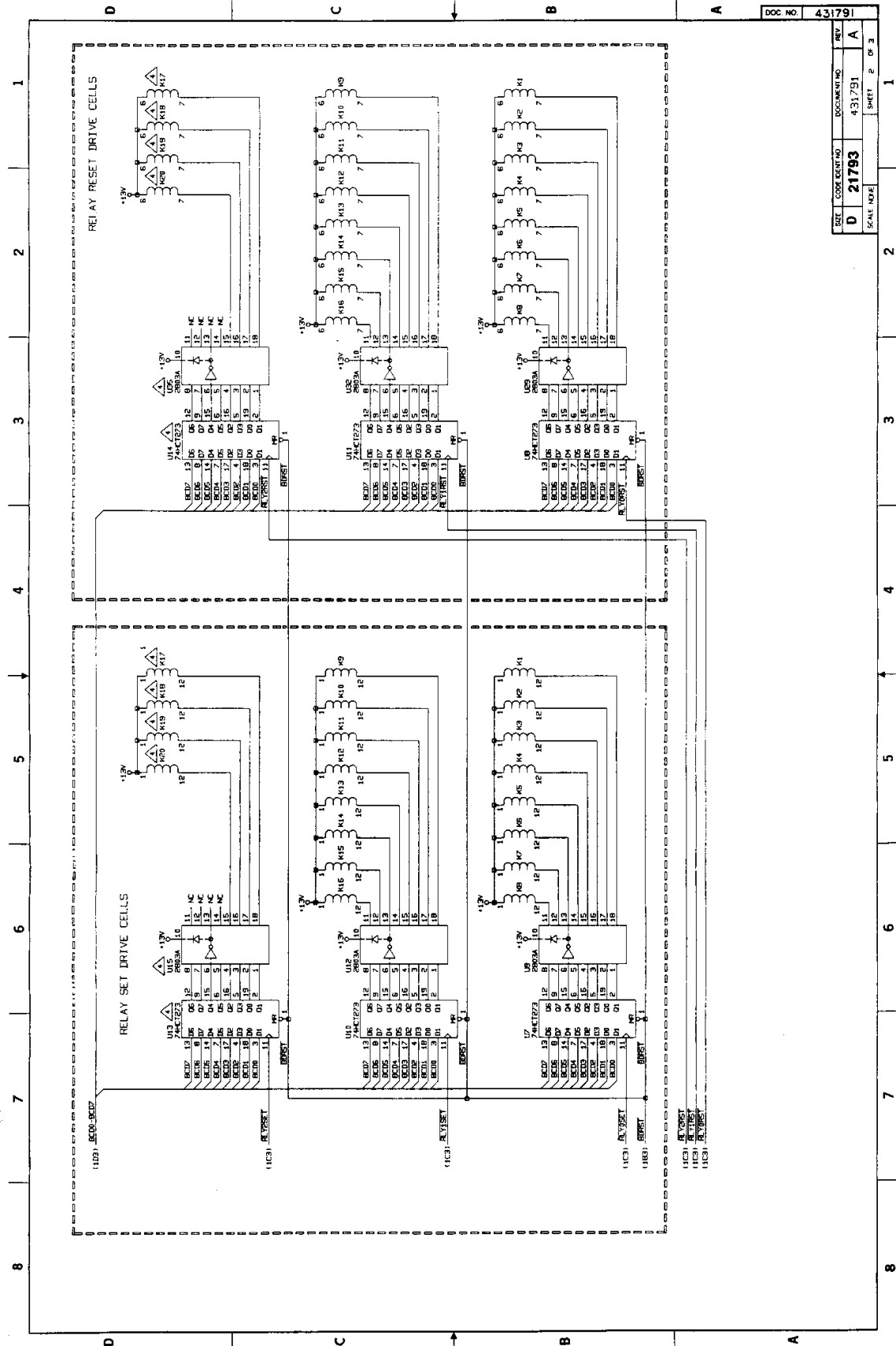
DOCUMENT TITLE  
SCHEM. MATRIX LATCH

SHEET NO. 21793 DOCUMENT NO. 431791 REV. A

SCALE: NONE SHEET 1 OF 3

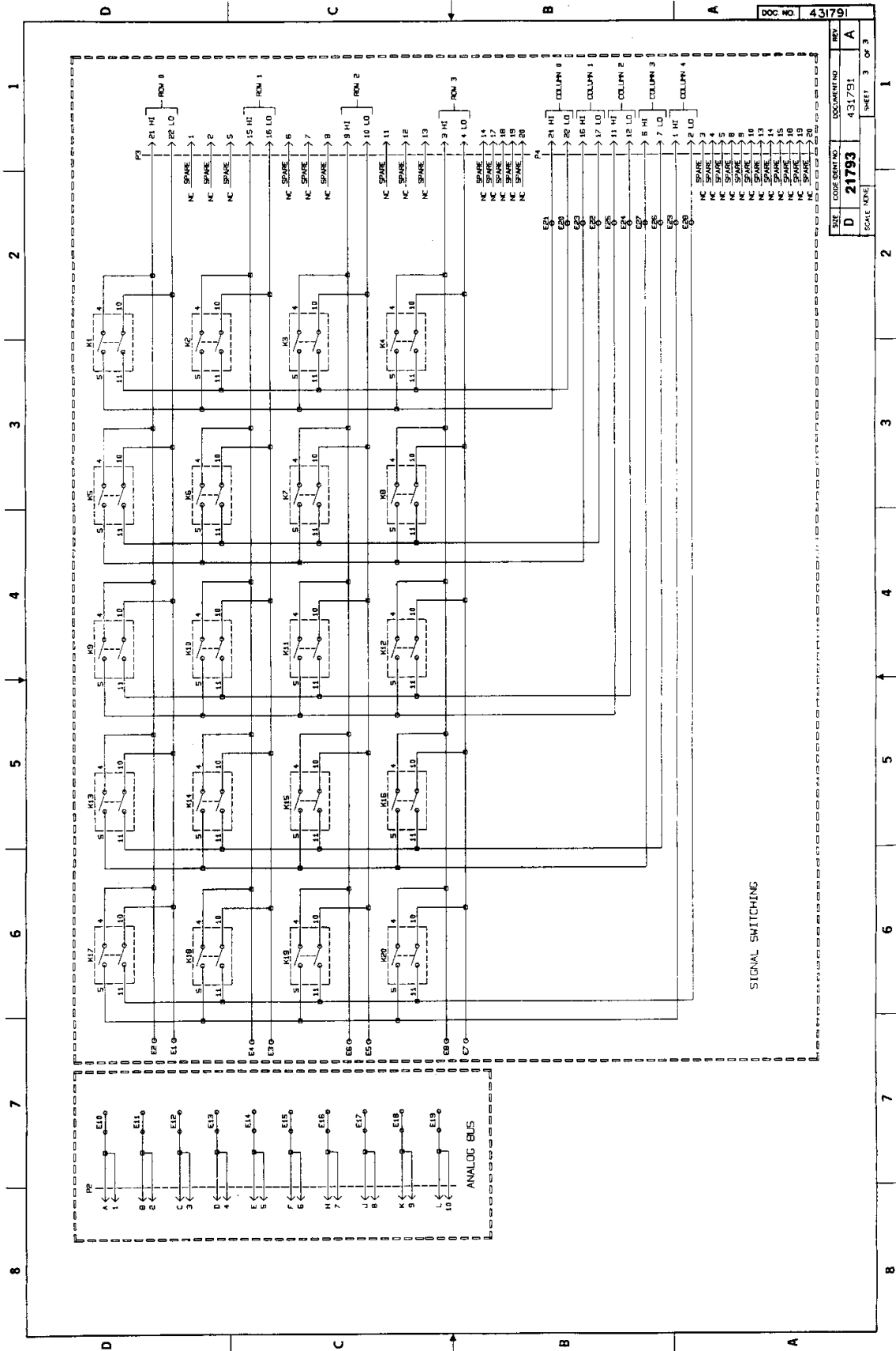
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- 1. CAPACITOR VALUES ARE IN MICROFARADS; 100K, 100V UNLESS OTHERWISE SPECIFIED.
  - 2. RELAYS K1 THRU K5 ARE RACAL-DANA P/N 310394.
  - 3. ALL RELAYS SHOULD BE ENERGIZED POSITION.
- NOTE: UNLESS OTHERWISE SPECIFIED.

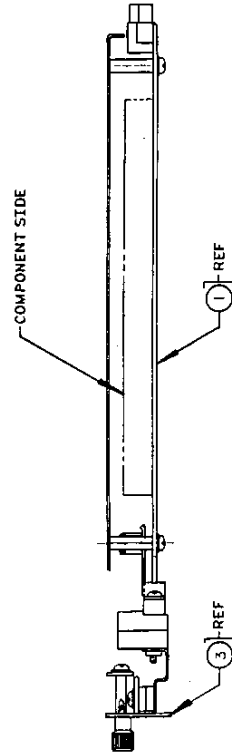
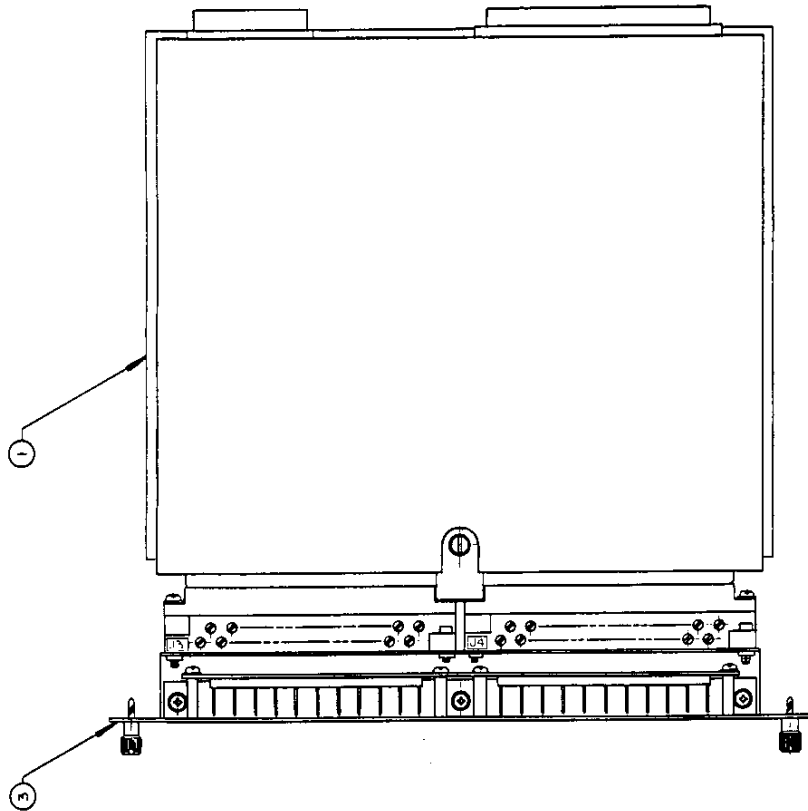


DOC. NO. 431791

REV	CODE	DATE	NO	DOCUMENT	NO
D	21793			431791	A
SCALE			NOTE	SHEET 2 OF 3	

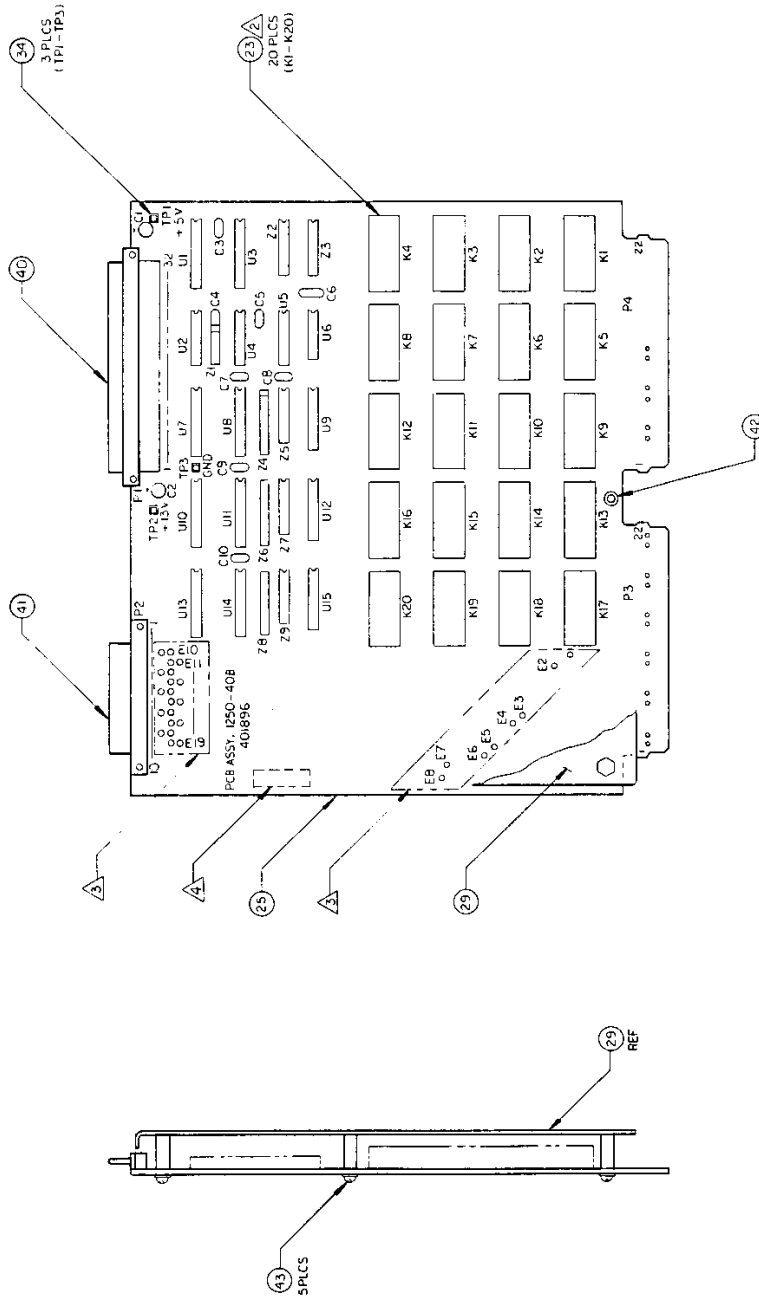


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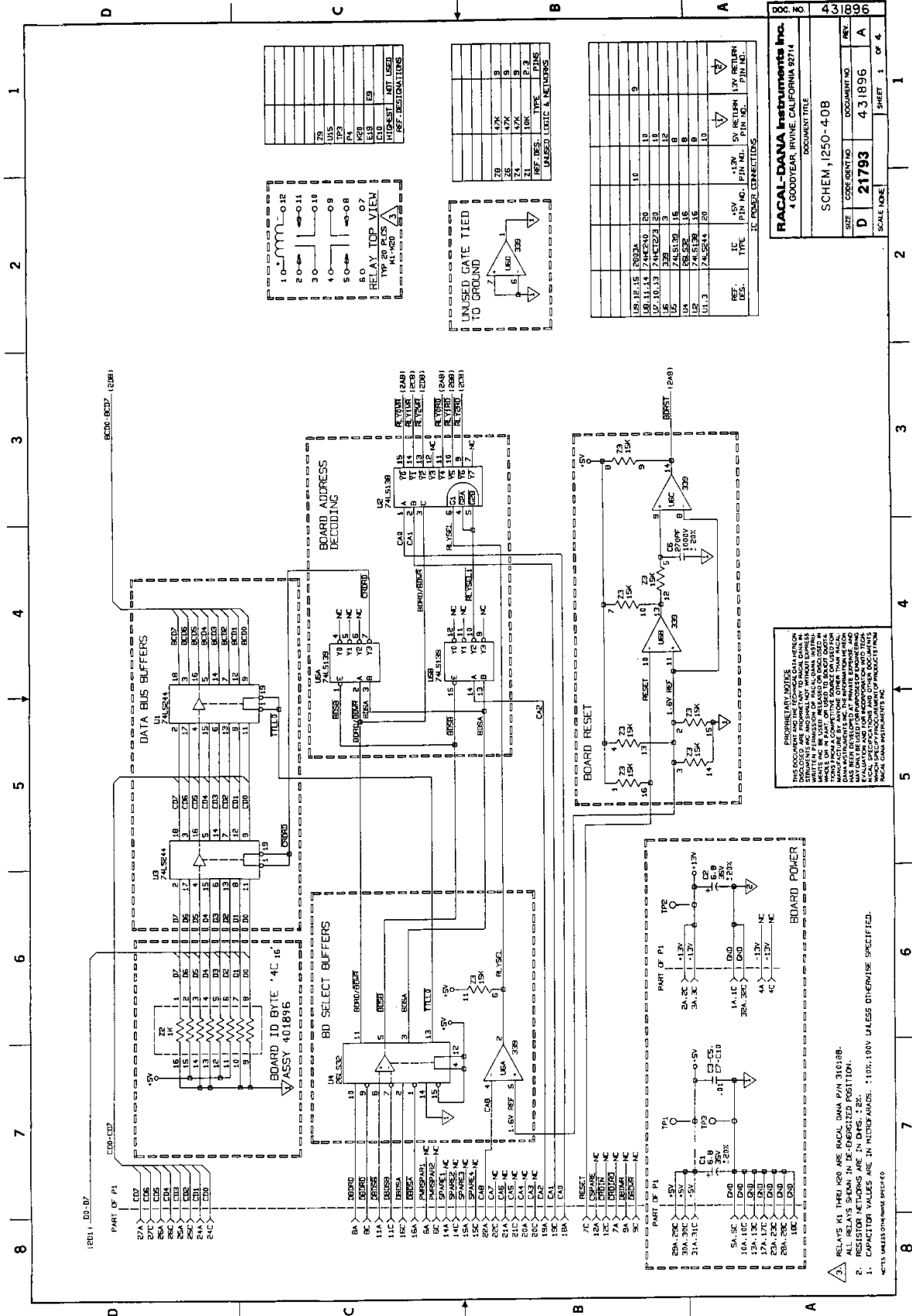
<b>RACAL-DANA Instruments Inc.</b>			
4, GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
OPT. ASSY, 1250--40B			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	404711	A
SCALE	SHEET		OF 2



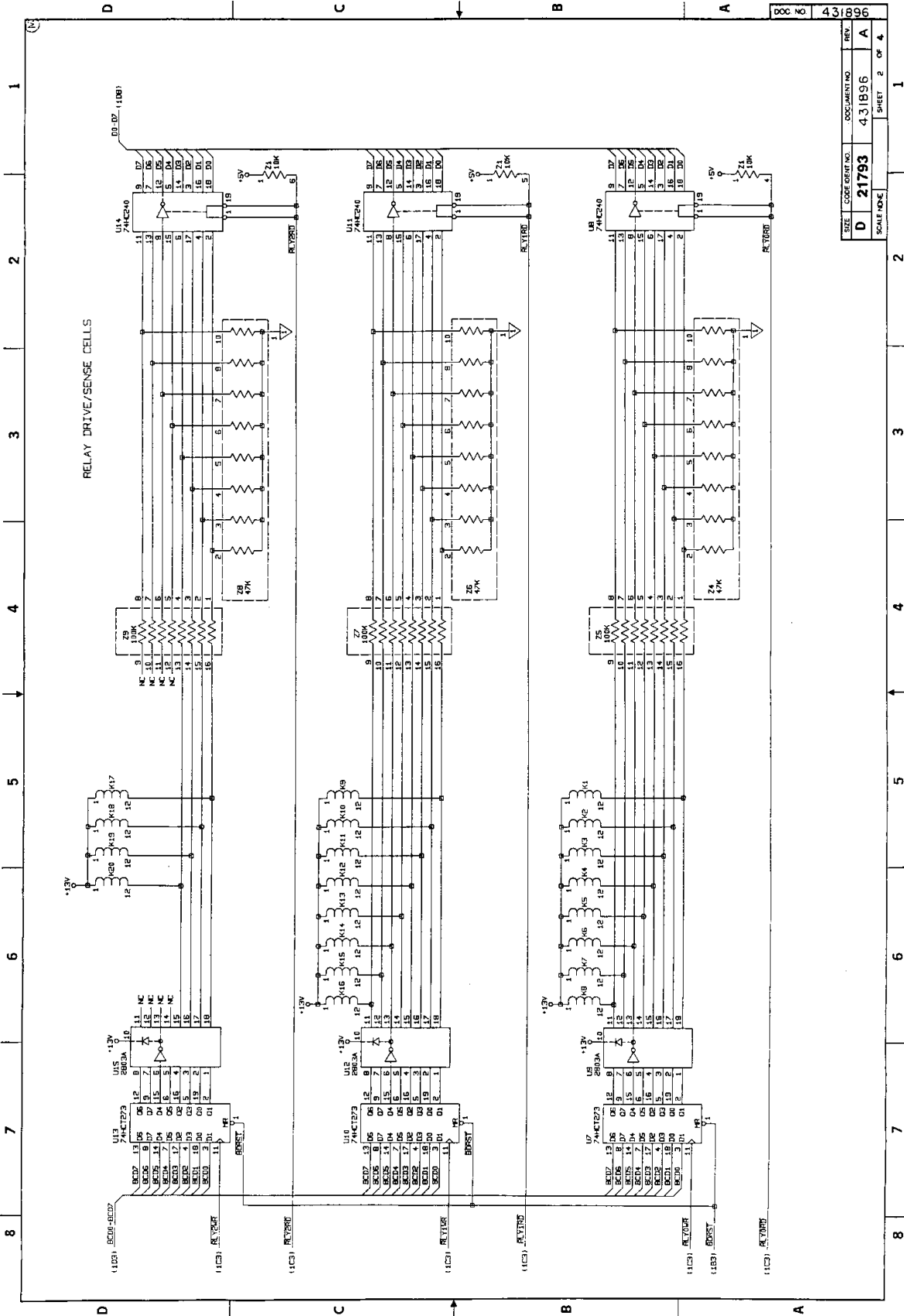
- ④ INK STAMP SERIAL NO. APPROX. WHERE SHOWN COMP. SIDE
  - ③ HOLES IN THIS AREA MUST BE FREE FROM SOLDER.
  - ② CAUTION. DO NOT USE THE FOLLOWING CLEANING DETERGENT: FREON TMC, ALPHA 564, TRICHLOROETHANE.
    - I. REF SCHEMATIC 431896.
- NOTES UNLESS OTHERWISE SPECIFIED

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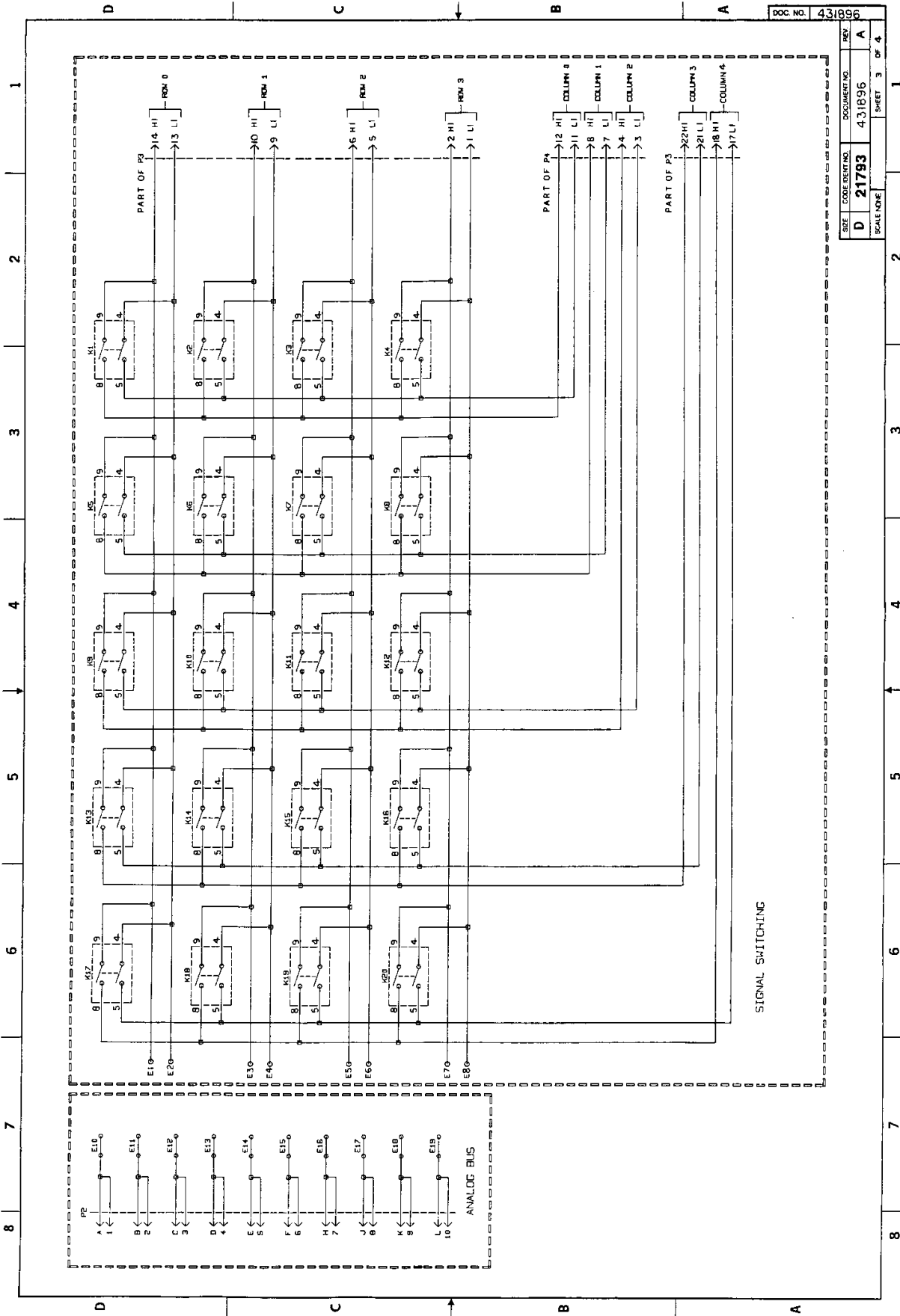
<b>RACAL-DANA Instruments Inc.</b> 4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, 1250-40B			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401896	A
SCALE	SHEET	1	OF 2





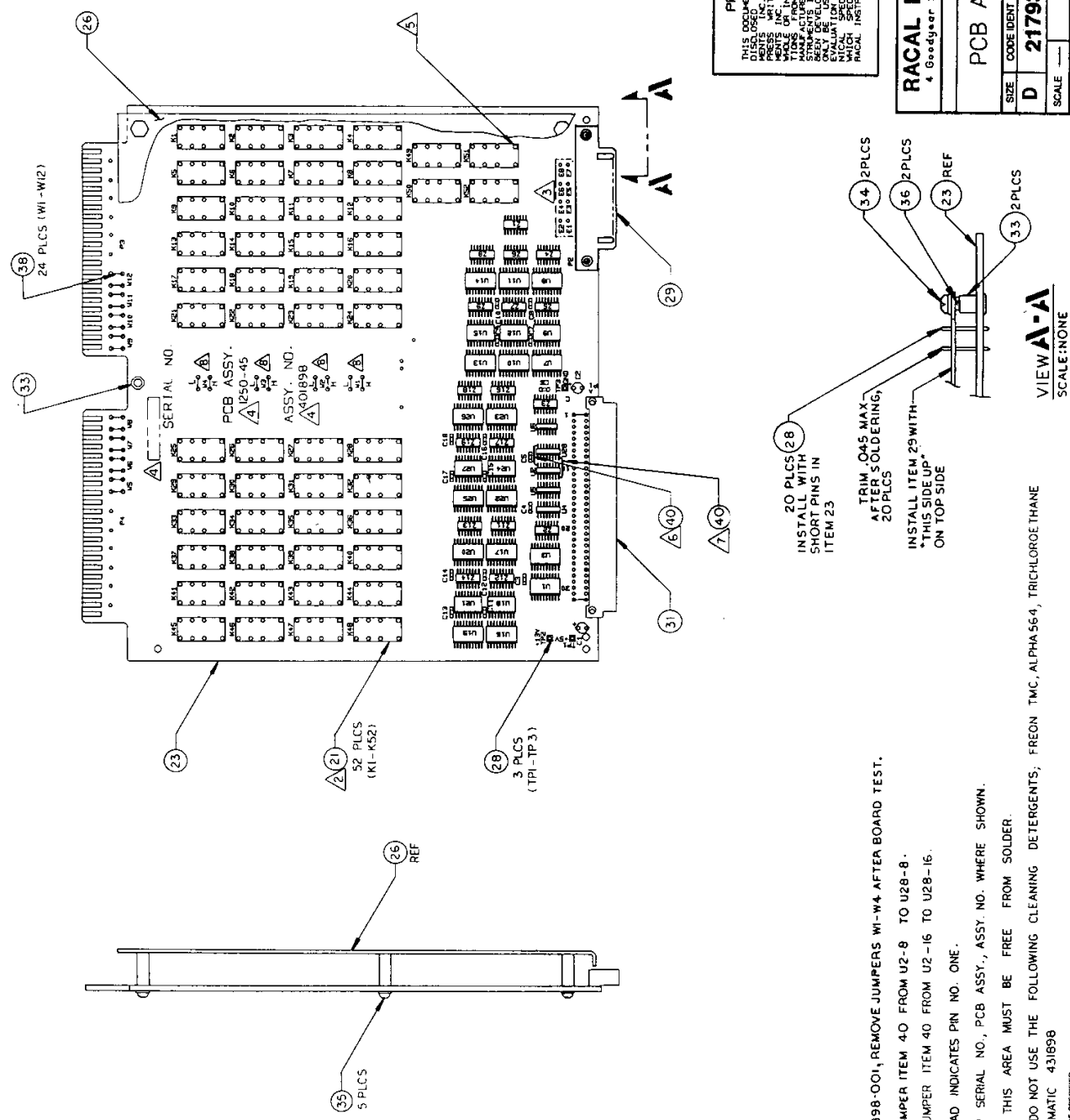


DOC NO	431896
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SCALE	2 OF 4
SIZE	D
CODE	21793
DOCUMENT NO	431896
SHEET	2 OF 4



SIZE	DOCUMENT NO.	DOCUMENT NO.	REV.
D	21793	431896	A
SCALE	NONE	SHEET	3 OF 4

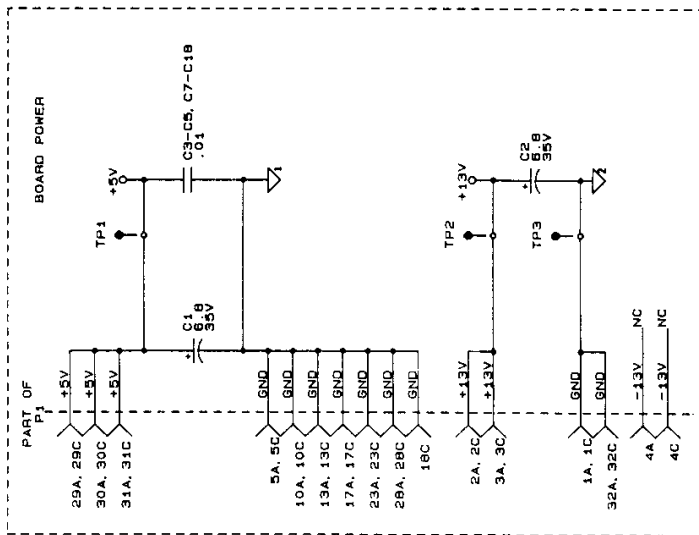




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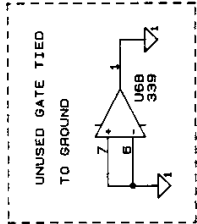
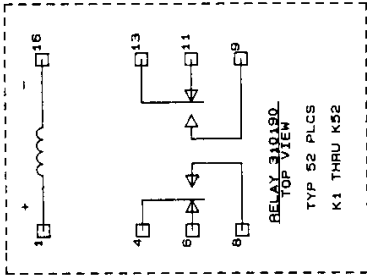
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DOCUMENT TITLE <b>PCB ASSY, 1250-45</b>			
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
<b>D</b>	<b>21793</b>	<b>401898-001</b>	<b>E</b>
SCALE	SHEET		OF
NONE	1		2

- 1. REF. SCHEMATIC 431898
- 2. CAUTION: DO NOT USE THE FOLLOWING CLEANING DETERGENTS; FREON TMC, ALPHA 564, TRICHLOROETHANE
- 3. HOLES IN THIS AREA MUST BE FREE FROM SOLDER.
- 4. INK STAMP SERIAL NO., PCB ASSY., ASSY. NO. WHERE SHOWN.
- 5. SQUARE PAD INDICATES PIN NO. ONE.
- 6. INSTALL JUMPER ITEM 40 FROM U2-8 TO U28-8.
- 7. INSTALL JUMPER ITEM 40 FROM U2-16 TO U28-16.
- 8. FOR 4-01898-001, REMOVE JUMPERS WI-W4 AFTER BOARD TEST.



PART OF P1

6A	PWRSPAR1	NC
6C	PWRSPAR2	NC
14A	SPARE1	NC
14C	SPARE3	NC
15A	SPARE4	NC
15C	CA7	NC
22C	CA8	NC
21A	CA5	NC
21C	CA4	NC
20A	CA3	NC
20C	CSPARE	NC
12A	CROWN	NC
12C	CROIRG	NC
7A	DBDWA	NC
9A	DBDWB	NC
9C	DBDWB	NC



U9, 12, 15, 16, 21, 24, 27	2803A	10	9
U9, 11, 13, 17, 20, 23, 25	7414	10	10
U6	339	3	12
U5	7414	16	8
U4	2803A	18	8
U2, 28	7414	20	10
U1, 3	7414	20	10

U19	REF. DES.
U28	REF. DES.
TP3	REF. DES.
P4	REF. DES.
C18	REF. DES.

IC POWER CONNECTIONS

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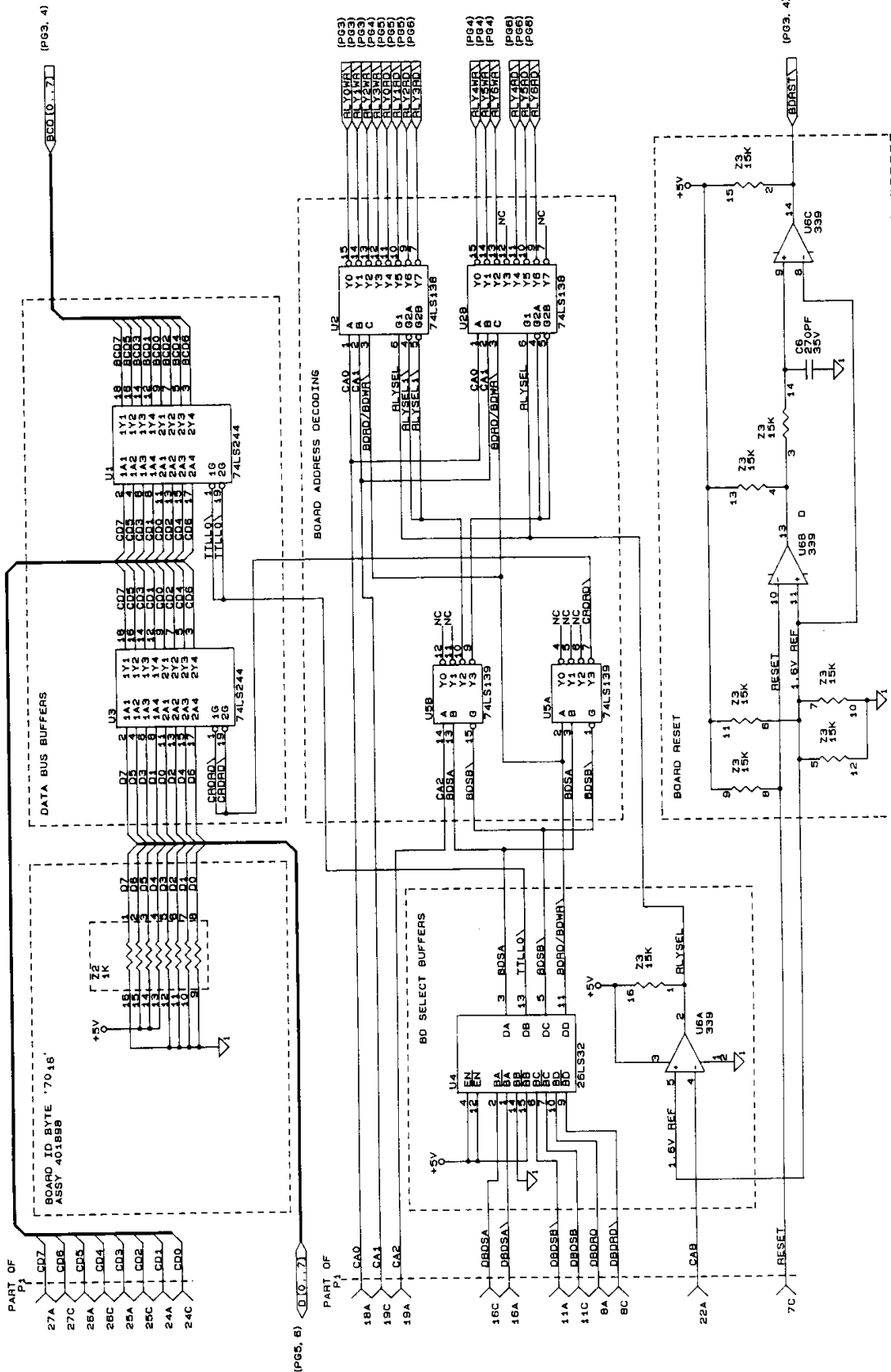
**RACAL-DANA Instruments Inc.**  
4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE			
SCHEM, 1250-45, -45A			
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B	21793	431898, -001	C
SCALE NONE			SHEET 1 OF 8

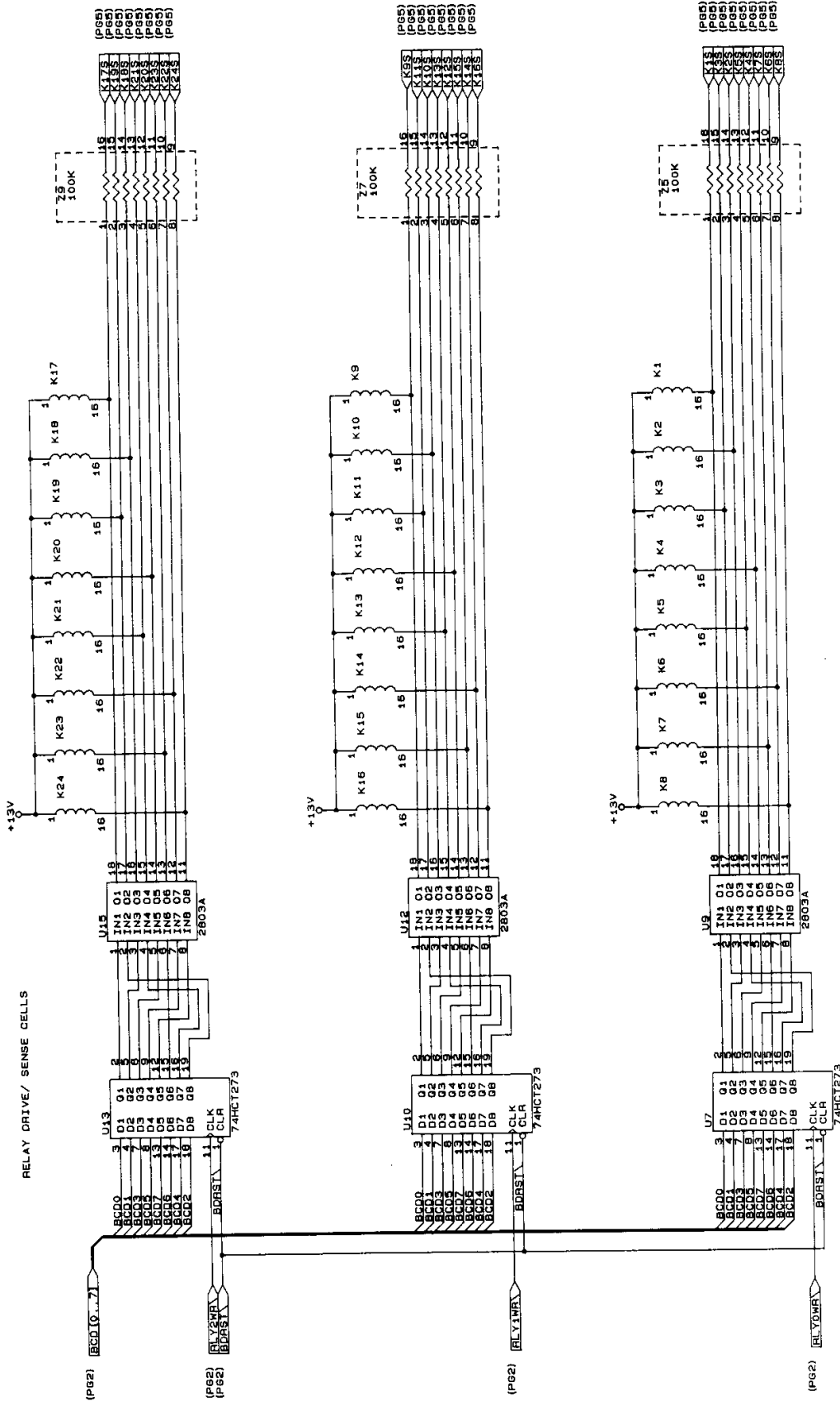
431898-001	SCHEM, 1250-45A
431898	SCHEM, 1250-45
RACAL INSTRUMENTS P/N TITLE	

- 4. ON 1250-45A, W1 THRU W4 NOT INSTALLED.
- 3. RELAYS K1 THRU K52 ARE RACAL INST. P/N 310180. ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
- 2. RESISTOR NETWORKS ARE IN OHMS.
- 1. CAPACITOR VALUES ARE IN MICROFARADS. +/-20%, 50V UNLESS OTHERWISE SPECIFIED.

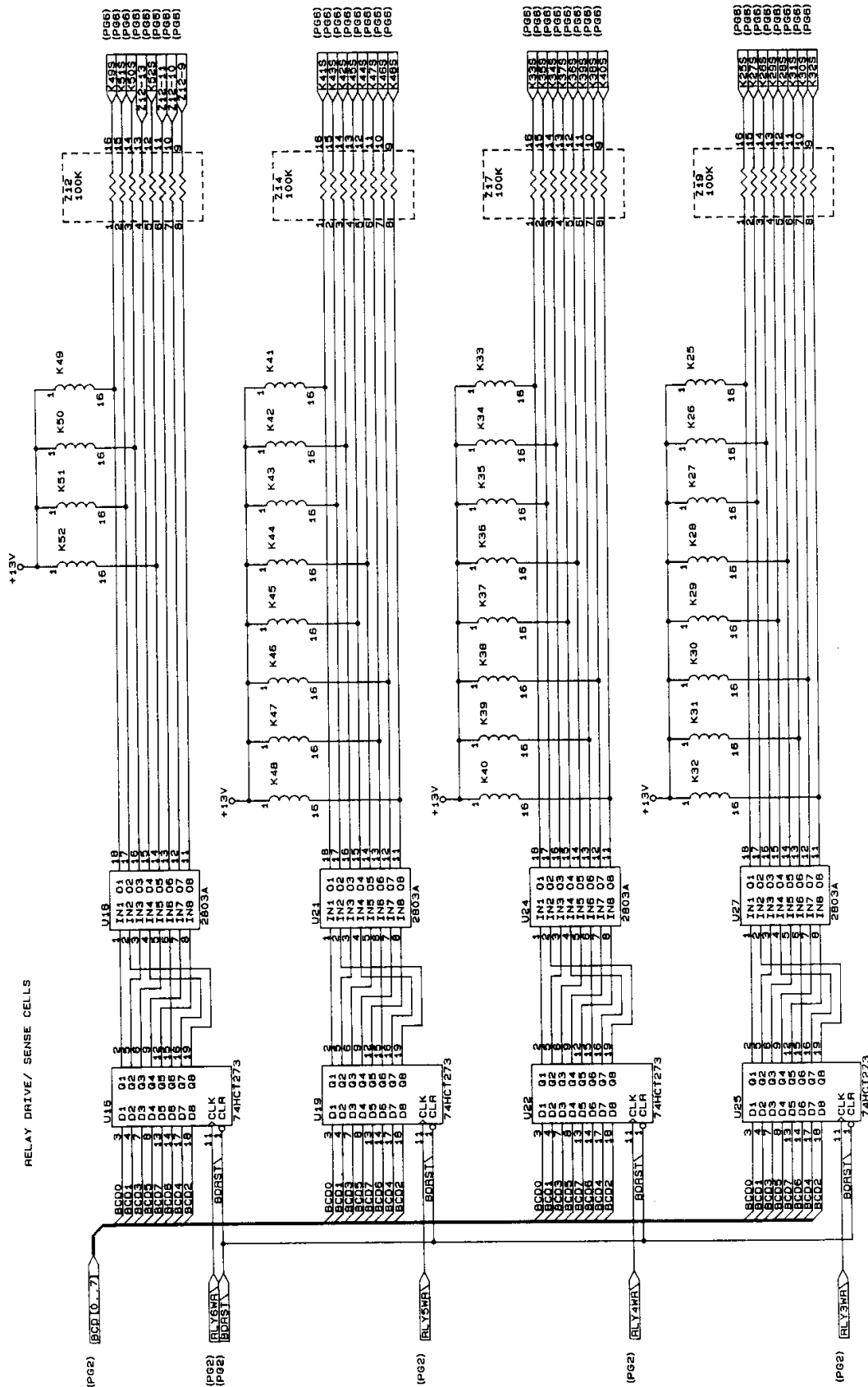
NOTES: UNLESS OTHERWISE SPECIFIED



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
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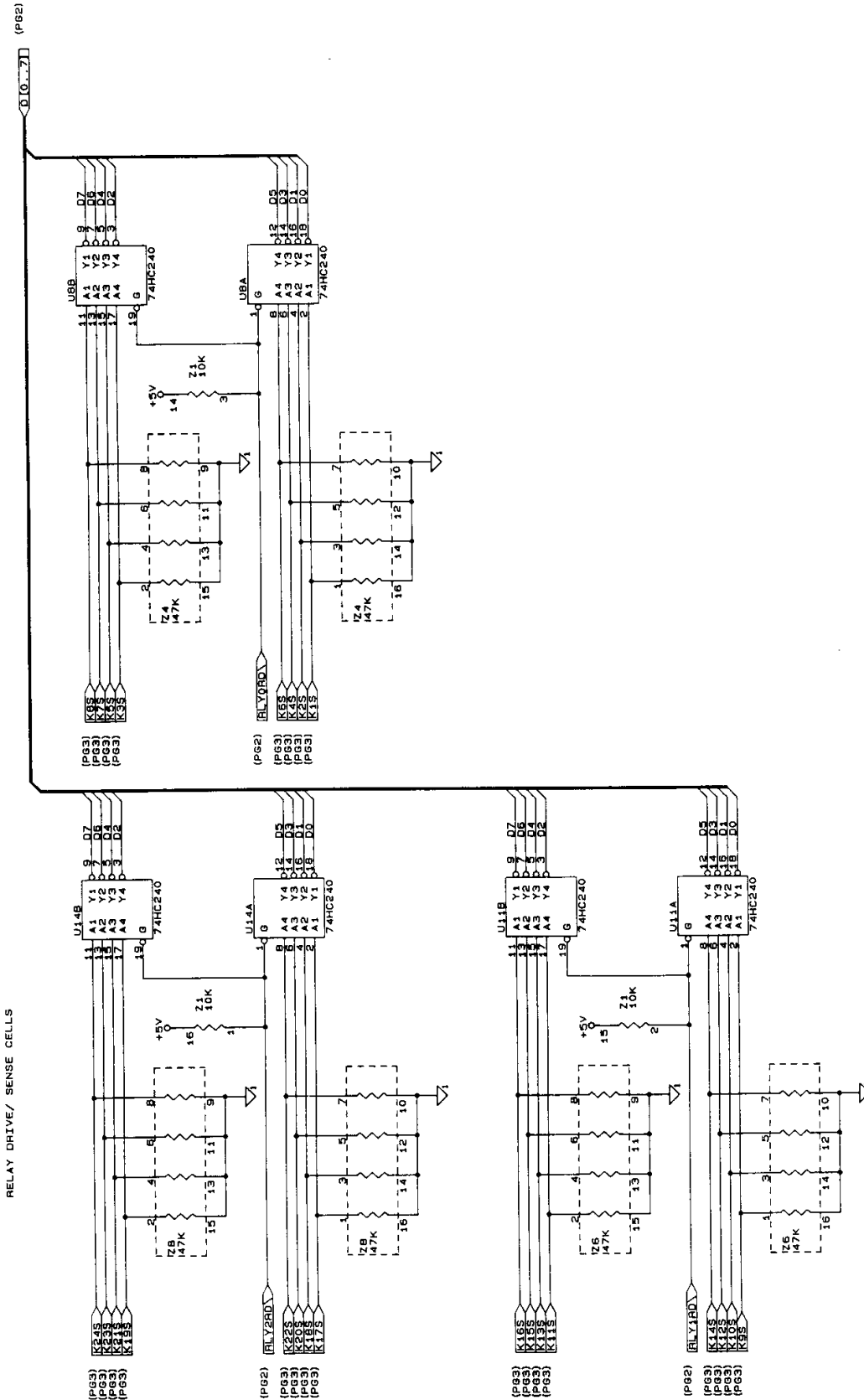
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B	21793	431898, -001	C
SCALE NONE		SHEET 3	OF 8



RELAY DRIVE/ SENSE CELLS

SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
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SCALE NONE		SHEET 4	OF 8



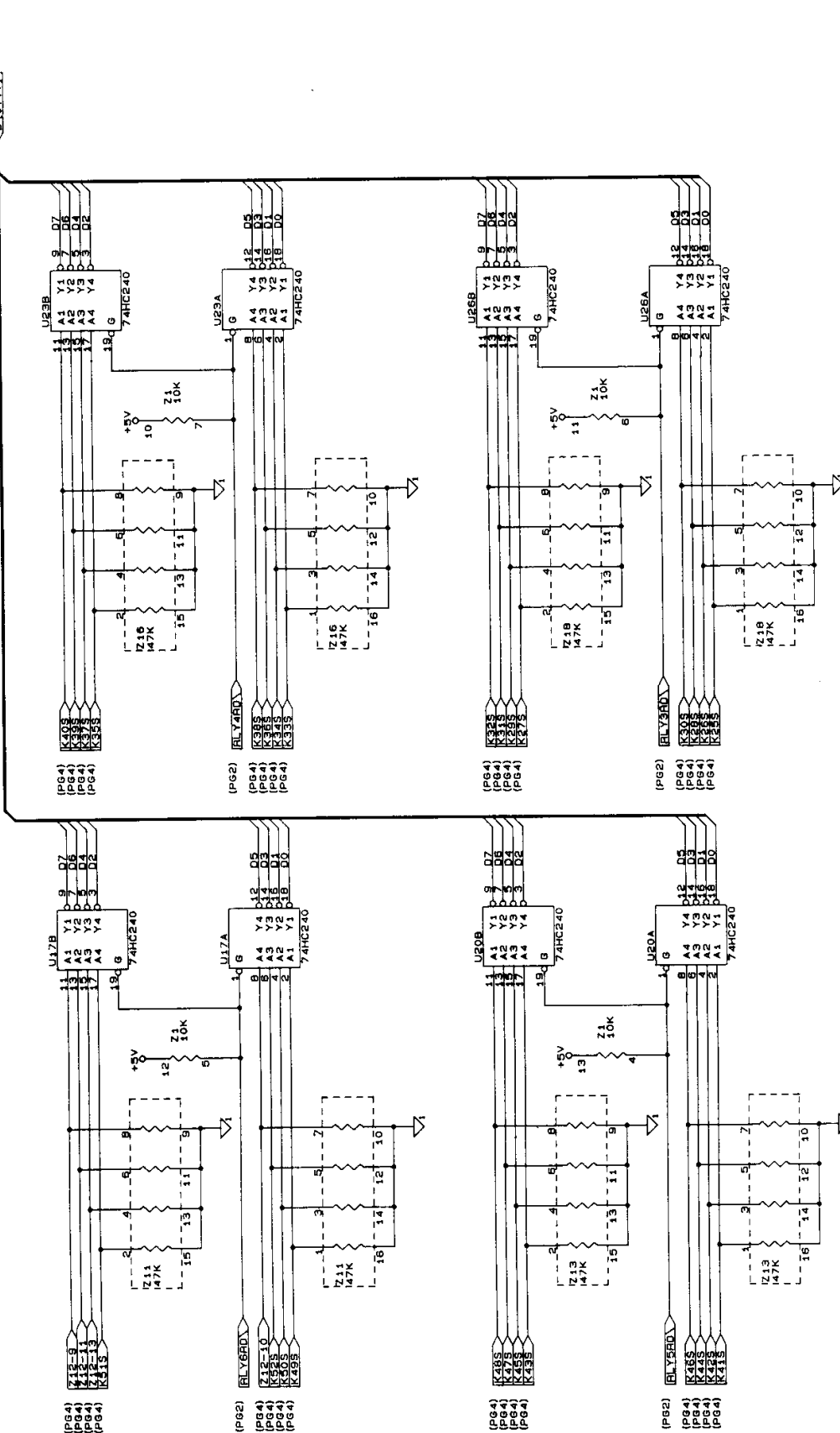


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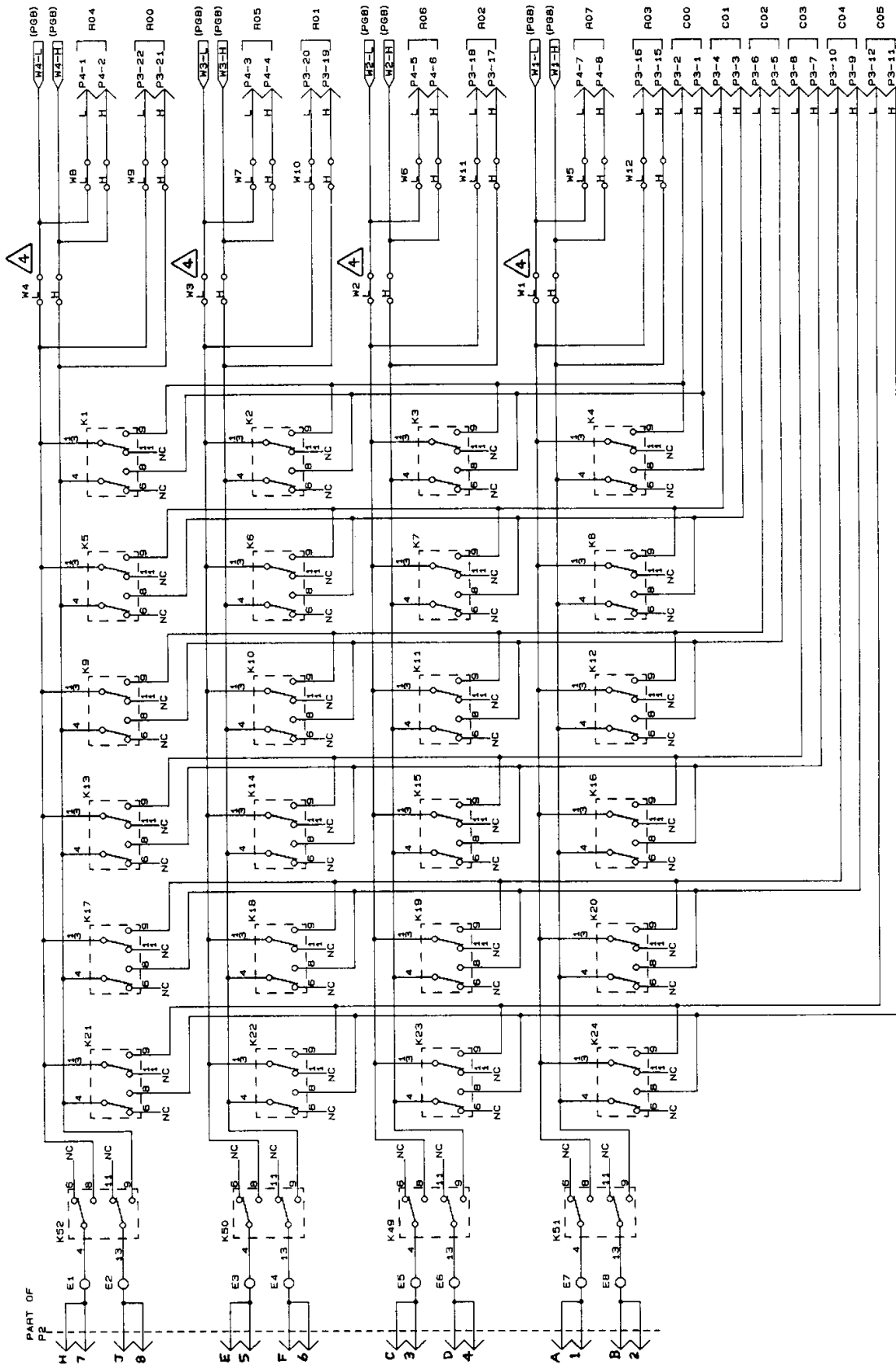
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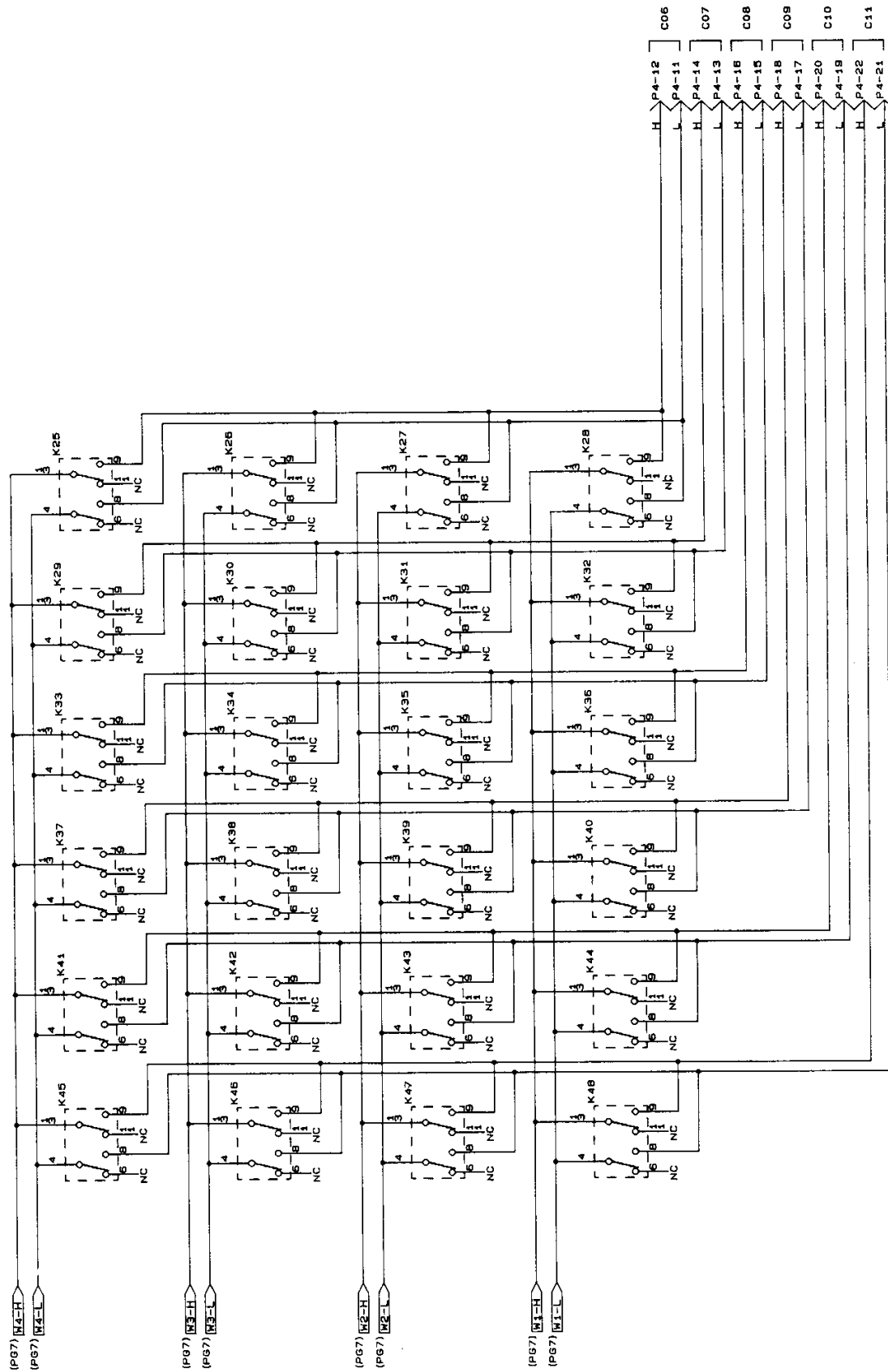
RELAY DRIVE/ SENSE CELLS



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	4-31898, -001	C
SCALE NONE		SHEET 6	OF 8

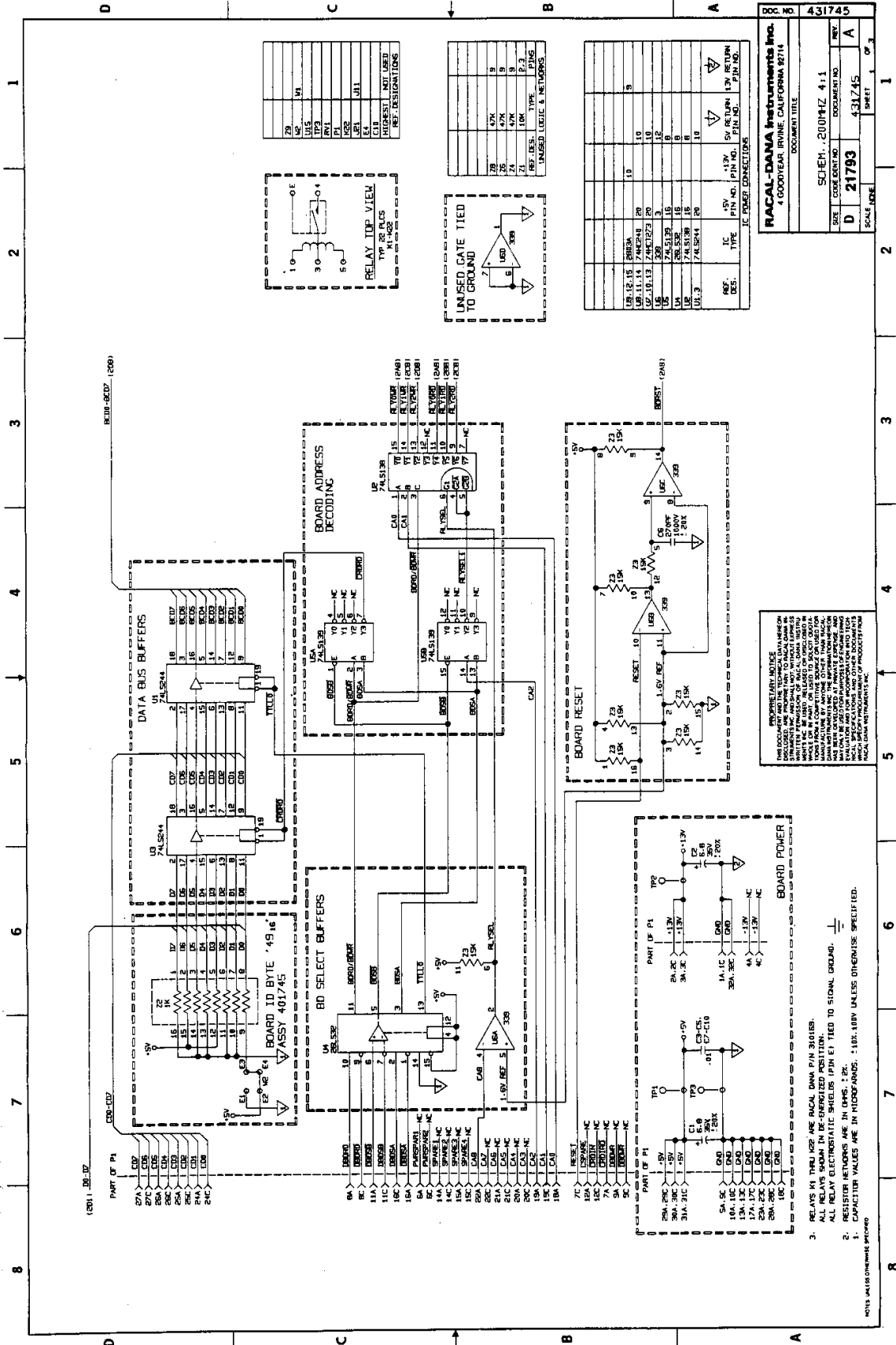


SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431898, -001	C
SCALE NONE		SHEET 7	OF 8



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	4-31898-001	C
SCALE	NONE	SHEET 8	OF 8





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- RELAYS U1 THROUGH U82 ARE RACAL DANA P/N 301058.
- ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
- ALL RELAY ELECTROSTATIC SHIELDS (PIN E) TIED TO SIGNAL GROUND.
- RESISTOR NETWORKS ARE IN OHMS, I 2K.
- CAPACITOR VALUES ARE IN MICROFARADS; .1 = 0.1; 100V UNLESS OTHERWISE SPECIFIED.

NOTES UNLESS OTHERWISE SPECIFIED

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 1 GOODYEAR IRVINE, CALIFORNIA 92714

DOC. NO. 431745

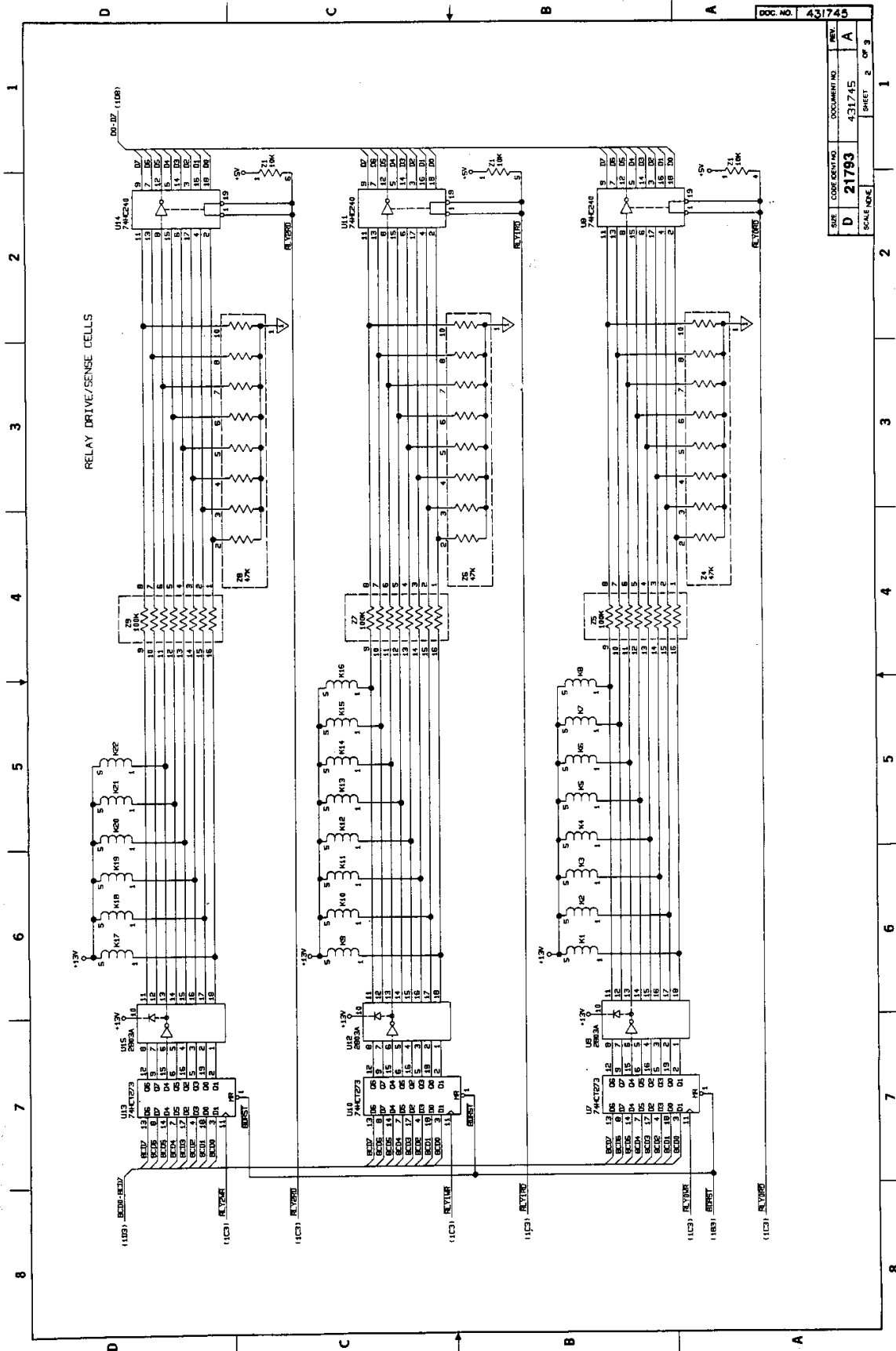
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SIZE CODE SHEET NO. DOCUMENT NO. REV. A

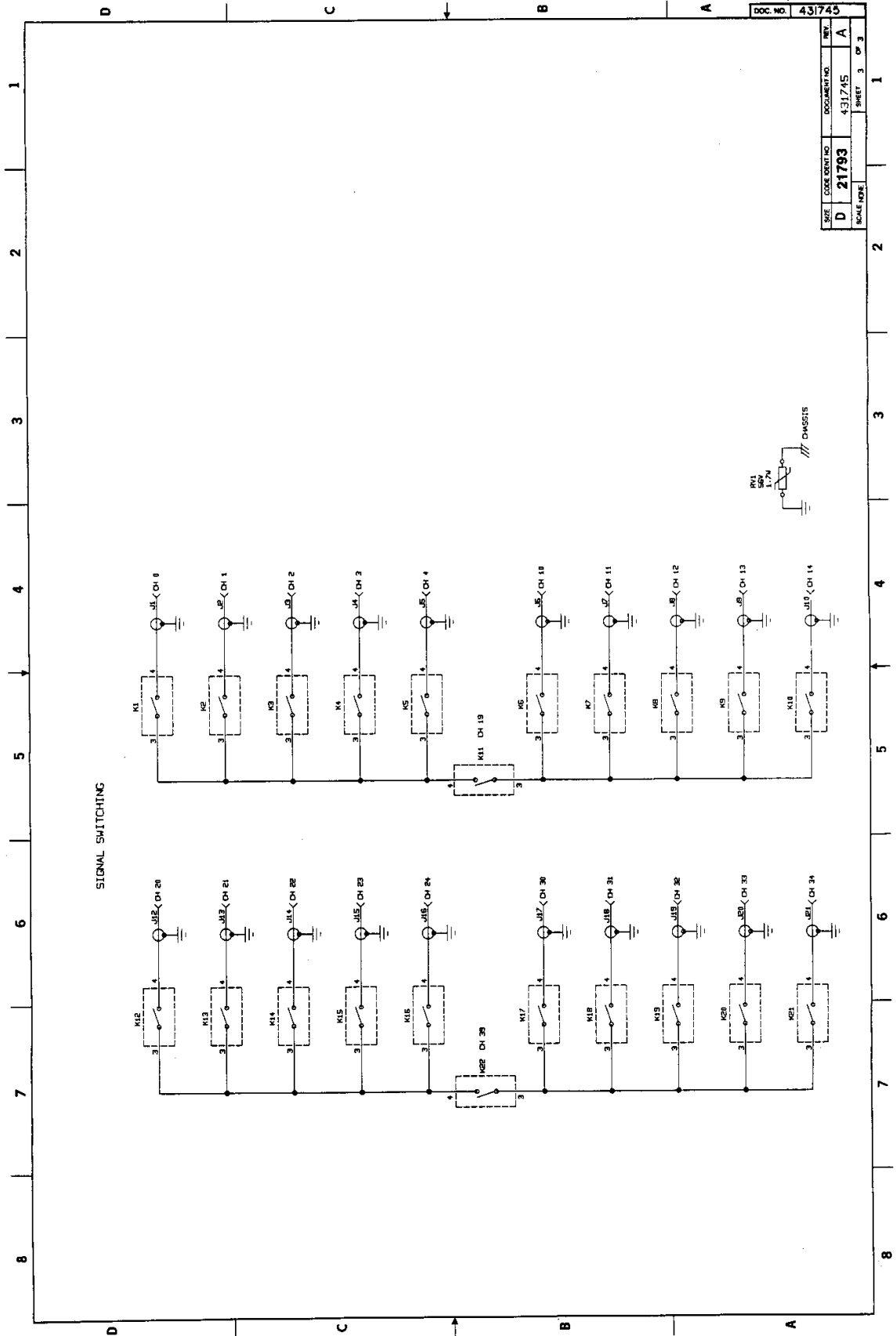
D 21793 431745 A

SCALE SIZE SHEET 1 OF 2

1 2 3 4 5 6 7 8



DOC. NO. 431745	
SIZE D	CODE 21793
DOCUMENT NO. 431745	REV. A
SCALE NONE	
SHEET 2 OF 3	

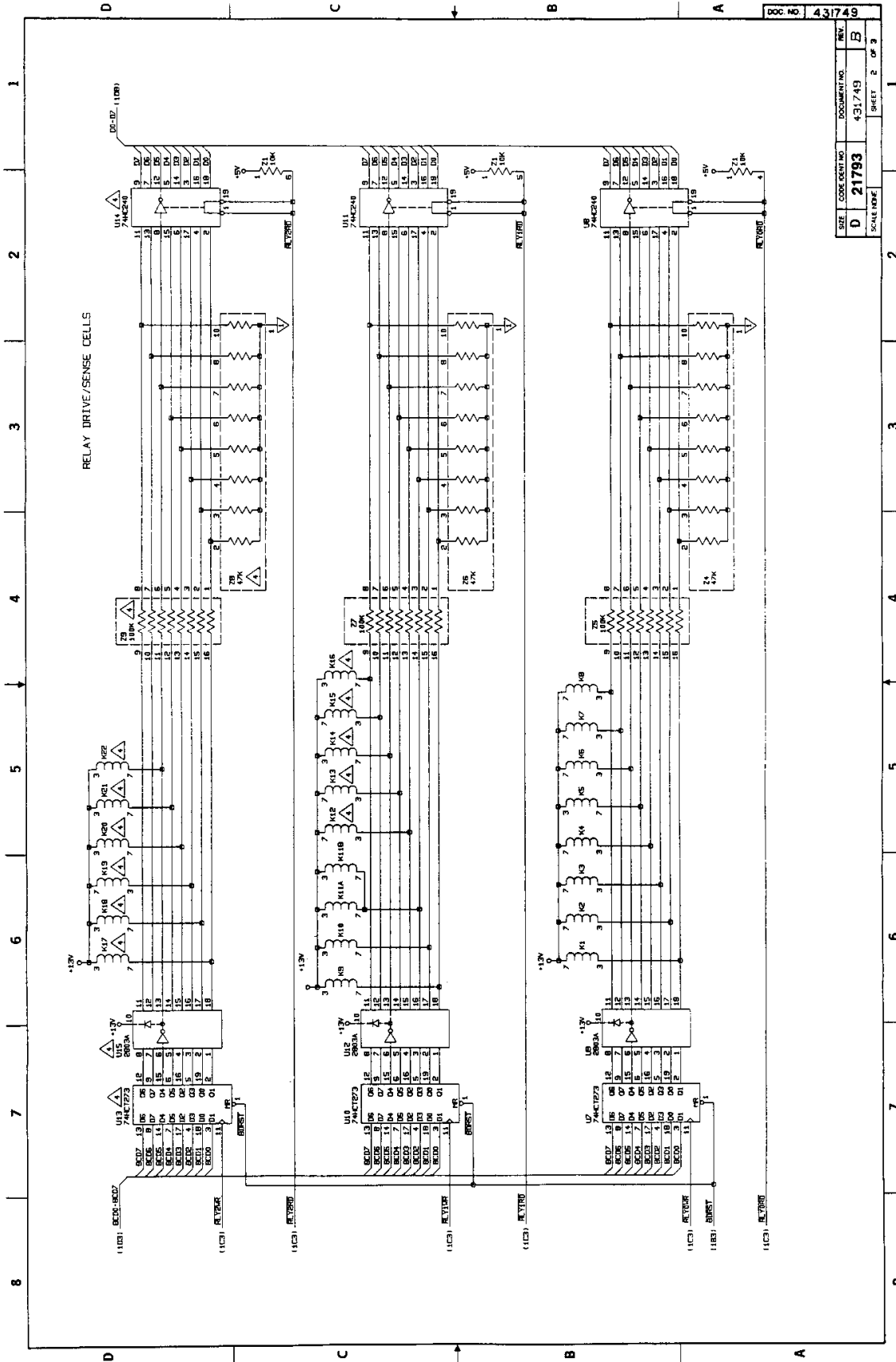


DOC. NO.	431745
SCALE	NOTE
D	2193
CODE	IDENT. NO.
	431745
	A
	SHEET 3 OF 3

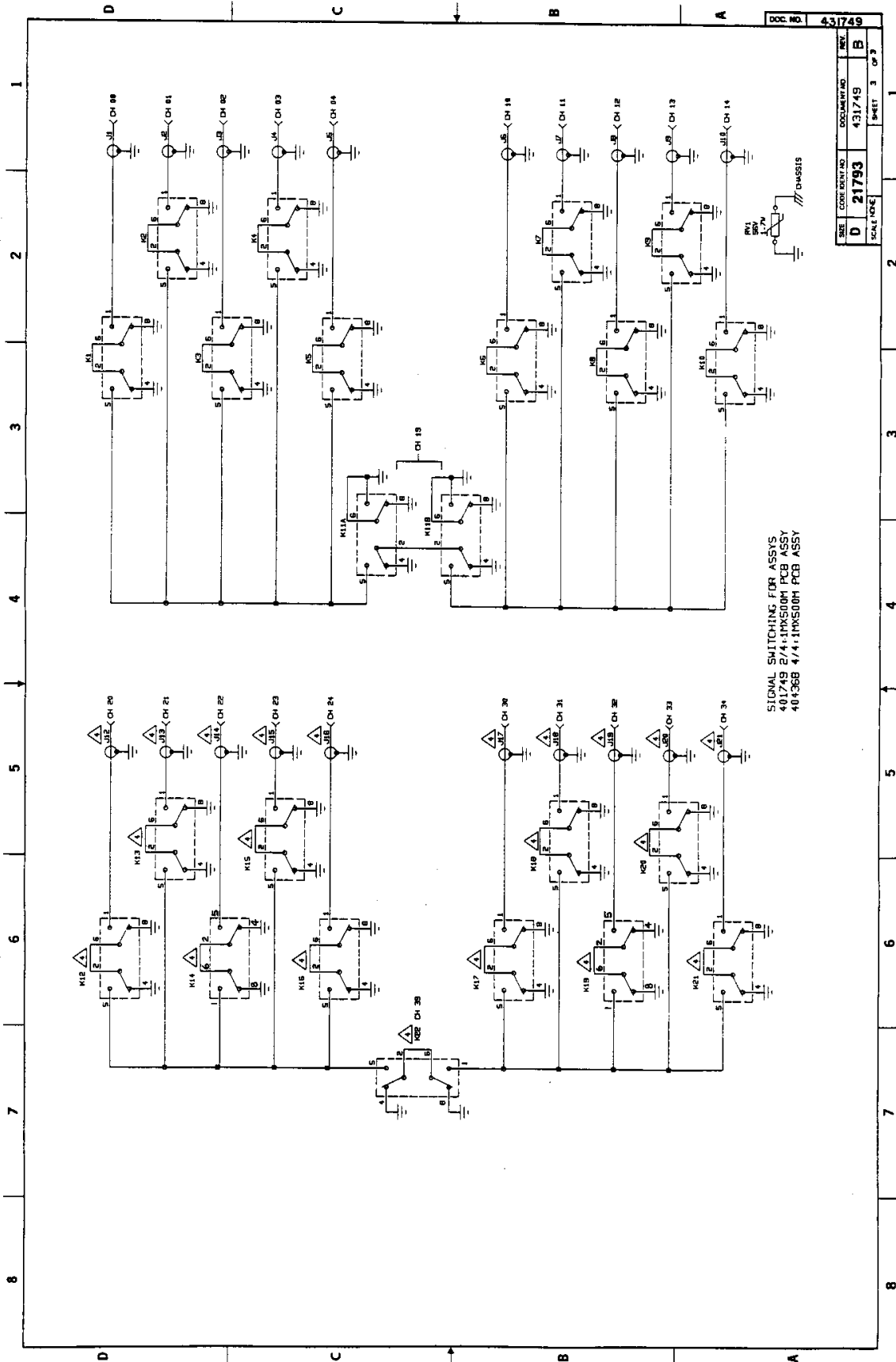


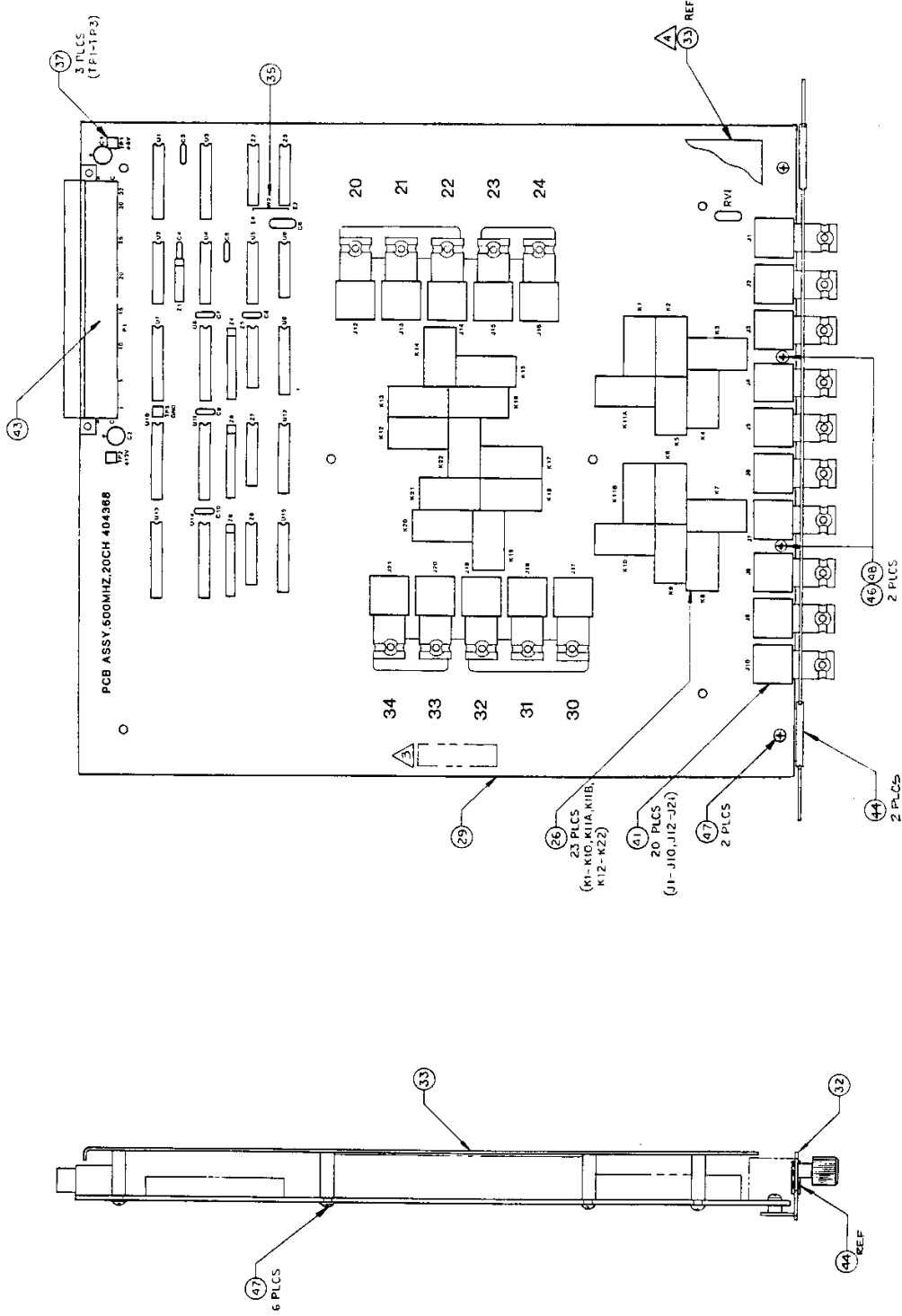






DOC NO.	431749
REV.	B
SIZE	D
CODE	21793
DOCUMENT NO.	431749
SHEET	2 OF 3
SCALE	NONE

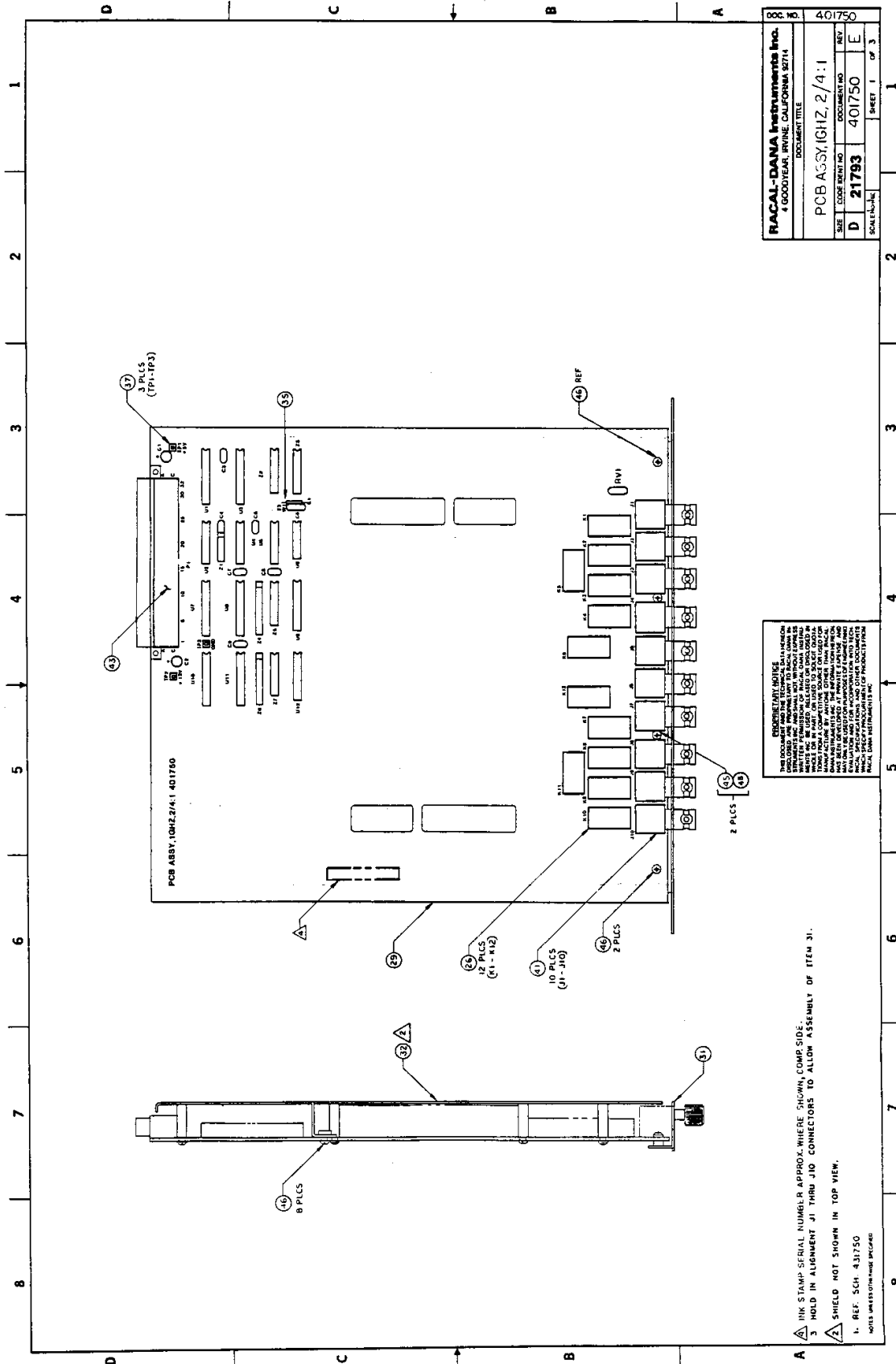




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<b>RACAL-DANA Instruments Inc.</b>			
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY 500MHZ 20CH			
SIZE	CODE	DEPT NO	DOCUMENT NO
D	21793	404368	F
SCALE: 1:1			SHEET 1 OF 3

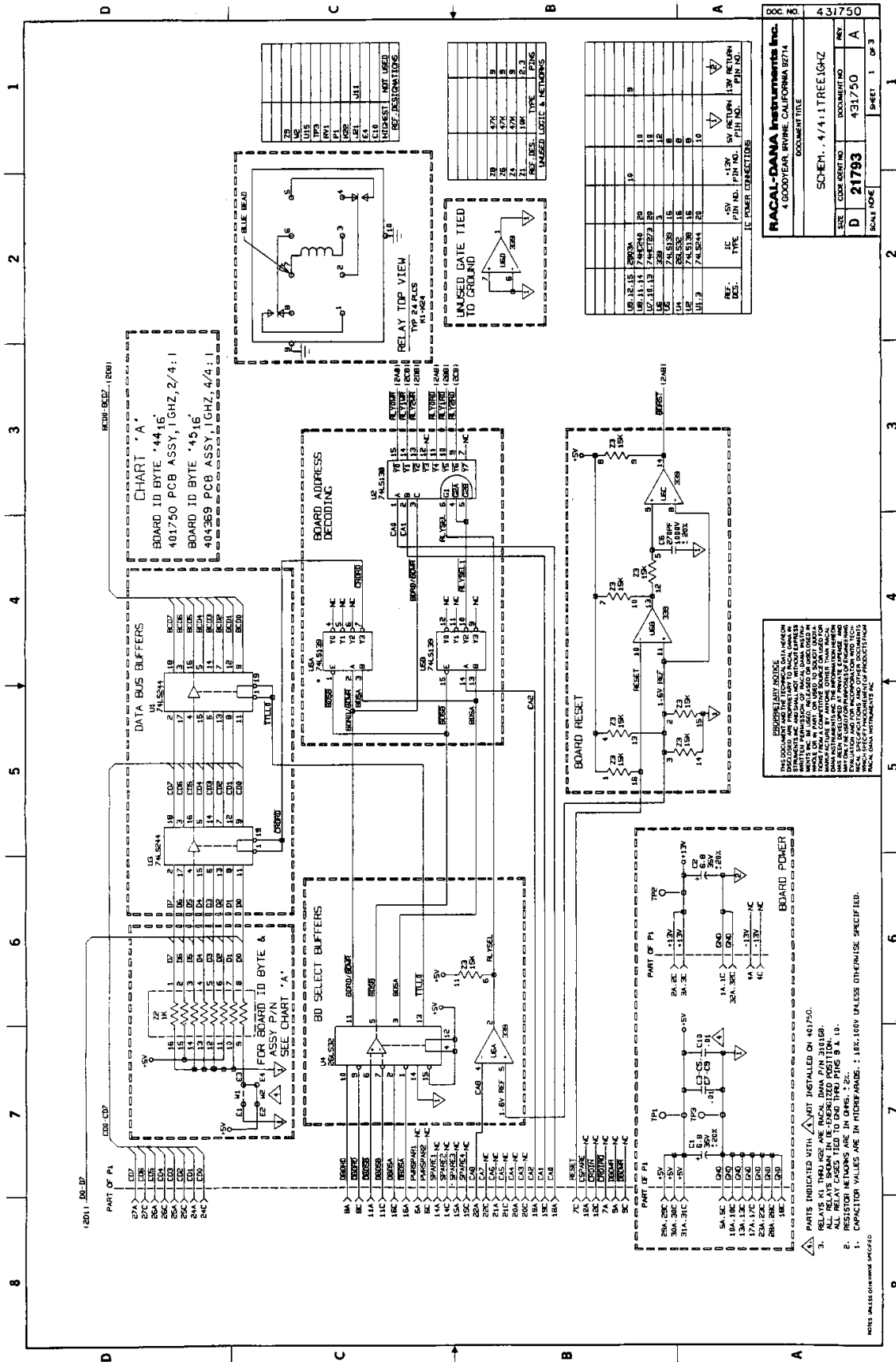
- 4 SHIELD NOT SHOWN IN TOP VIEW FOR CLARITY.
  - 3 INK STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.
  - 2 HOLD IN ALIGNMENT J1 THRU J10 CONNECTORS TO ALLOW ASSEMBLY OF ITEM 31.
  - 1. REF SCH. 431749
- NOTES UNLESS OTHERWISE SPECIFIED



RACAL-DANA Instruments Inc.		401750	
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY (10HZ, 2/A, 1)			
SIZE	CODE REV NO	DOCUMENT NO	REV
D	21793	401750	E
SCALE 1:1		SHEET 1 OF 3	

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- 1. SHIELD NOT SHOWN IN TOP VIEW.
  - 2. REF. SCH. 431750
  - 3. REF. SCH. 431750
  - 4. REF. SCH. 431750
  - 5. REF. SCH. 431750
- NOTE: UNLESS OTHERWISE SPECIFIED

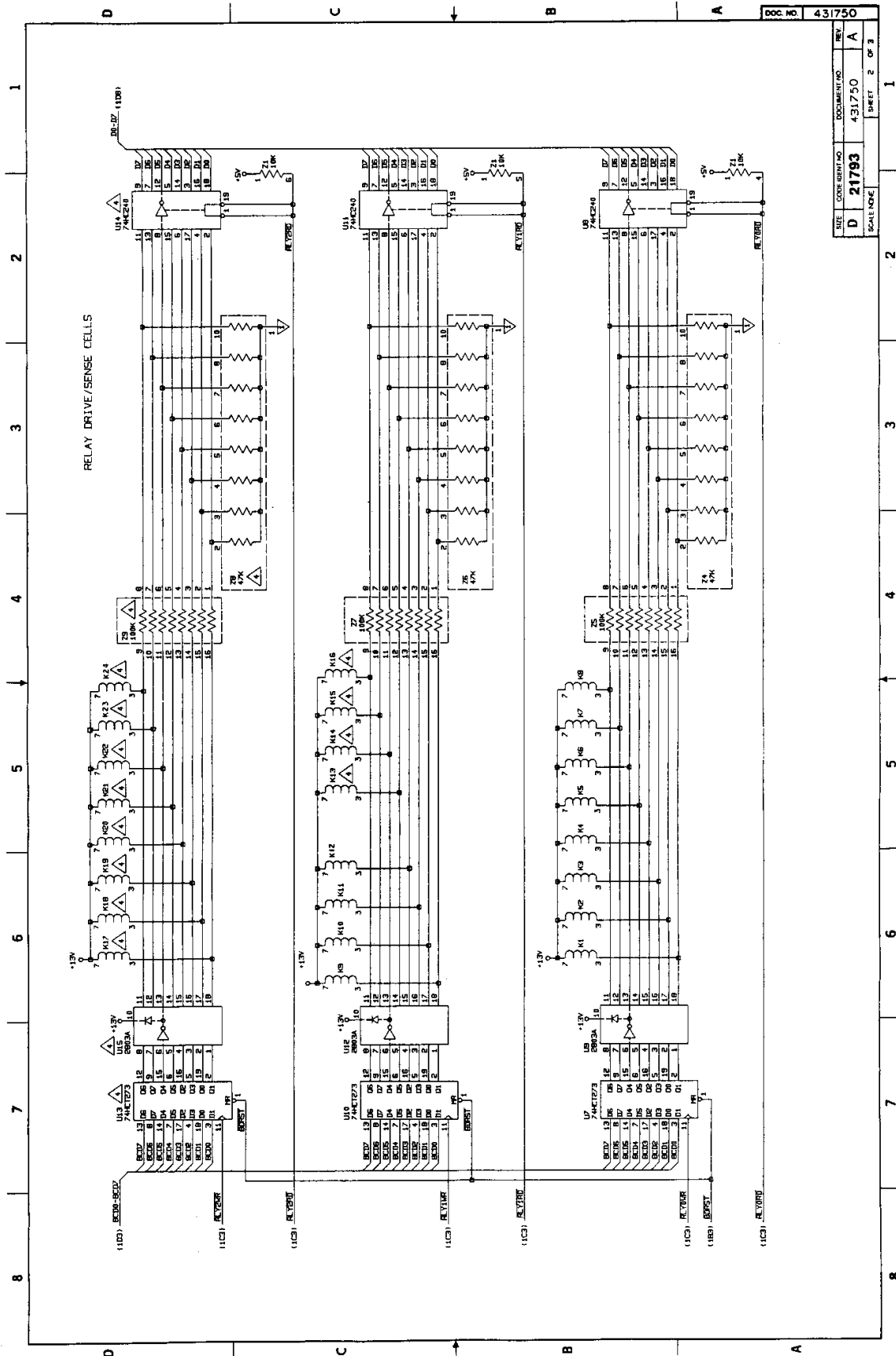


DOC NO.	431750
REV.	A
SCHEM. 4/4:1 TREE 1GHZ	
SIZE	D
CODE GRANT NO.	21793
DOCUMENT NO.	431750
SHEET	1 OF 3

**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR, IRVINE, CALIFORNIA 92714

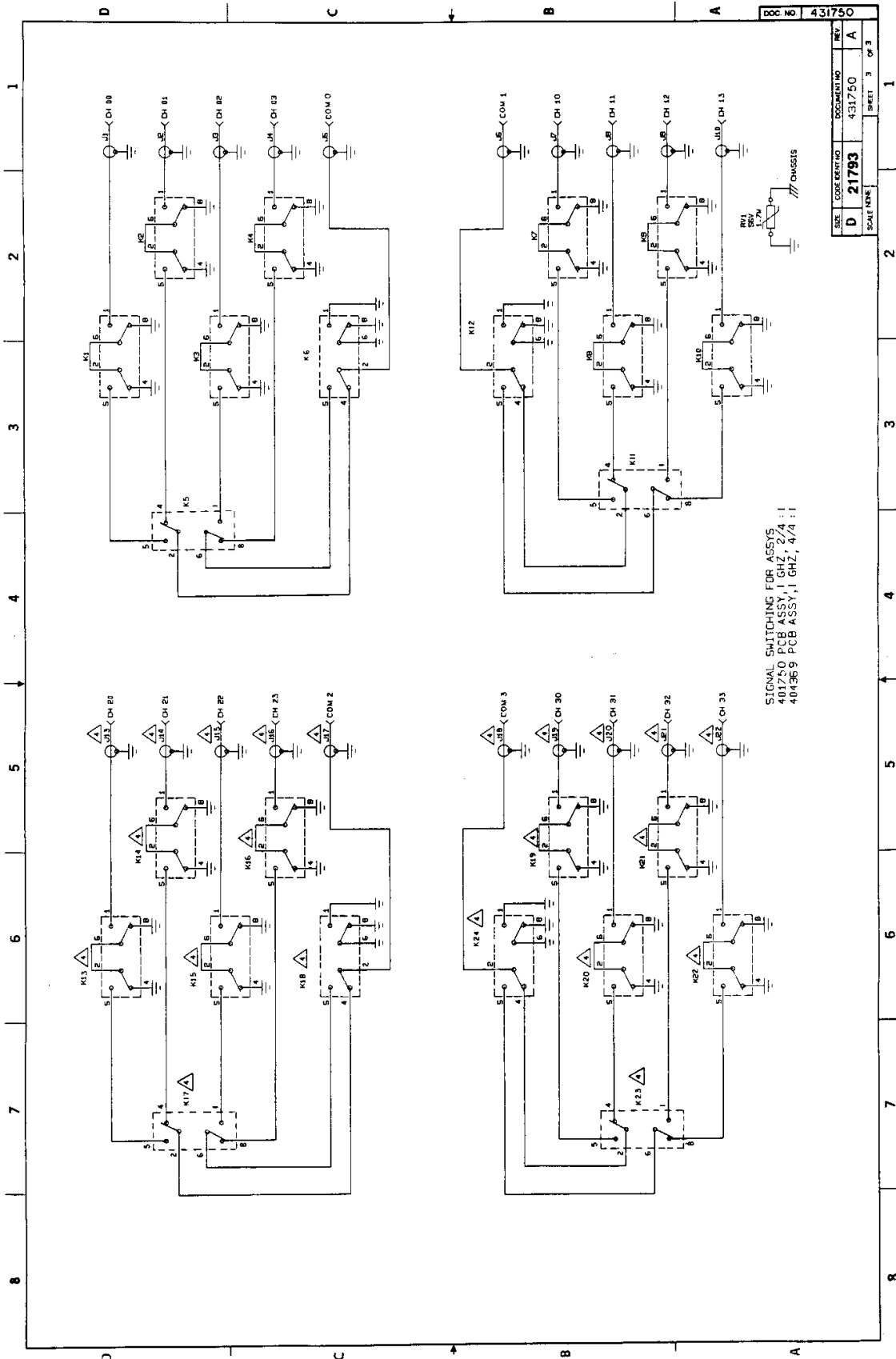
UNLESS OTHERWISE SPECIFIED:  
 1. RESISTOR VALUES ARE IN OHMS; 2K, 10K, 100K UNLESS OTHERWISE SPECIFIED.  
 2. CAPACITOR VALUES ARE IN MICROFARADS; 100N, 100P UNLESS OTHERWISE SPECIFIED.  
 3. PARTS INDICATED WITH A TRIANGLE ARE NOT INSTALLED ON 431750.  
 4. RELAY IS A 24 PIN RELAY WITH 12 COMMON PINS AND 12 SWITCH PINS.  
 5. BOARD ID BYTE IS 4416 FOR BOARD ID BYTE AND 4916 FOR BOARD ID BYTE AND 4416 FOR BOARD ID BYTE AND 4916 FOR BOARD ID BYTE.

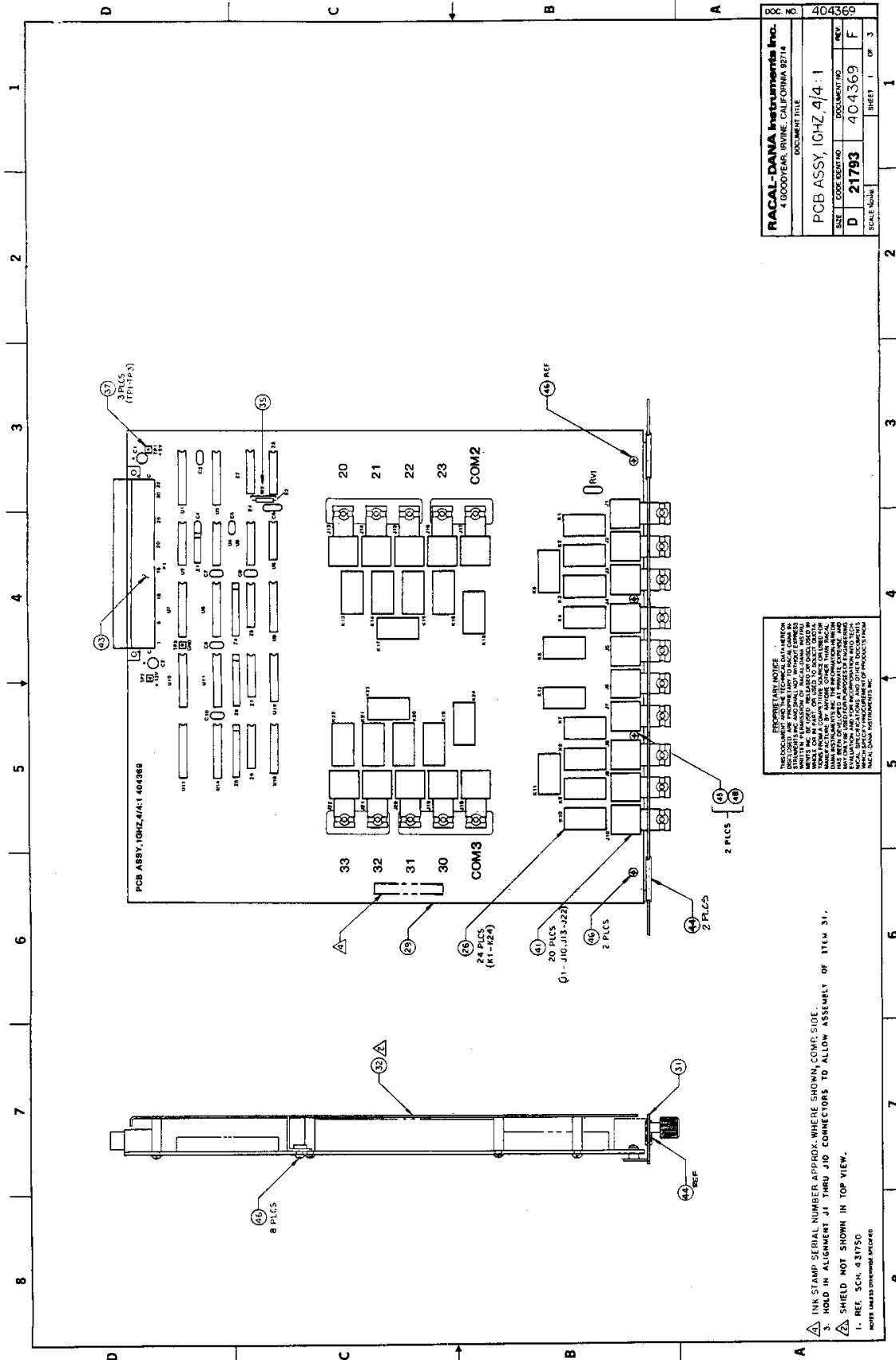
UNLESS OTHERWISE SPECIFIED:  
 1. RESISTOR VALUES ARE IN OHMS; 2K, 10K, 100K UNLESS OTHERWISE SPECIFIED.  
 2. CAPACITOR VALUES ARE IN MICROFARADS; 100N, 100P UNLESS OTHERWISE SPECIFIED.  
 3. PARTS INDICATED WITH A TRIANGLE ARE NOT INSTALLED ON 431750.  
 4. RELAY IS A 24 PIN RELAY WITH 12 COMMON PINS AND 12 SWITCH PINS.  
 5. BOARD ID BYTE IS 4416 FOR BOARD ID BYTE AND 4916 FOR BOARD ID BYTE AND 4416 FOR BOARD ID BYTE AND 4916 FOR BOARD ID BYTE.



DOC NO. 431750	
REV. A	REV. A
DOCUMENT NO. 431750	SHEET 2 OF 3
SCALE NONE	



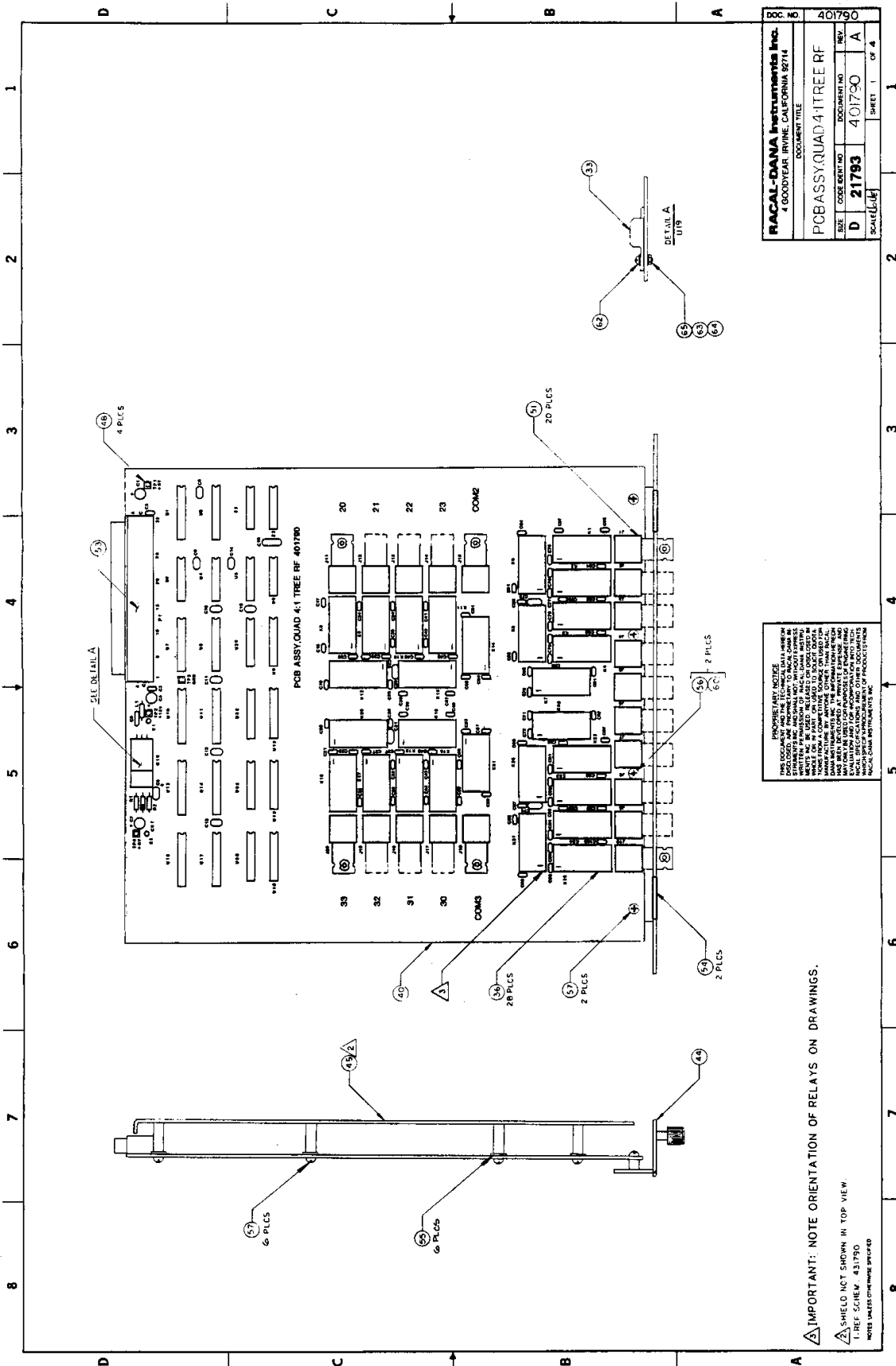




DOC. NO.		404369	
RACAL-DANA Instruments Inc. 1 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, 1GHZ, 4/14:1			
USE	DOC. IDENT. NO.	DOCUMENT ID.	REV.
D	21793	404369	F
SCALE 1/4"=1"			SHEET 1 OF 3

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 RACAL-DANA INSTRUMENTS INC.

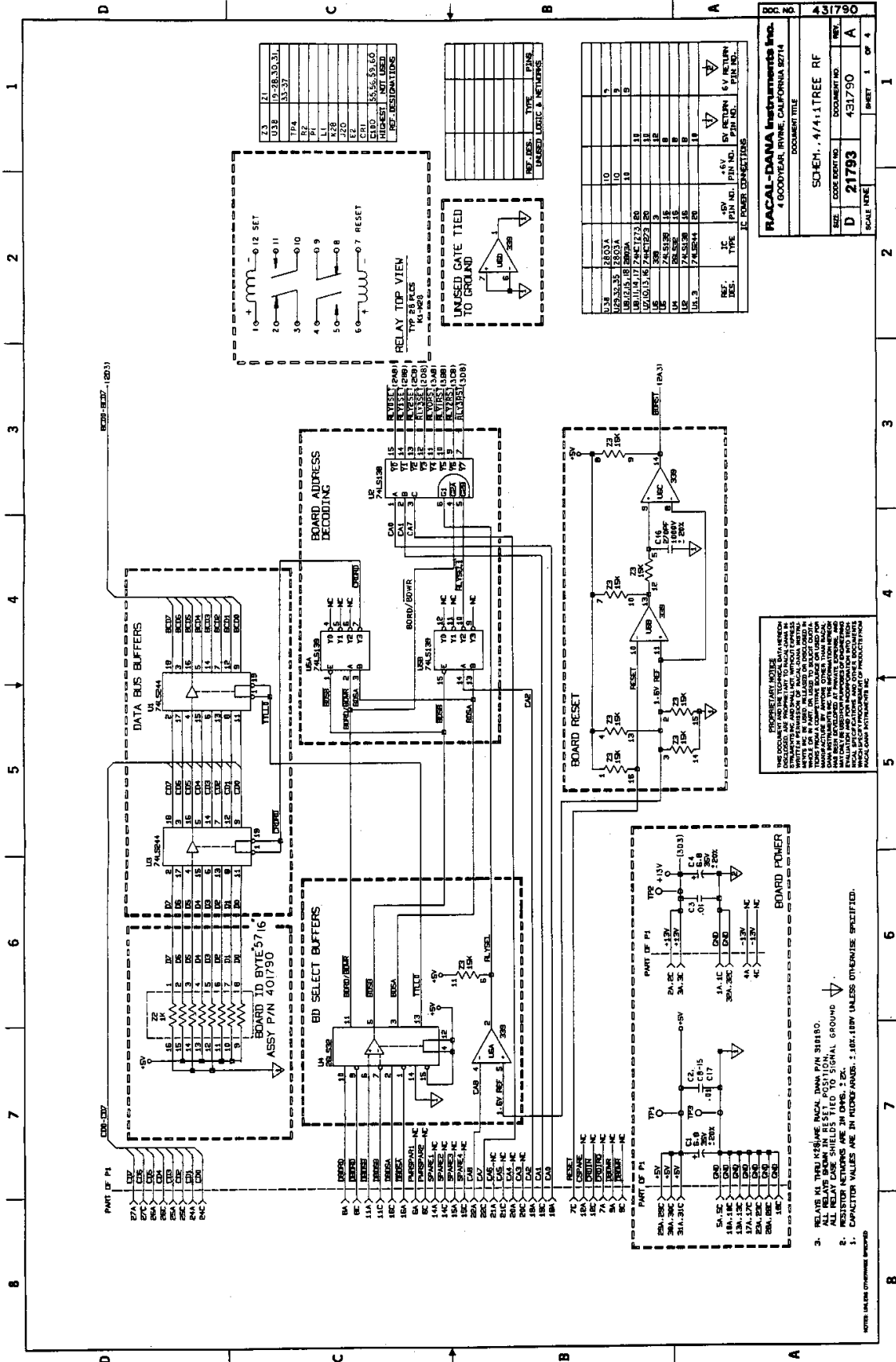
- INK STAMP SERIAL NUMBER APPROX. WHERE SHOWN, COM1, SIDE.  
 3. HOLD IN ALIGNMENT J1 THRU J10 CONNECTORS TO ALLOW ASSEMBLY OF ITEM 31.  
 SHIELD NOT SHOWN IN TOP VIEW.  
 1. REF. SCH. 431750  
 NOTES: DIMENSIONS SHOWN IN PARENTS



<b>RACAL-DANA Instruments Inc.</b> 4 GOODYEAR IRVINE, CALIFORNIA 92714	
DOCUMENT TITLE <b>PCB ASSY. QUAD 4.1 TREE RF</b>	
SIZE <b>D</b>	DOCUMENT NO. <b>401790</b>
SCALE <b>1:1</b>	REV. <b>A</b>
SHEET 1 OF 4	

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IMPORTANT: NOTE ORIENTATION OF RELAYS ON DRAWINGS.  
 SHIELD NOT SHOWN IN TOP VIEW.  
 TREE SCHEM: 431790  
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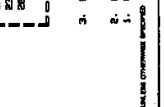
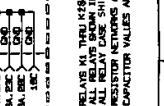
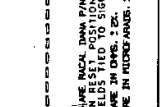
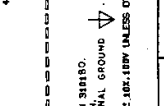
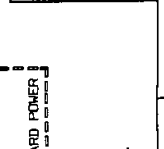


DOC. NO.	431790
DOC. TITLE	SCHEM. 4/411 TREE RF
REV.	A
DATE	2/17/93
SCALE	1 OF 1

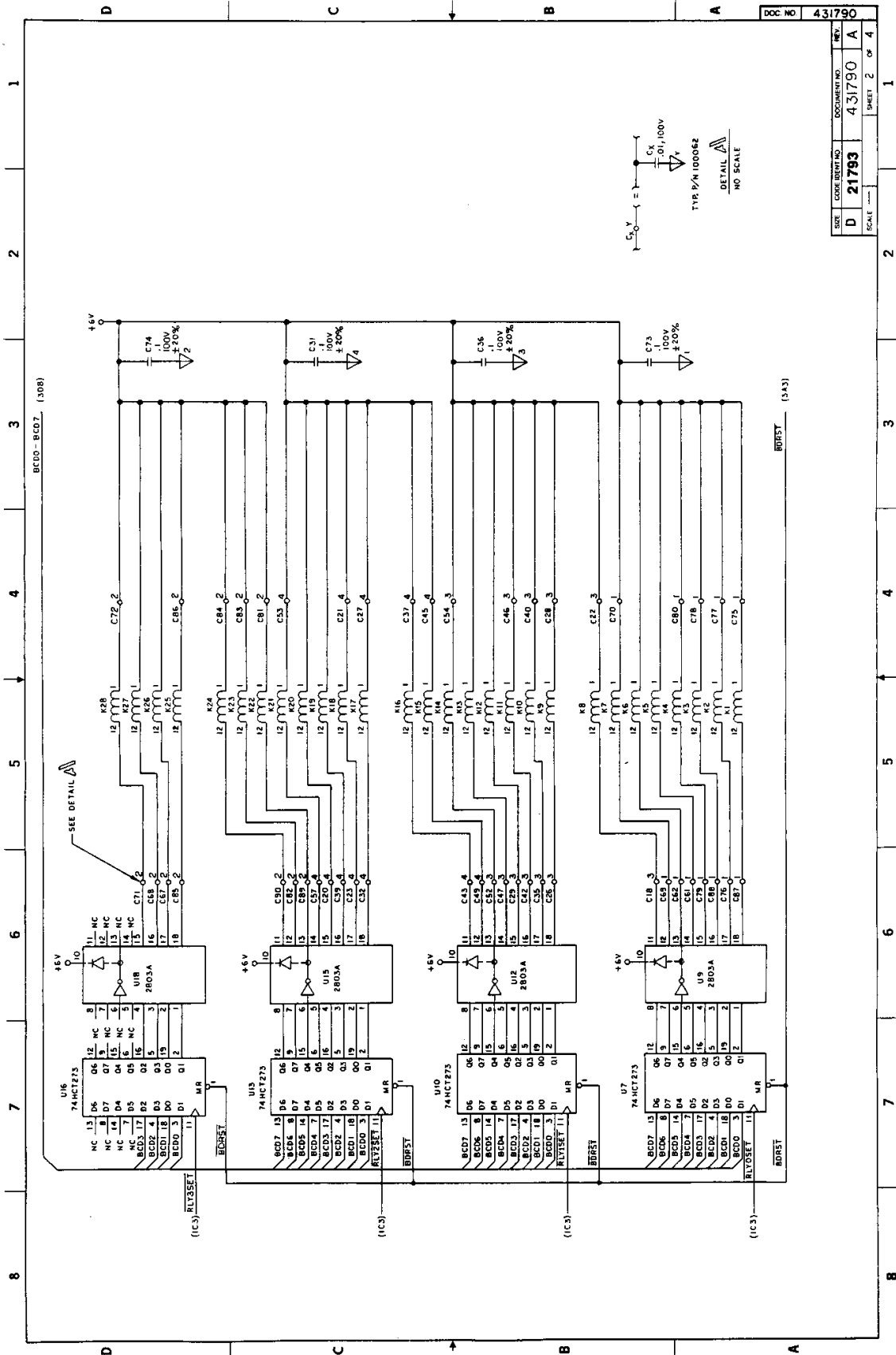
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U4	74LS139	18		
U5	74LS139	18		
U6	74LS139	18		
U7	74LS139	18		
U8	74LS139	18		
U9	74LS139	18		
U10	74LS139	18		
U11	74LS139	18		
U12	74LS139	18		
U13	74LS139	18		
U14	74LS139	18		
U15	74LS139	18		
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U99	74LS139	18		
U100	74LS139	18		

UNUSED LOGIC IS RETURNED TO GROUND

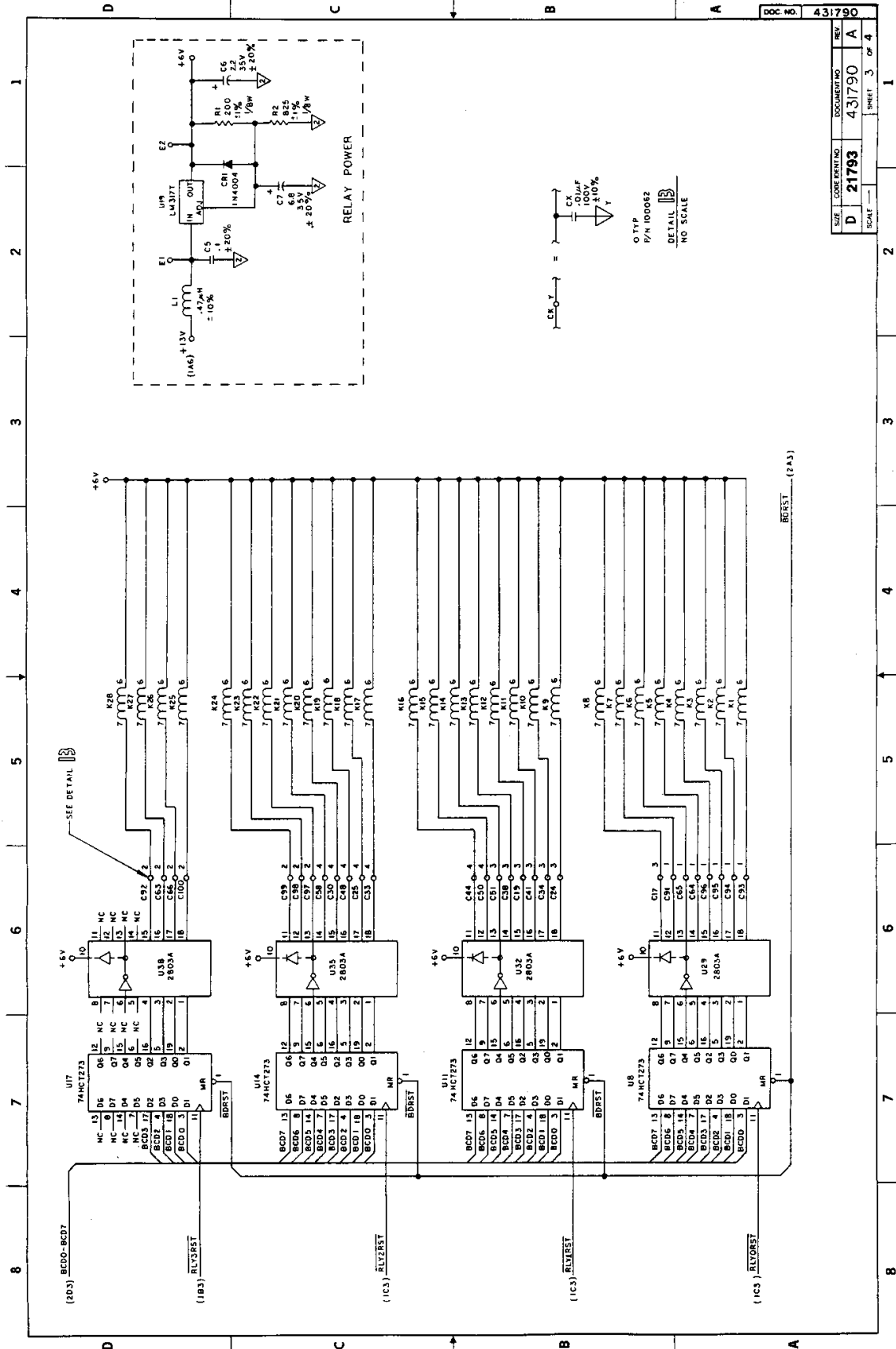
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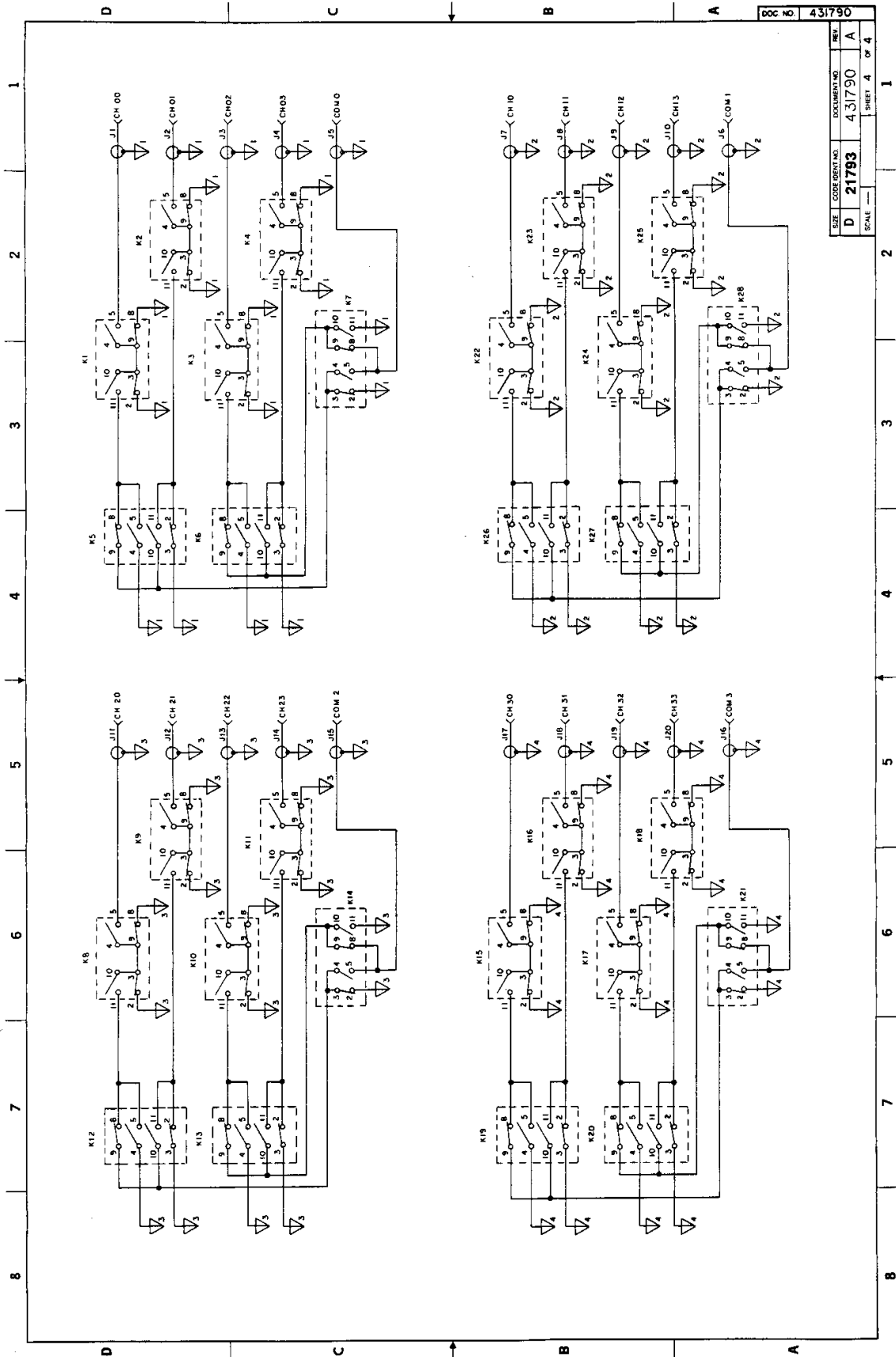
1. CAPACITOR VALUES ARE IN MICROFARADS; 1.0K=1.0KV UNLESS OTHERWISE SPECIFIED.
2. ALL RELAY CASES ARE SHIELDED TO SIGNAL GROUND.
3. RELAY M1 THRU K5 HAVE BACK DRAIN P/N 30180.



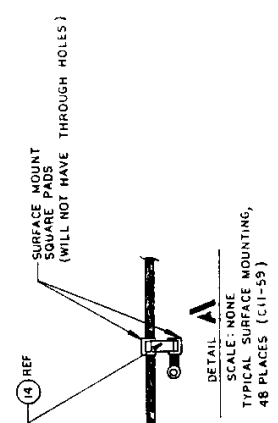
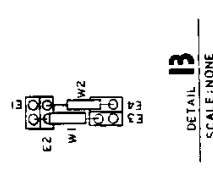
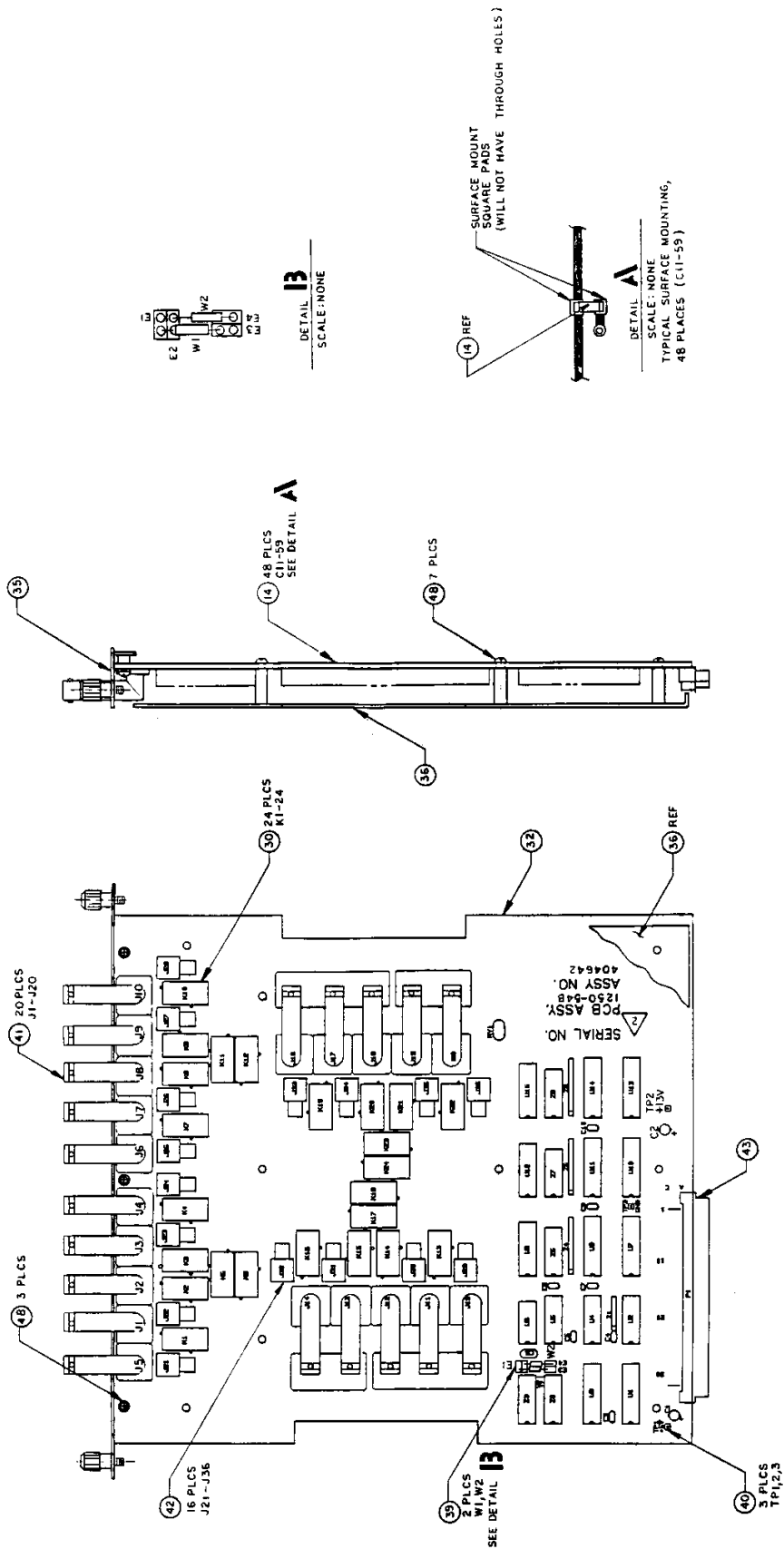
DOC NO	431790
SIZE	D
LOGIC IDENT NO	21793
DOCUMENT NO	431790
REV	A
SCALE	NO SCALE
SHEET	2 OF 4



DOC. NO.	431790
REV	A
SIZE	D
COMP. NO.	21793
DOCUMENT NO.	431790
SHEET	3
OF	4
SCALE	—



DOC NO	431790
SIZE	D
CORE IDENT NO.	21793
DOCUMENT NO.	431790
REV.	A
SCALE	1:1
SHEET	4
OF	4



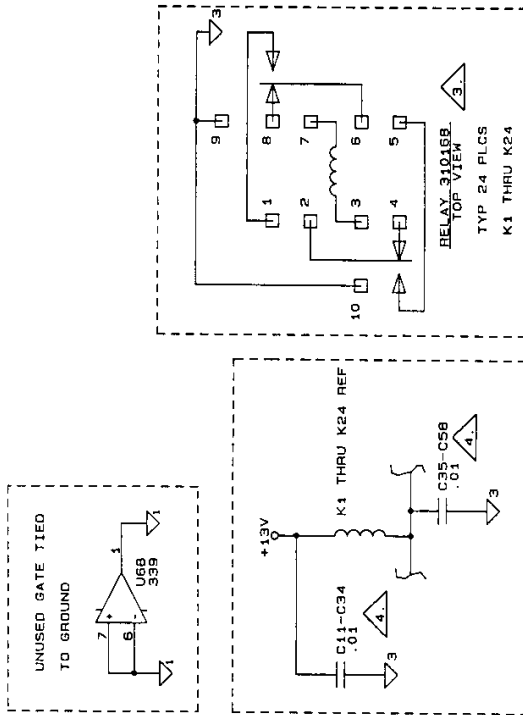
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4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, 1250-54B			
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
D	21793	404642	A
SCALE		SHEET	OF 2
		1	2

△ INK STAMP SERIAL NUMBER, ASSEMBLY NAME & NUMBER ON COMPONENT SIDE APPROX. WHERE SHOWN.

1. REFERENCE SCHEMATIC 431887.
- NOTES: UNLESS OTHERWISE SPECIFIED

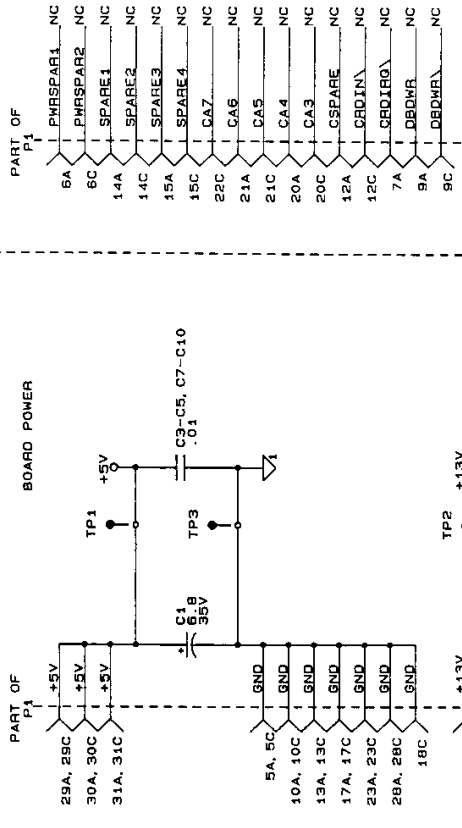




REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U9, 12, 15	2903A	20	10		9
U8, 11, 14	74HC240	20	10		9
U7, 10, 13	74HC1273	20	10		9
U6	74LS139	16	8		6
U4	26LS32	16	8		6
U2	74LS138	16	8		6
U1, 3	74LS244	20	10		9

Z9	
M2	
U3	
RV1	
P1	
K24	
C58	
HIGHEST REF. DES.	

IC POWER CONNECTIONS



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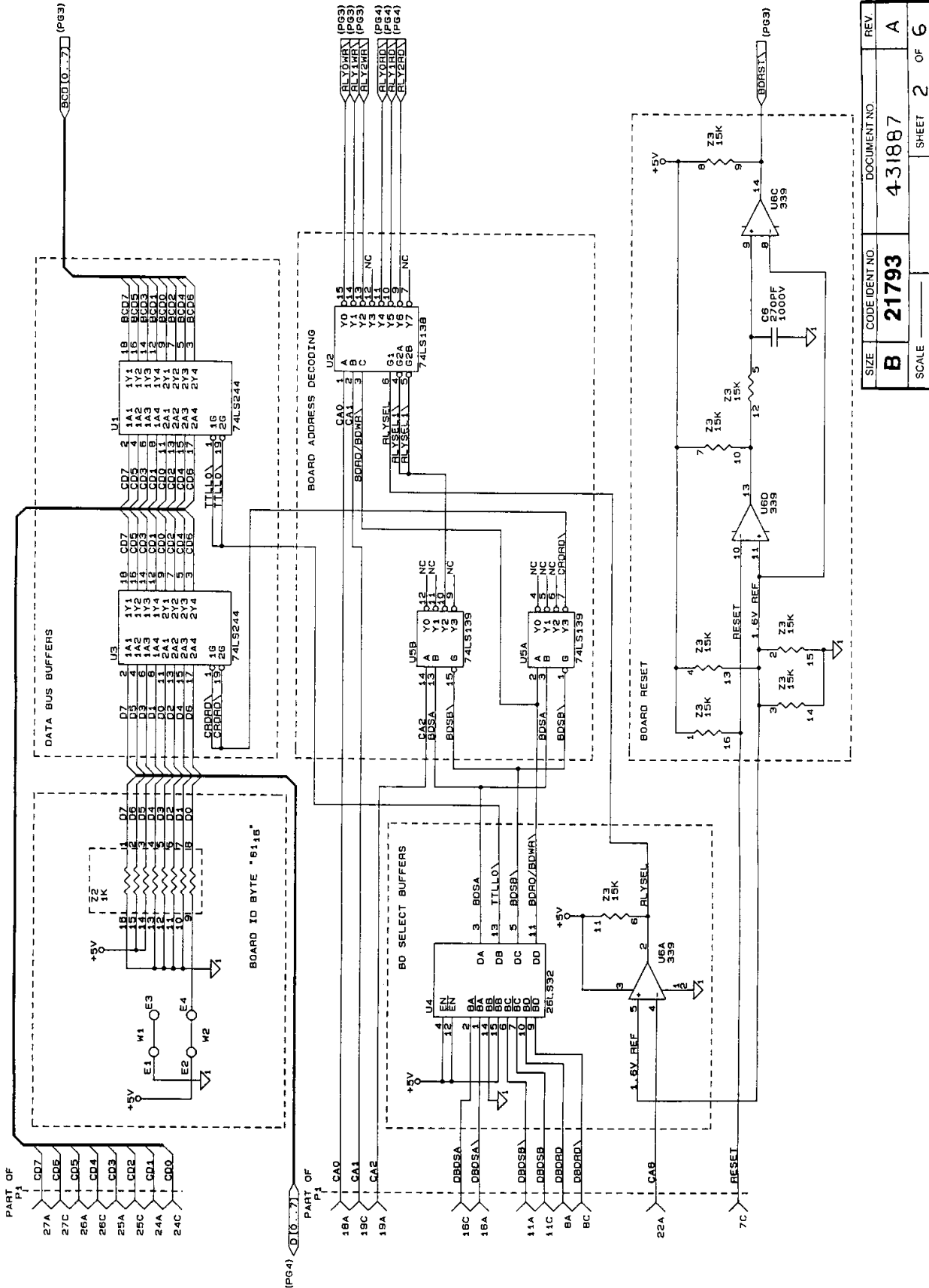
DOCUMENT TITLE

SCHEM., 1250-54

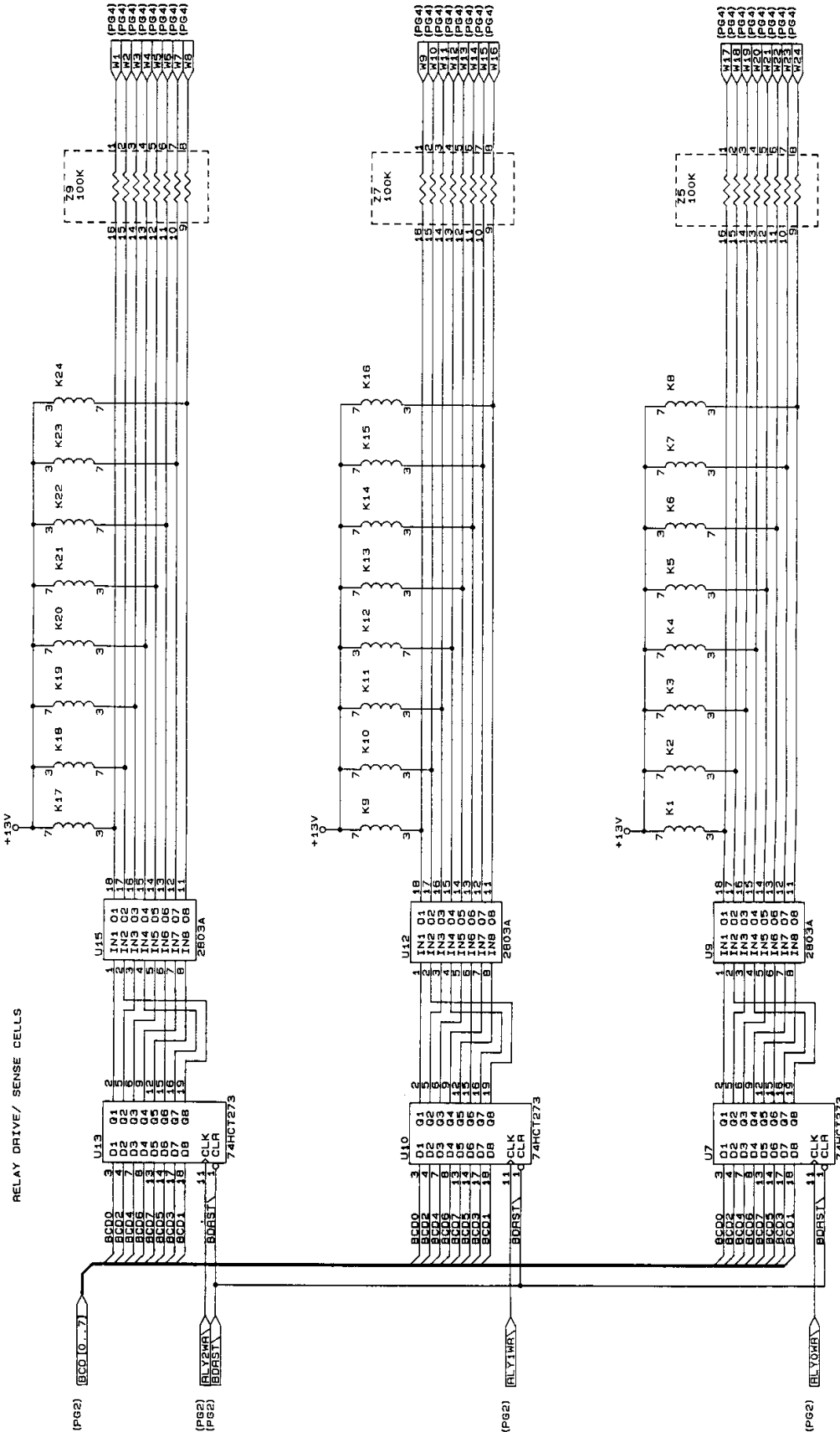
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431887	A

SCALE \_\_\_\_\_ SHEET 1 OF 6

4. FOR LOCATION OF CAPACITORS C11-58.
3. RELAYS K1 THRU K24 ARE RACAL-DANA P/N 31016B. ALL RELAYS SHOWN IN THIS DRAWING ARE IN MICROFARAD. ALL RELAY CASES TIED TO GND THRU PINS 5 & 10.
2. RESISTOR NETWORKS ARE IN OHMS. +/-2%.
1. CAPACITOR VALUES ARE IN MICROFARADS. +/-20%, 50V UNLESS OTHERWISE SPECIFIED.
- NOTES: UNLESS OTHERWISE SPECIFIED

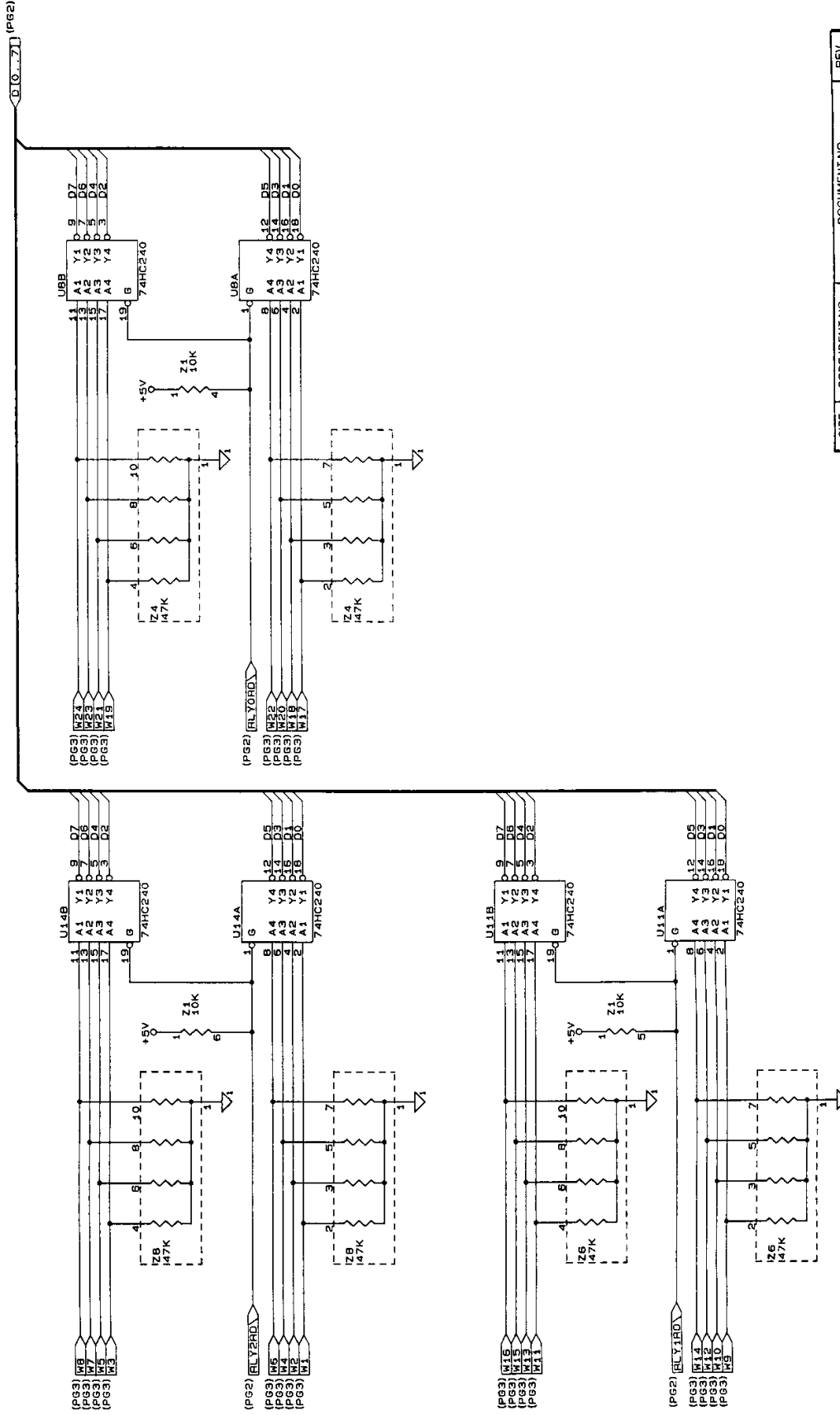


SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431887	A
SCALE		SHEET 2	OF 6



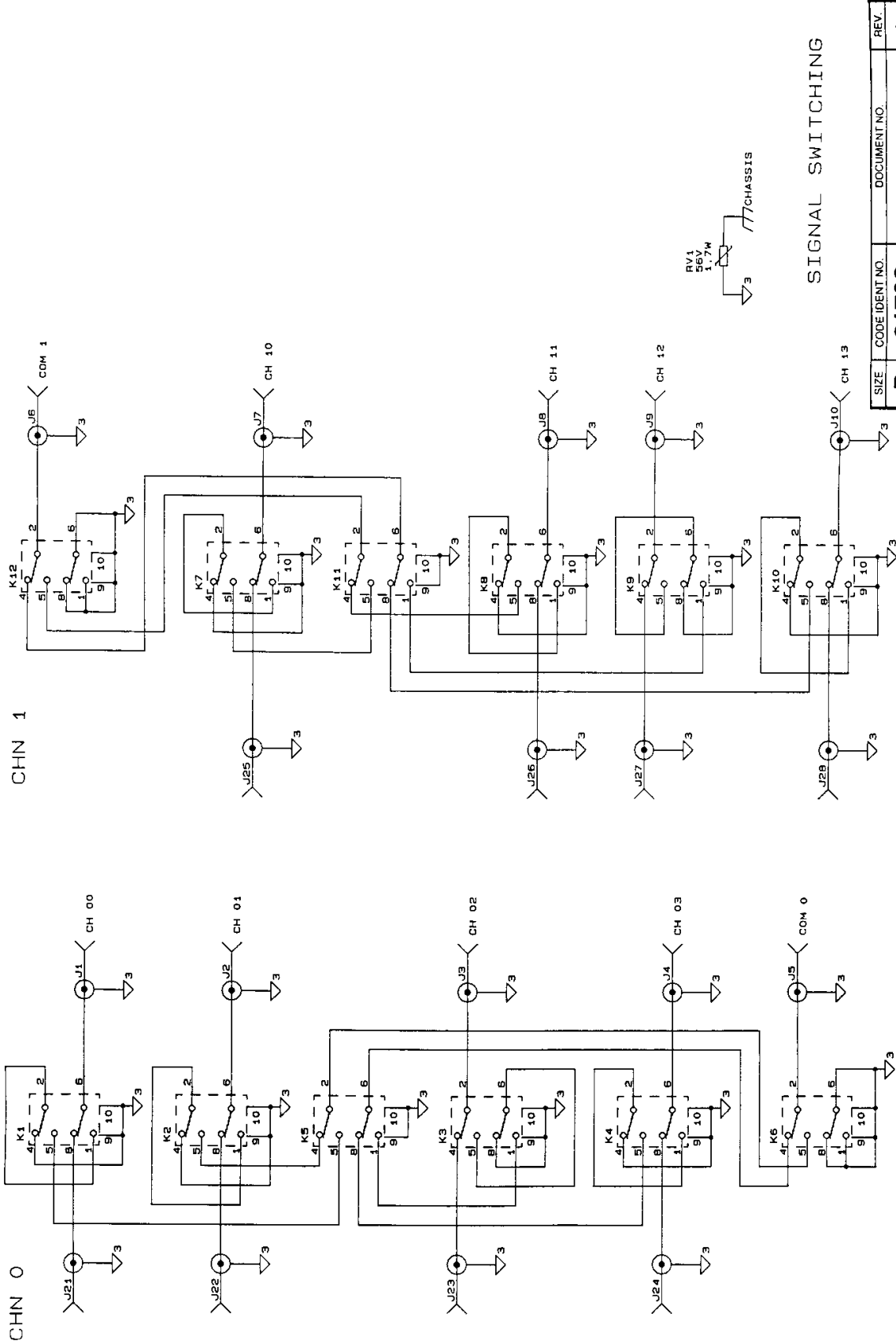
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431887	A
SCALE		SHEET	OF
		3	6

RELAY DRIVE/ SENSE CELLS



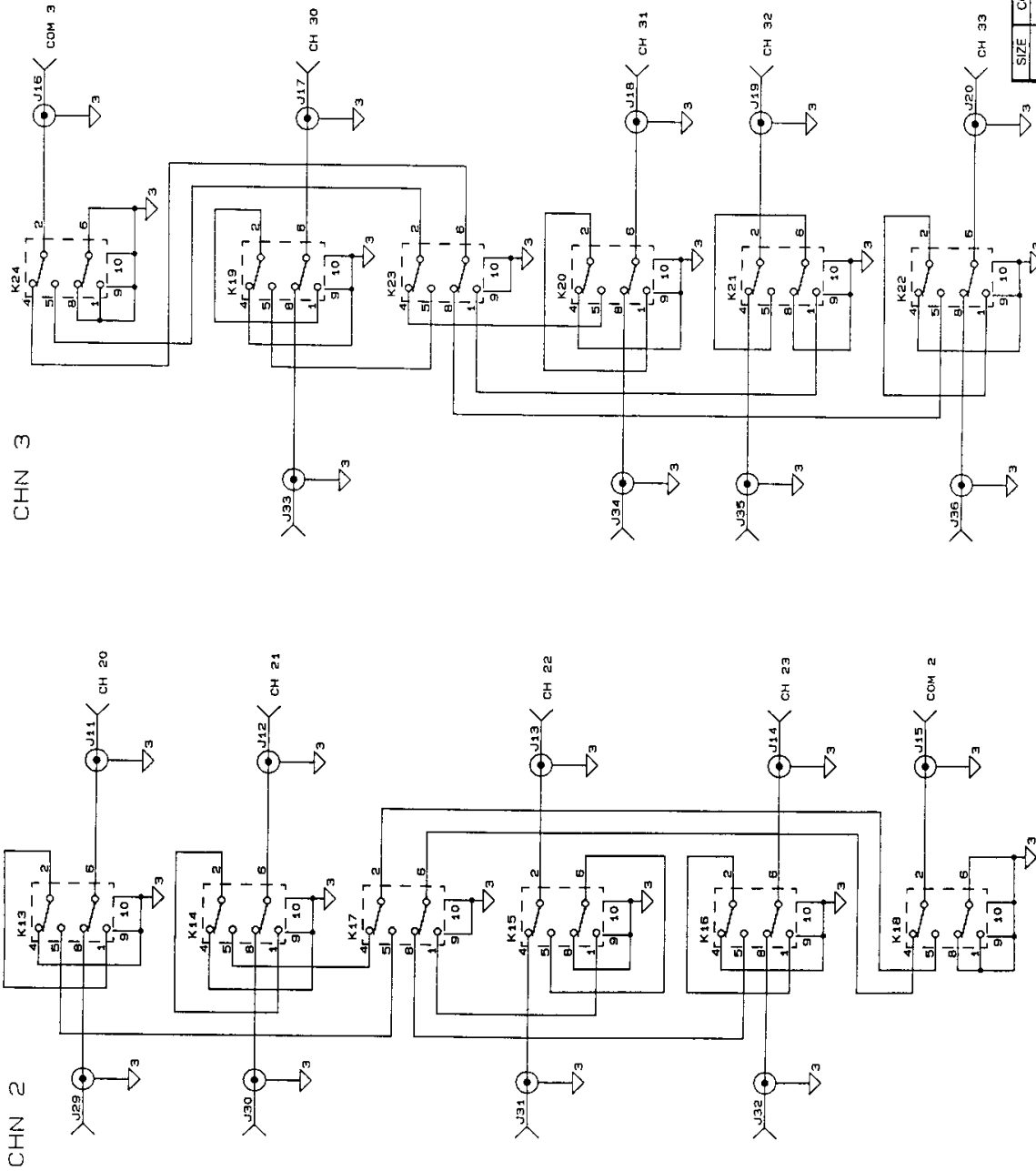
(B10...Z1) (Pg2)

SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431887	A
SCALE		SHEET 4	OF 6



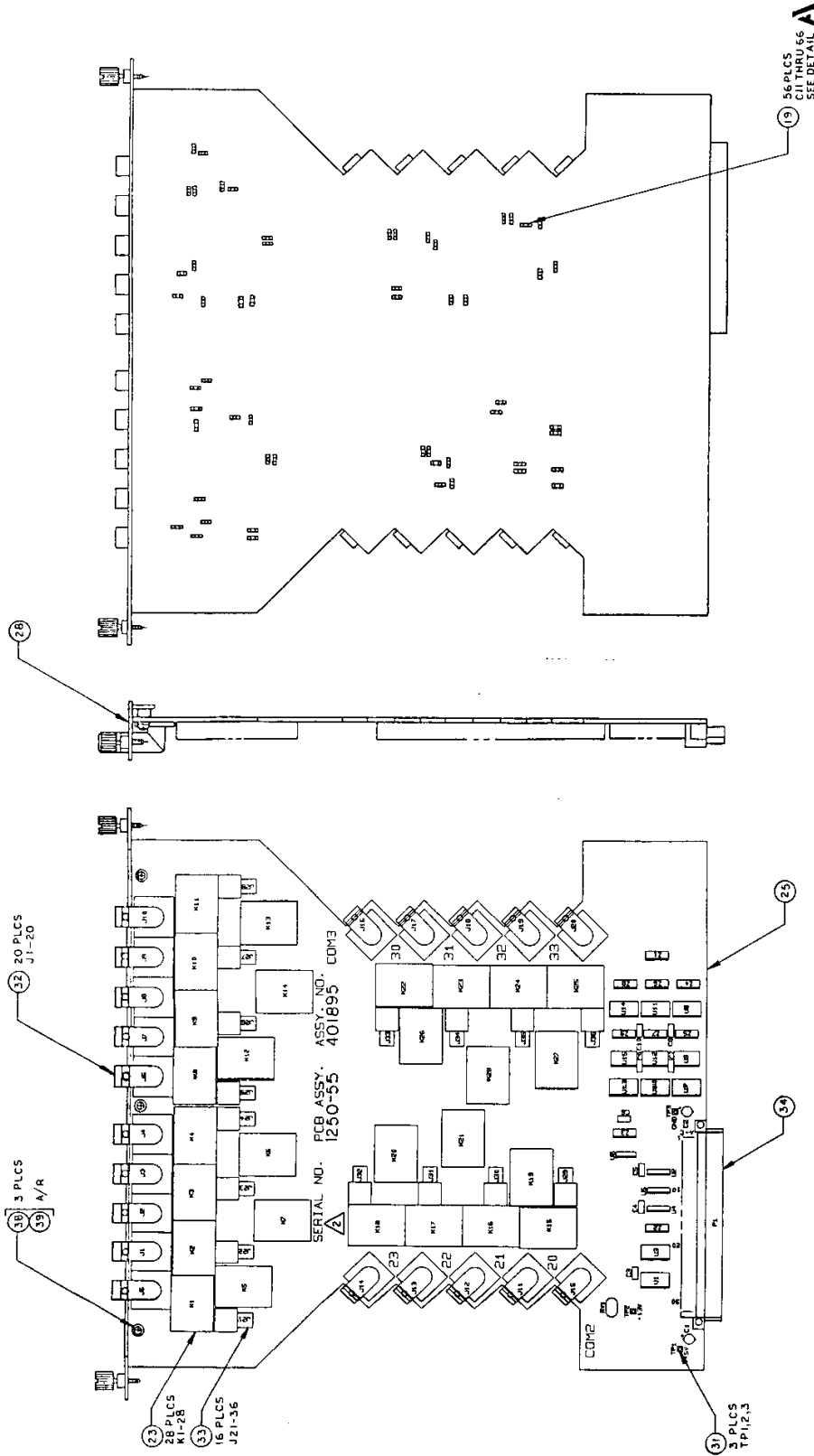
SIGNAL SWITCHING

SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431887	A
SCALE		SHEET	OF
		5	6



SIGNAL SWITCHING

SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431887	A
SCALE	SHEET 6 OF 6		

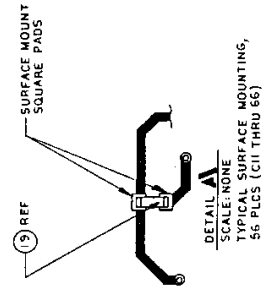


COMPONENT SIDE  
(NEAR SIDE)

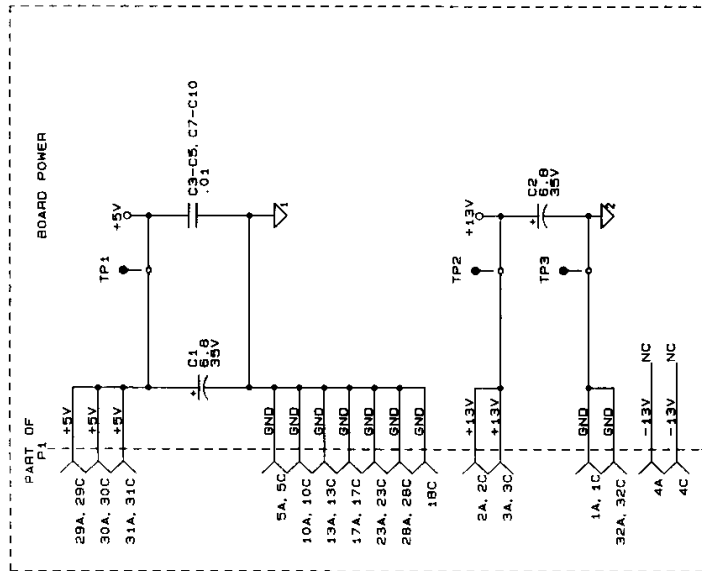
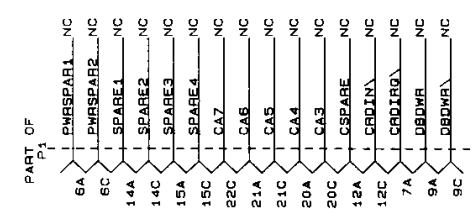
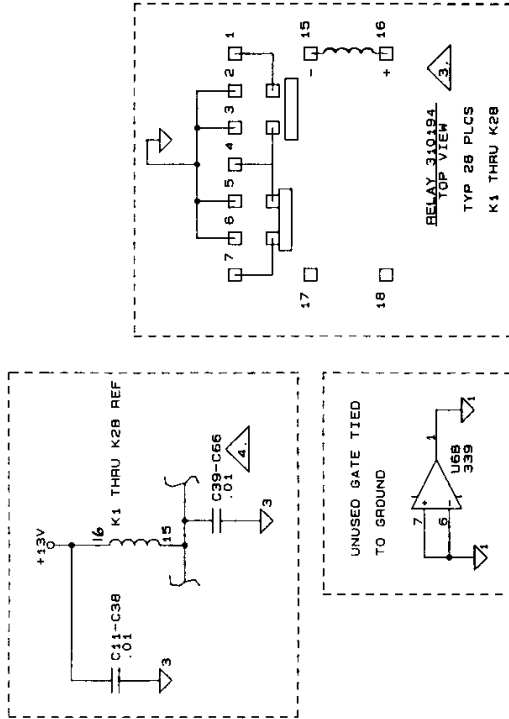
CIRCUIT SIDE  
(FAR SIDE)

<b>RACAL-DANA Instruments Inc.</b> 4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401895	A
SCALE			SHEET 1 OF 2

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INK STAMP SERIAL NUMBER ON COMPONENT SIDE APPROX. WHERE SHOWN.  
1. REFERENCE SCHEMATIC 431895.  
NOTE: UNLESS OTHERWISE SPECIFIED



REF. DES.	IC TYPE	+5V PIN NO.	+13V PIN NO.	5V RETURN PIN NO.	13V RETURN PIN NO.
U8	12	15	10	10	9
U8	11	14	74HC240	10	
U7	10	13	74HC123	10	
U6	9	12	339	10	
U5	8	11	5139	10	
U4	7	10	26132	10	
U3	6	9	74LS139	10	
U2	5	8	74LS139	10	
U1	3	7	74LS244	10	

HIGHEST REF. DES.
U9
U13
U12
U11
P1
K28
U66
C66

IC POWER CONNECTIONS

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**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE  
**SCHEM., 1250-55**

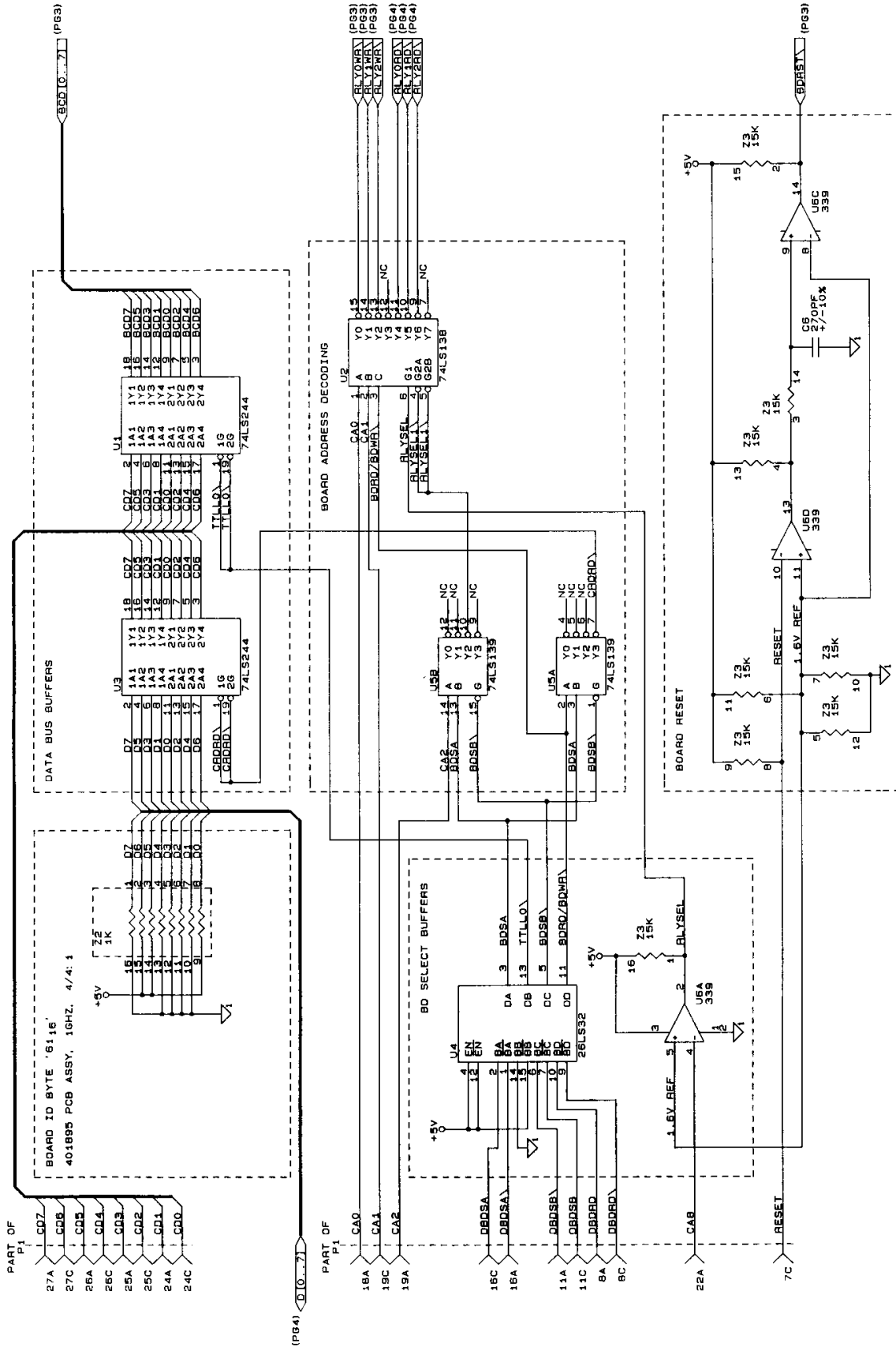
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SCALE \_\_\_\_\_ SHEET **1** OF **6**

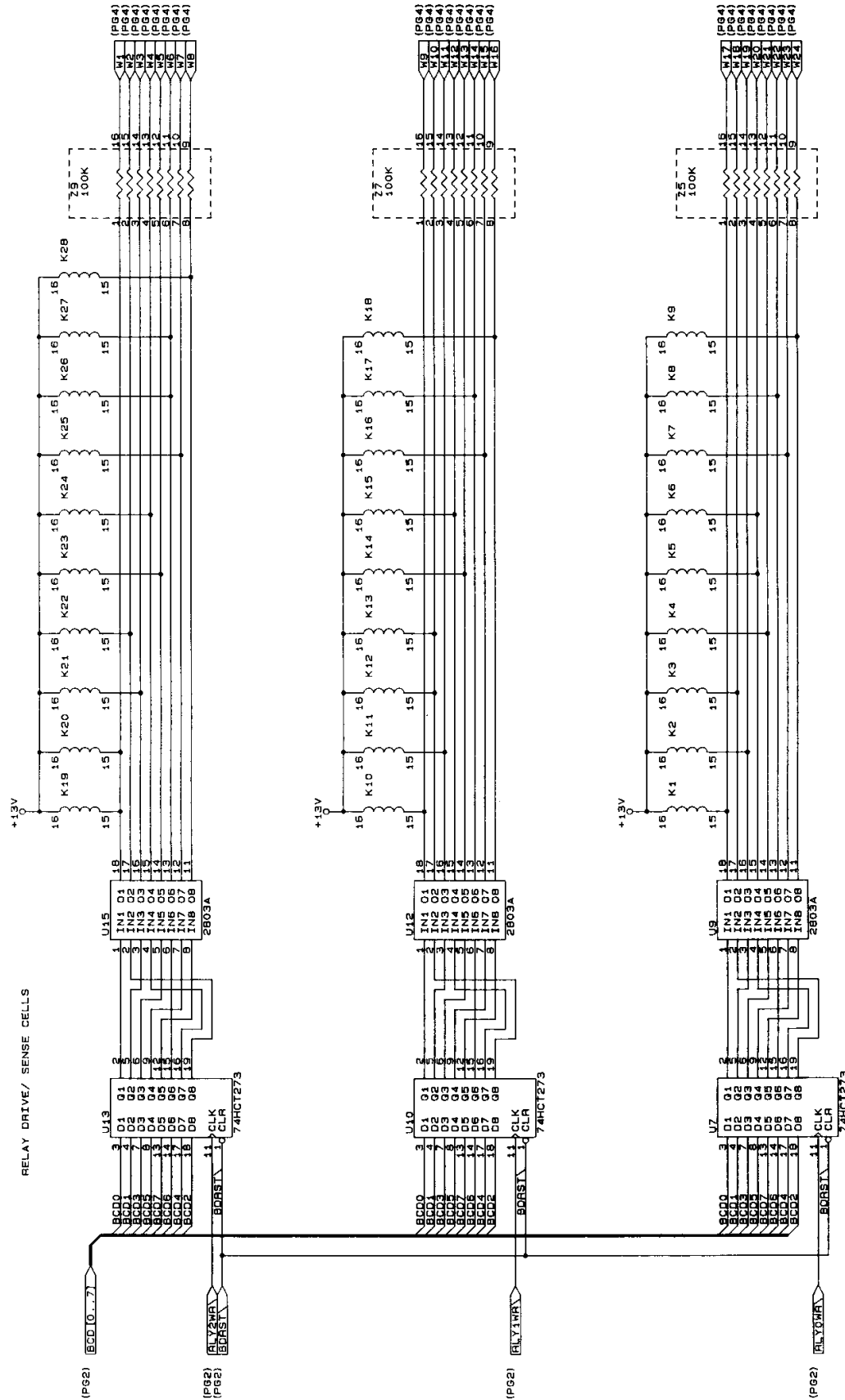
4. FOR LOCATION OF CAPACITORS C39-C66.  
 3. RELAYS K1 THRU K28 ARE RACAL DANA P/N 310194.  
 ALL RELAYS SHOWN IN DE-ENERGIZED POSITION.
2. RESISTOR NETWORKS ARE IN OHMS.
1. CAPACITOR VALUES ARE IN MICROFARADS, +/-20%, 50V UNLESS OTHERWISE SPECIFIED.

NOTES: UNLESS OTHERWISE SPECIFIED



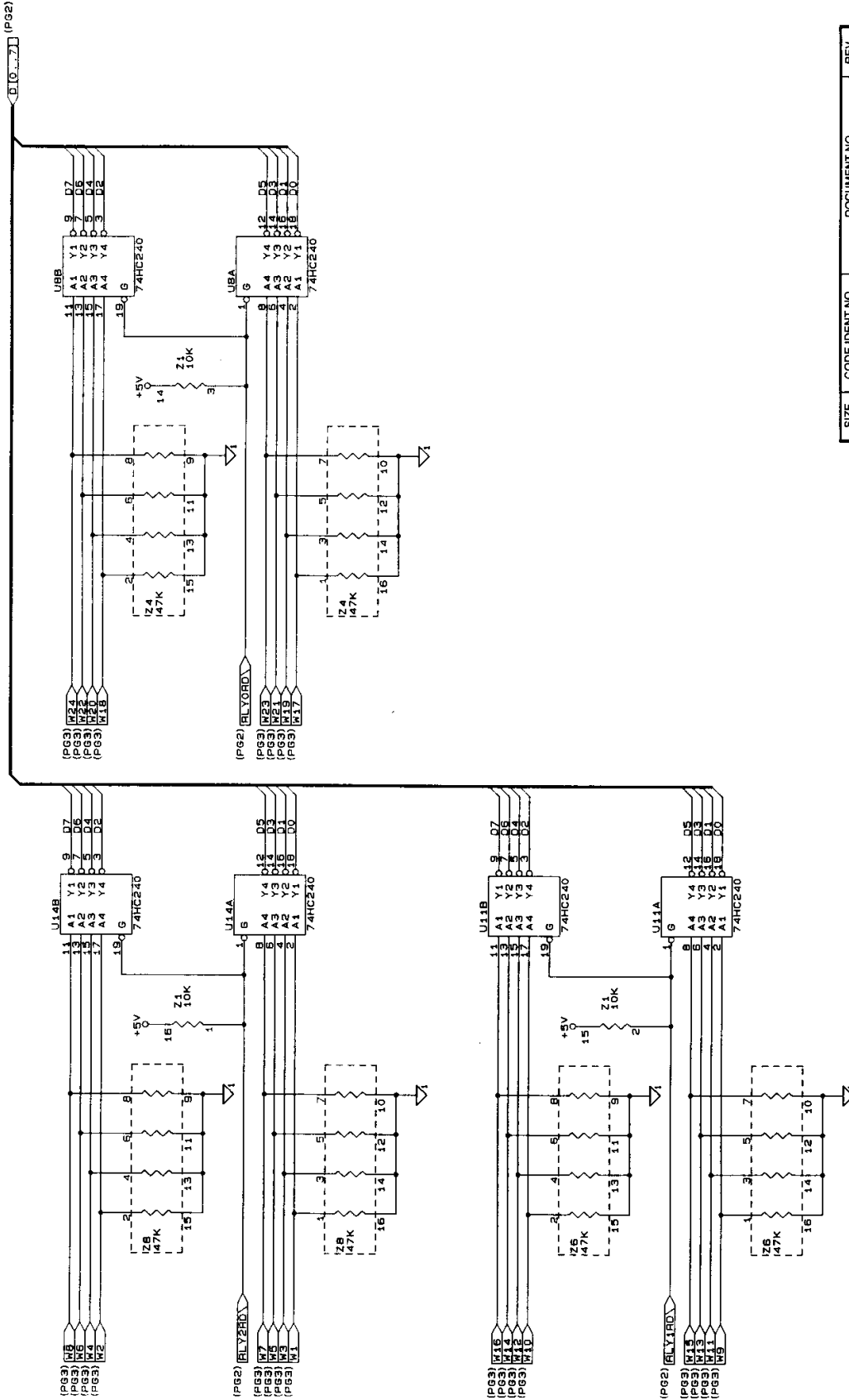


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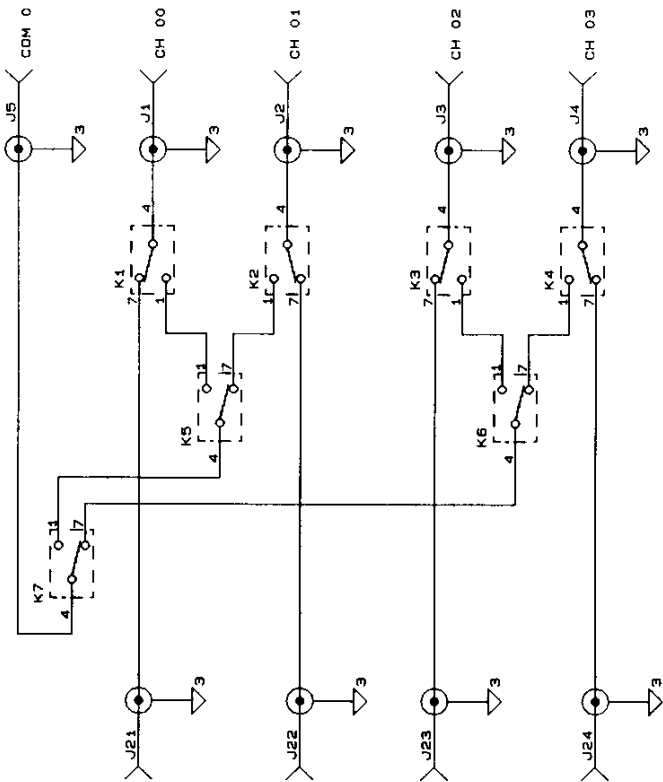
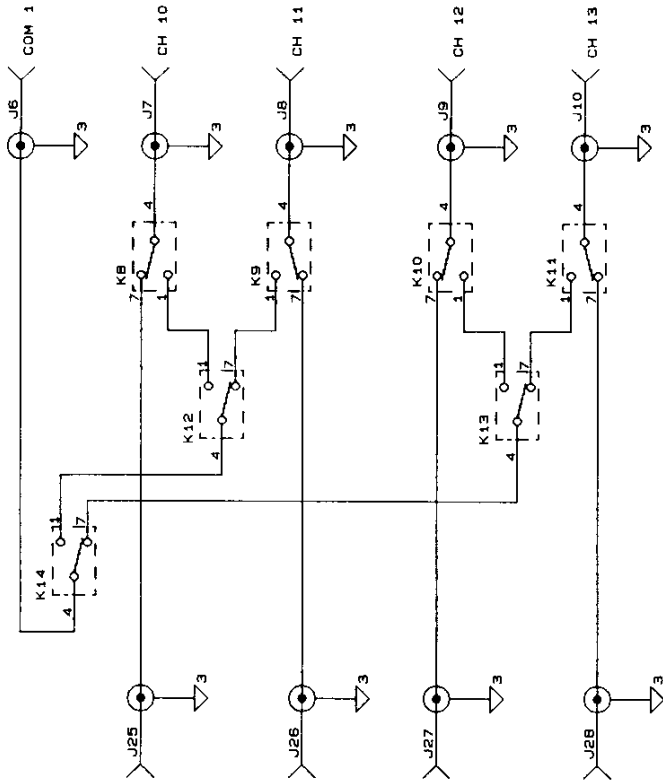


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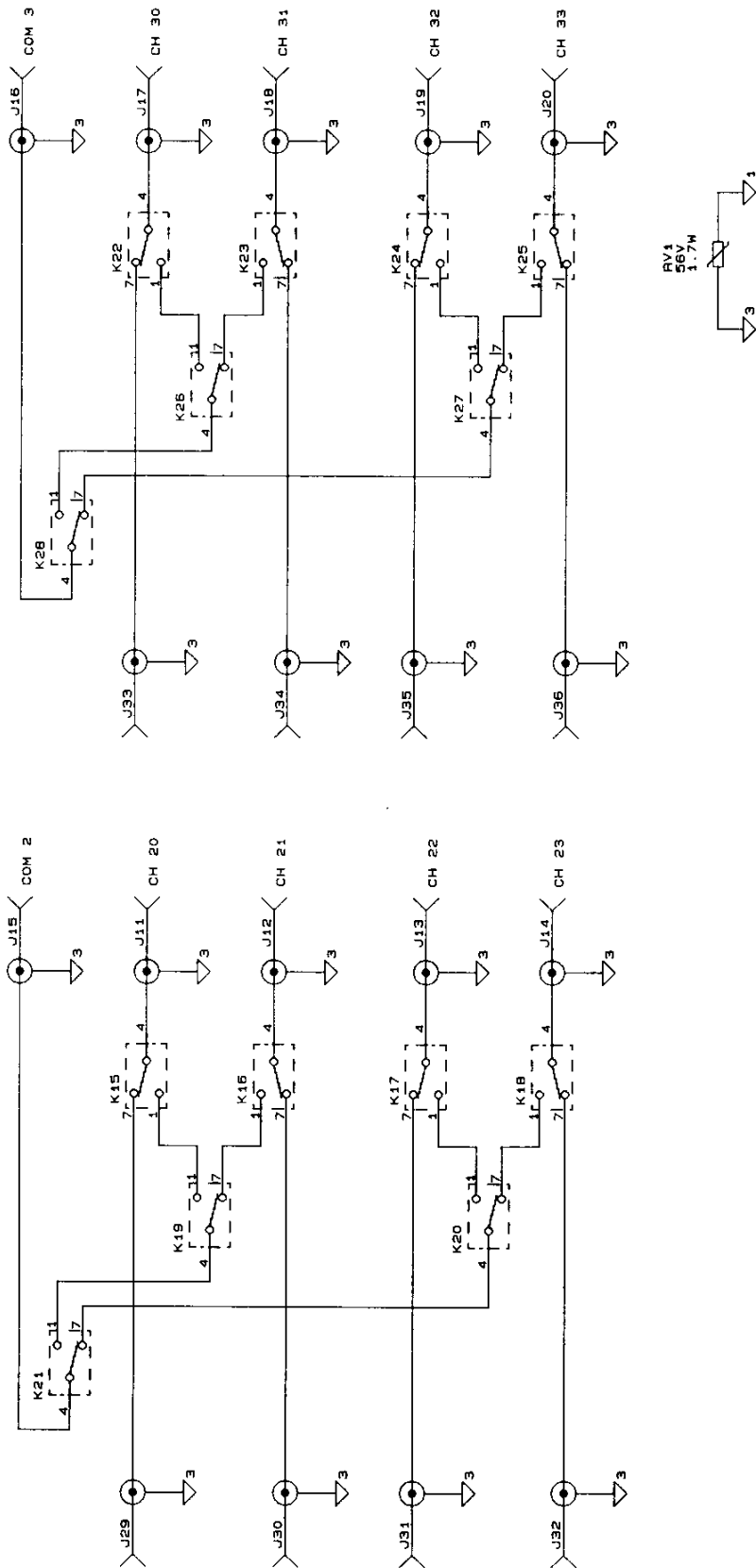
RELAY DRIVE/ SENSE CELLS



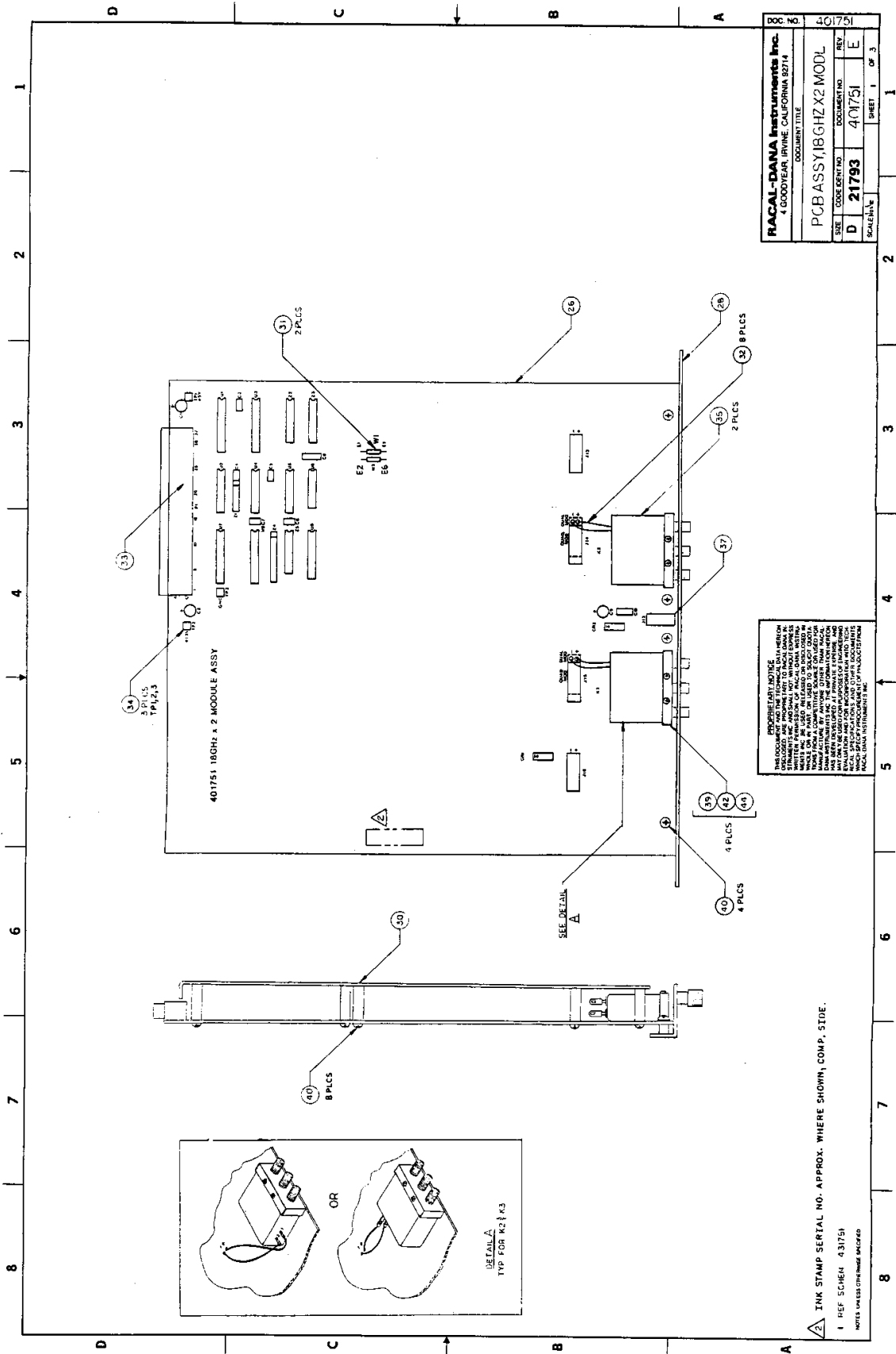
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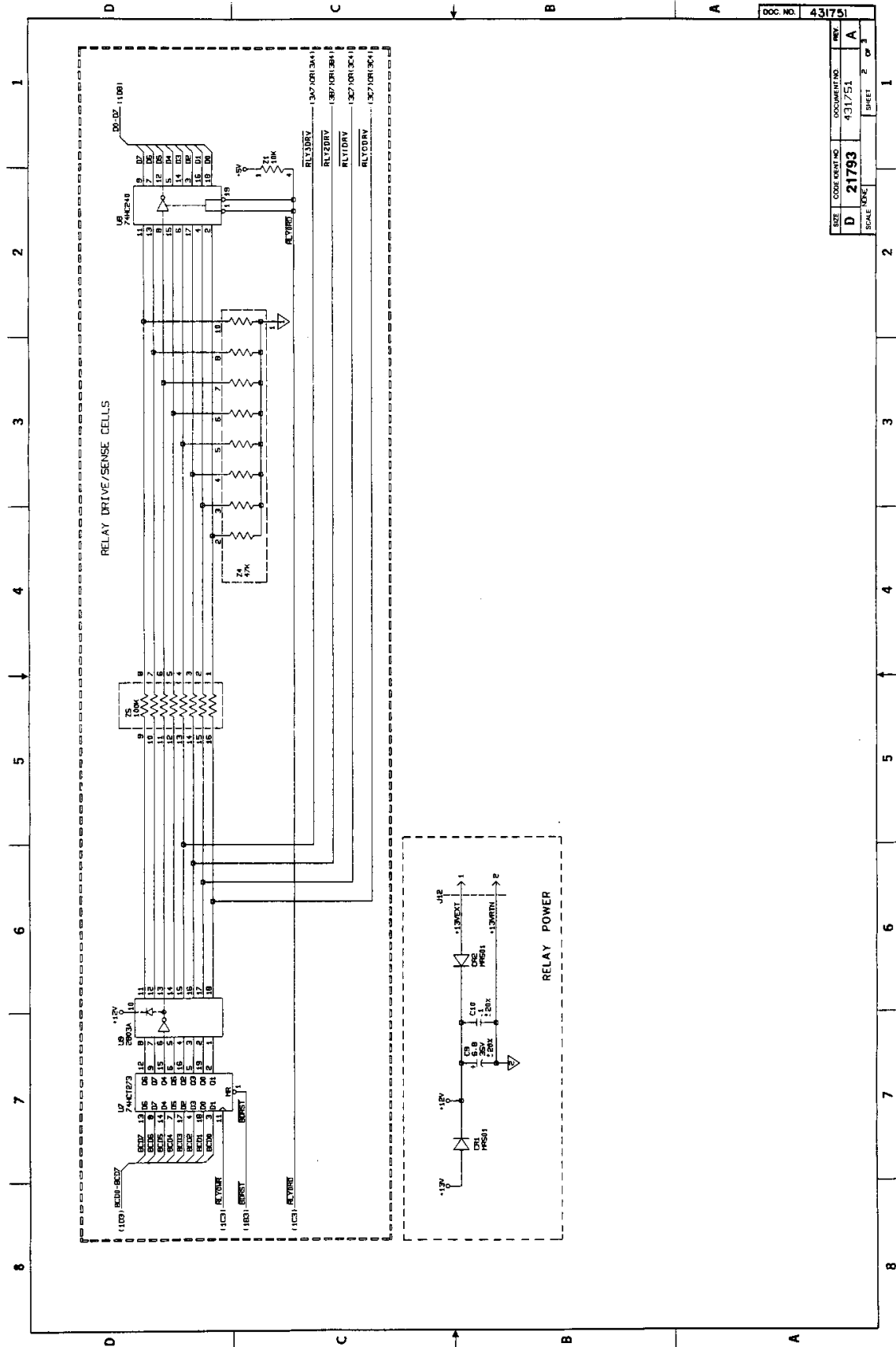
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SCALE		SHEET <b>5</b> OF <b>6</b>	



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431895	A
SCALE		SHEET 6	OF 6

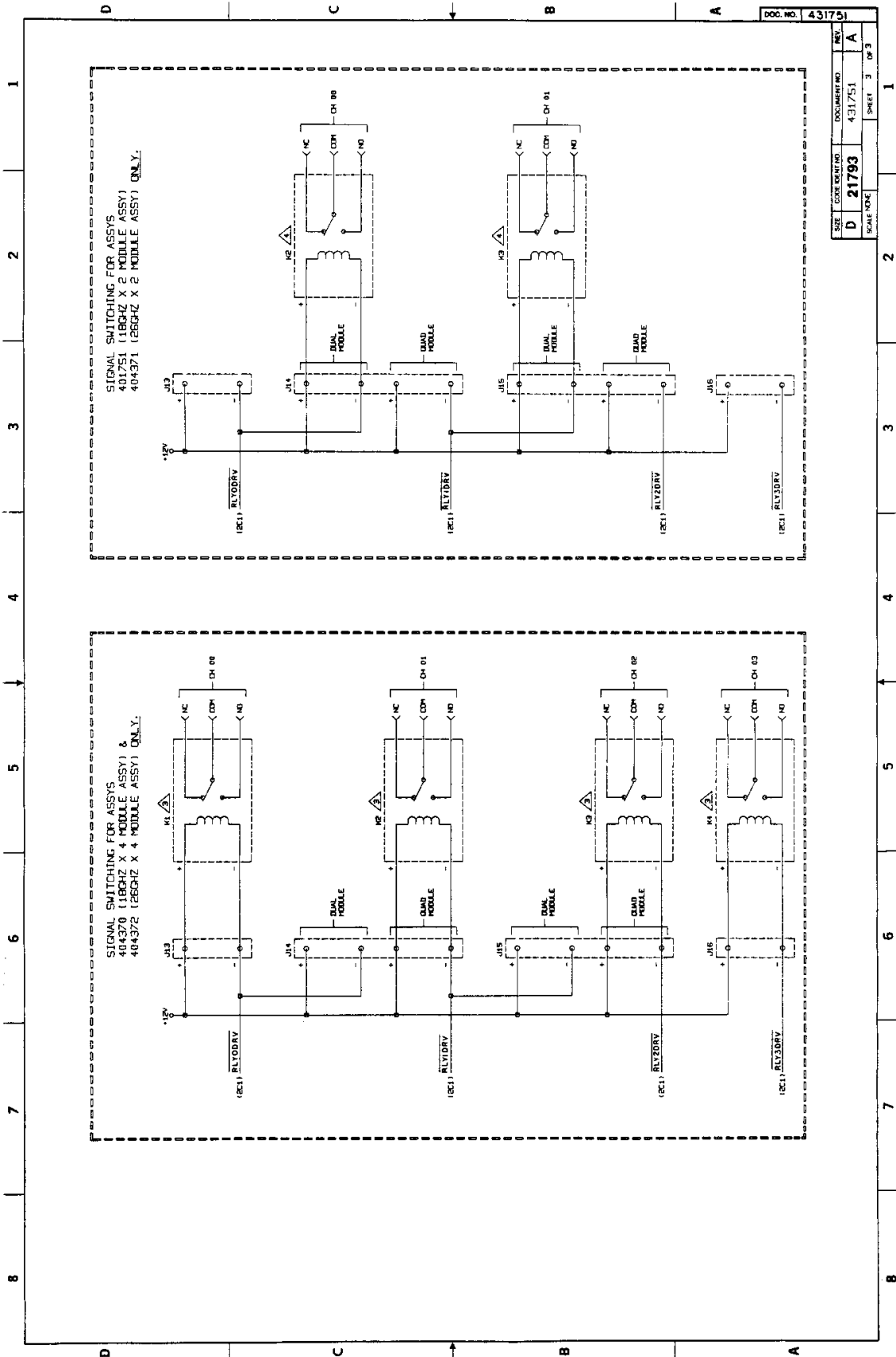




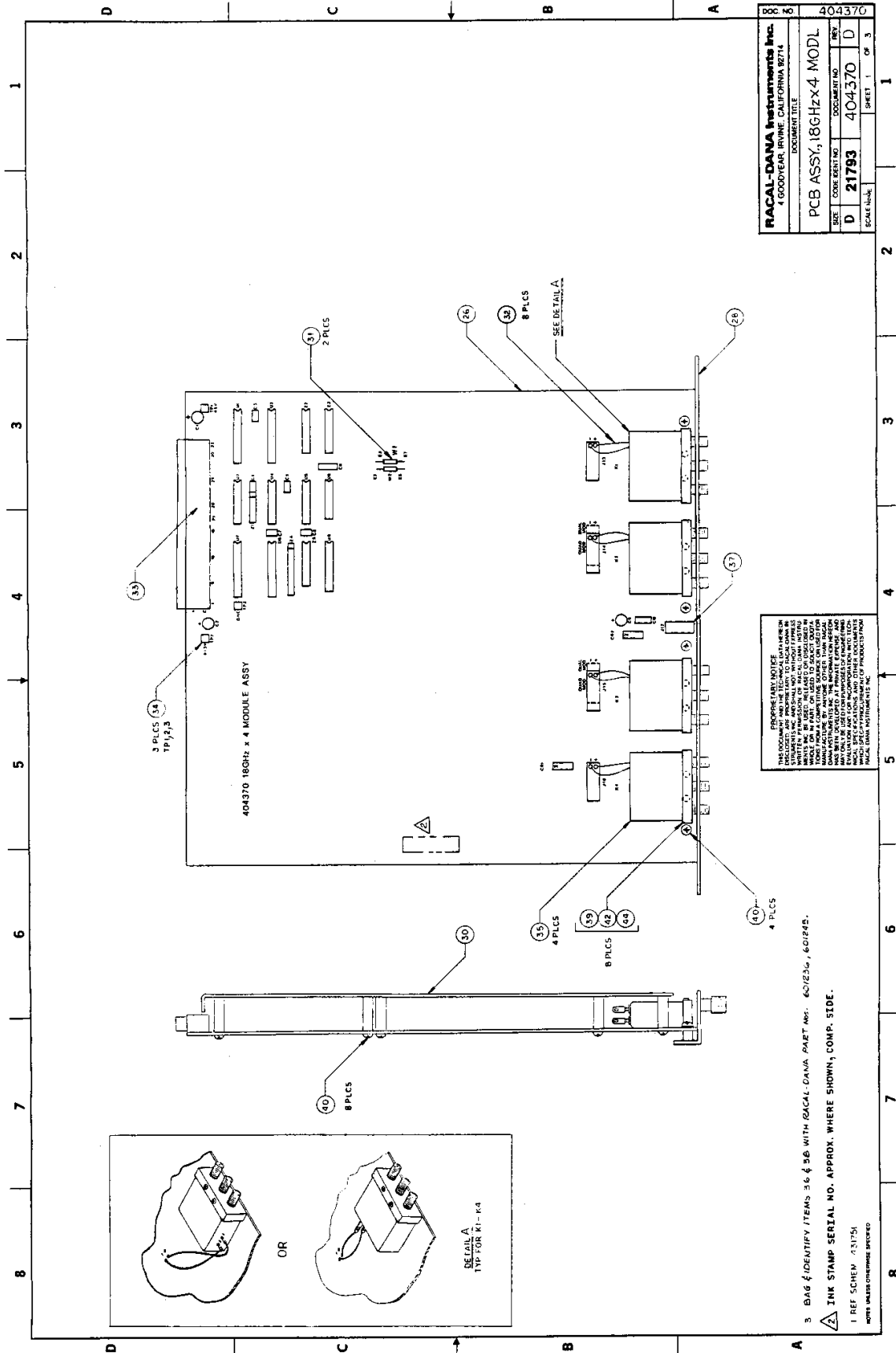


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CODE	21793
EVENT NO.	431751
DOCUMENT NO.	A
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SHEET	2
OF	3

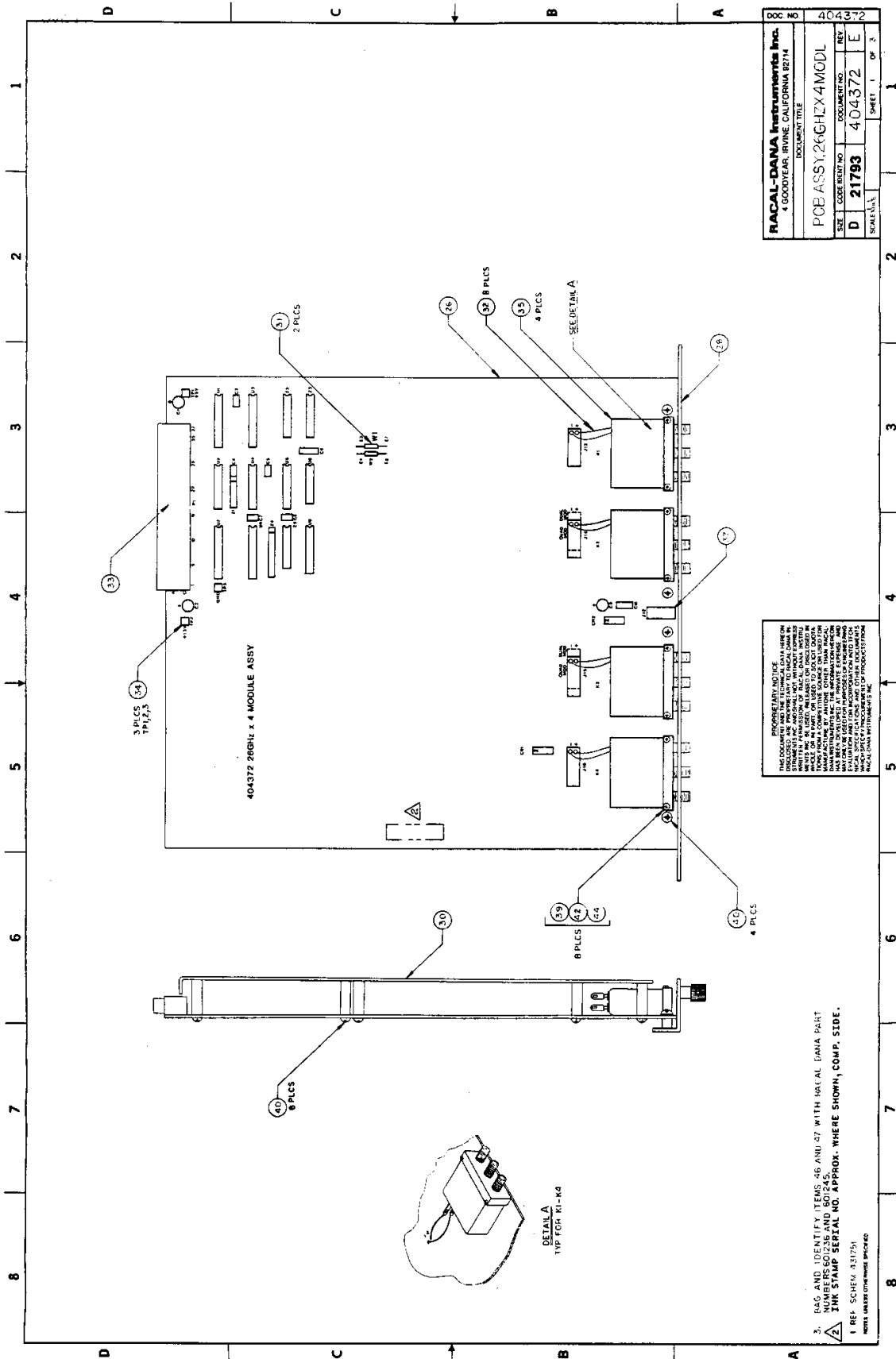




USE	CONTRACT NO.	DOCUMENT NO.	REV.
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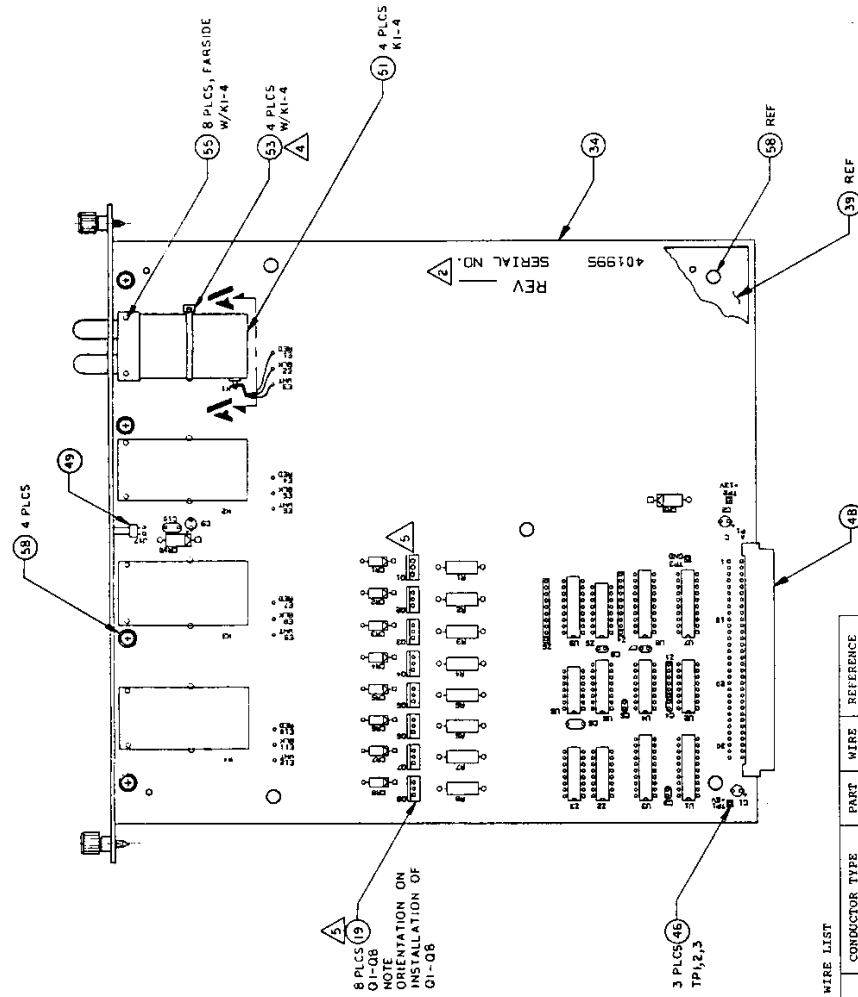
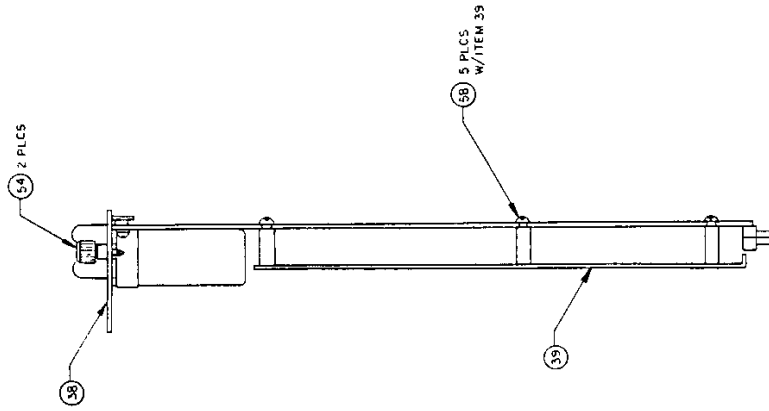




RACAL-DANA Instruments Inc.	
4 GOODVEAR, IRVINE CALIFORNIA 92714	
DOCUMENT TITLE	
PCB ASSY:26GHZ x 4 MODL	
SHEET NO.	REV
D 21793	404372 E
SHEET 1 OF 3	

PROPOSED PART NUMBER  
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 INSTRUMENTS INC. TO MAKE AVAILABLE TO THE PUBLIC  
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 INFORMATION CONTAINED HEREIN IS UNCLASSIFIED  
 EXCEPT WHERE SHOWN OTHERWISE. UNCLASSIFIED  
 INFORMATION IS RELEASED TO THE PUBLIC THROUGH  
 RACAL-DANA INSTRUMENTS INC.

- 3. BAG AND IDENTIFY ITEMS 46 AND 47 WITH RACAL-DANA PART NUMBER 404372 AND SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.
- 4. JMW STAMP SERIAL NO. APPROX. WHERE SHOWN, COMP. SIDE.
- 1. REF. SCHEM 331751
- NOTES: UNLESS OTHERWISE SPECIFIED

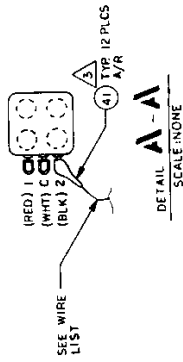


WIRE LIST

FROM	TO	CONDUCTOR TYPE GAUGE, COLOR	PART NUMBER	WIRE LENGTH	REFERENCE
E1	K1-1	TEF, STRND, 24G, RED	524222	A/R	CH0A
E2	K1-2	TEF, STRND, 24G, BLK	524000	A/R	CH0B
E3	K1-C	TEF, STRND, 24G, WHT	524999	A/R	GND
E4	K2-1	TEF, STRND, 24G, RED	524322	A/R	CH1A
E5	K2-2	TEF, STRND, 24G, BLK	524000	A/R	CH1B
E6	K2-C	TEF, STRND, 24G, WHT	524999	A/R	GND
E7	K3-1	TEF, STRND, 24G, RED	524222	A/R	CH2A
E8	K3-2	TEF, STRND, 24G, BLK	524000	A/R	CH2B
E9	K3-C	TEF, STRND, 24G, WHT	524999	A/R	GND
E10	K4-1	TEF, STRND, 24G, RED	524222	A/R	CH3A
E11	K4-2	TEF, STRND, 24G, BLK	524000	A/R	CH3B
E12	K4-C	TEF, STRND, 24G, WHT	524999	A/R	GND

- ▲ INSTALL ITEM 53 AROUND KI-4. THE HEAD OF THE CABLE TIE SHOULD BE ON THE COMPONENT SIDE.
- ▲ USE SHRINK TUBING, ITEM 41, ON THE LEADS OF KI-4.
- ▲ INK STAMP SERIAL NUMBER AND CURRENT REVISION ON COMPONENT SIDE APPROX. WHERE SHOWN.
- 1. REFERENCE SCHEMATIC 431995.

NOTES UNLESS OTHERWISE SPECIFIED



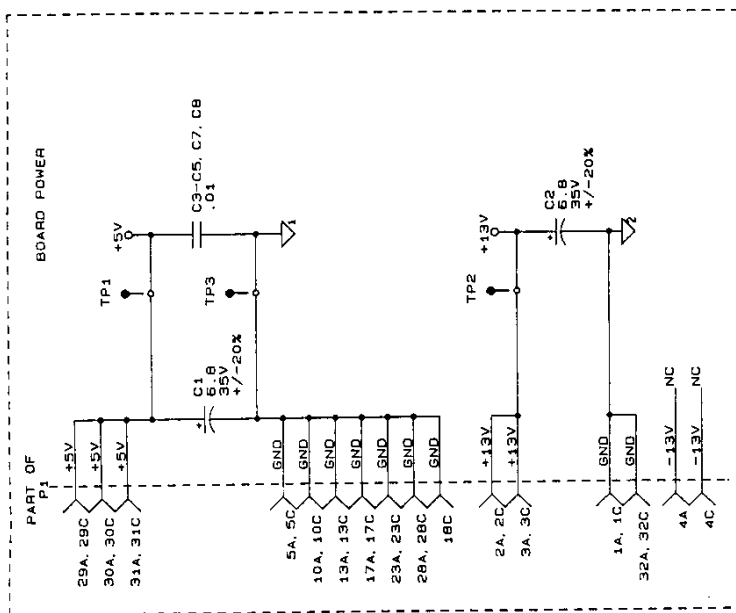
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**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE  
 PCB ASSY. 1250-65

SIZE	CODE IDENT NO	DOCUMENT NO	REV
D	21793	401995	A

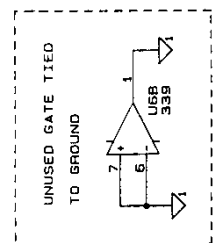
SCALE — SHEET 1 of 4



PART OF P1

6A	PWRSPAR1	NC
6C	PWRSPAR2	NC
14A	SPARE1	NC
14C	SPARE2	NC
15A	SPARE3	NC
15C	SPARE4	NC
22C	CA7	NC
22C	CA6	NC
21A	CA5	NC
21C	CA4	NC
20A	CA3	NC
20C	CSPARE	NC
12A	CRDIN	NC
12C	CRDIR	NC
7A	DBDIR	NC
8A	DBDIR	NC
9C		NC

76	
U9	
U8	
U7	
U6	
U5	
U4	
U3	
U2	
U1	
K4	
K3	
K2	
K1	
F12	
F10	
F8	
F6	
F4	
F2	
HIGHEST REF. DES.	



U9	74LS139	20	10	9
U8	74LS38B	20	10	9
U7	74LS139	20	10	9
U6	74LS38B	20	10	9
U5	74LS139	16	8	8
U4	74LS38B	16	8	8
U3	74LS139	16	8	8
U2	74LS38B	16	8	8
U1	74LS139	20	10	9
REF. DES.	IC TYPE	+5V PIN NO.	+12V PIN NO.	13V RETURN PIN NO.

IC POWER CONNECTIONS

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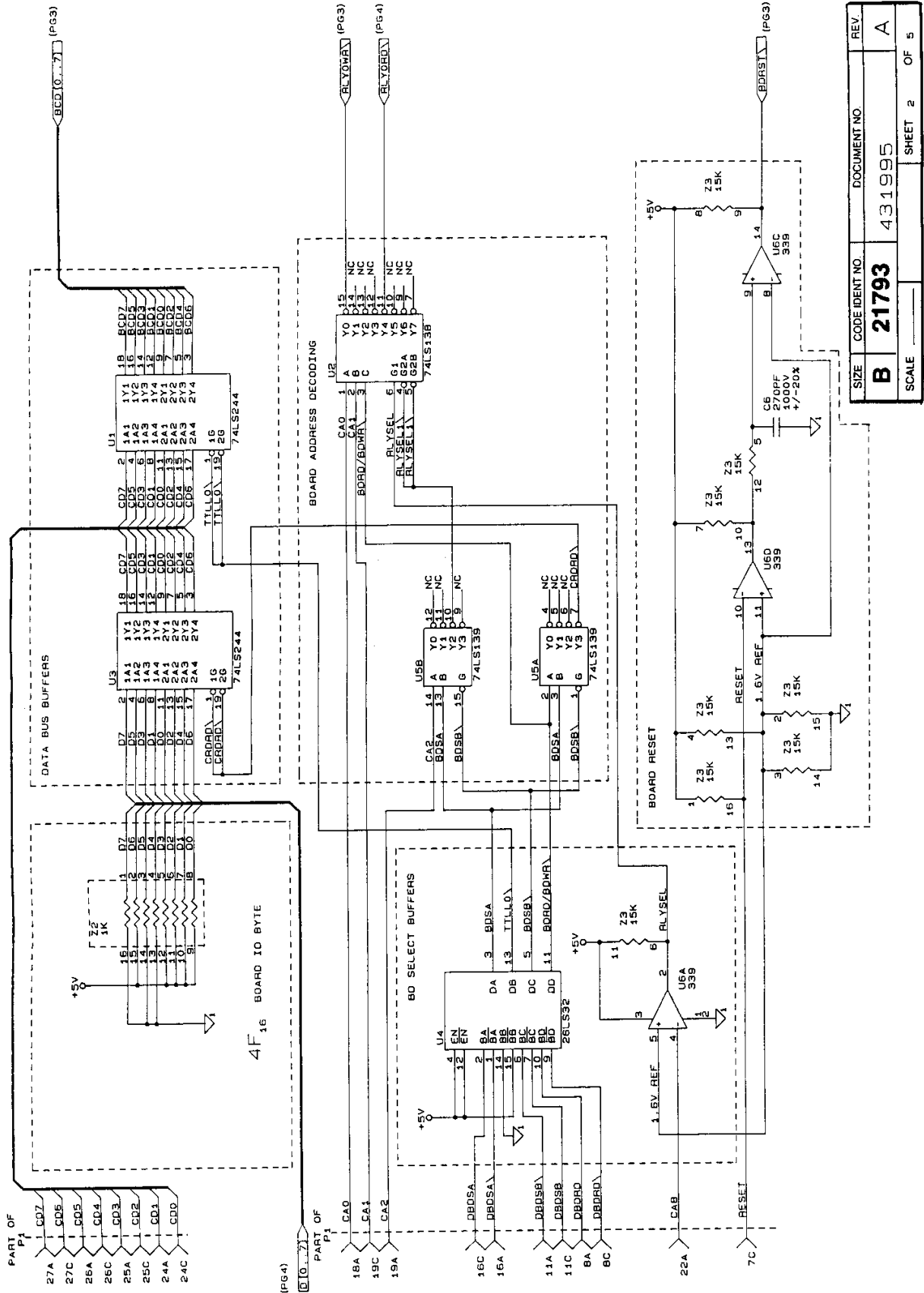
**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE  
 SCHEM, 1250-65

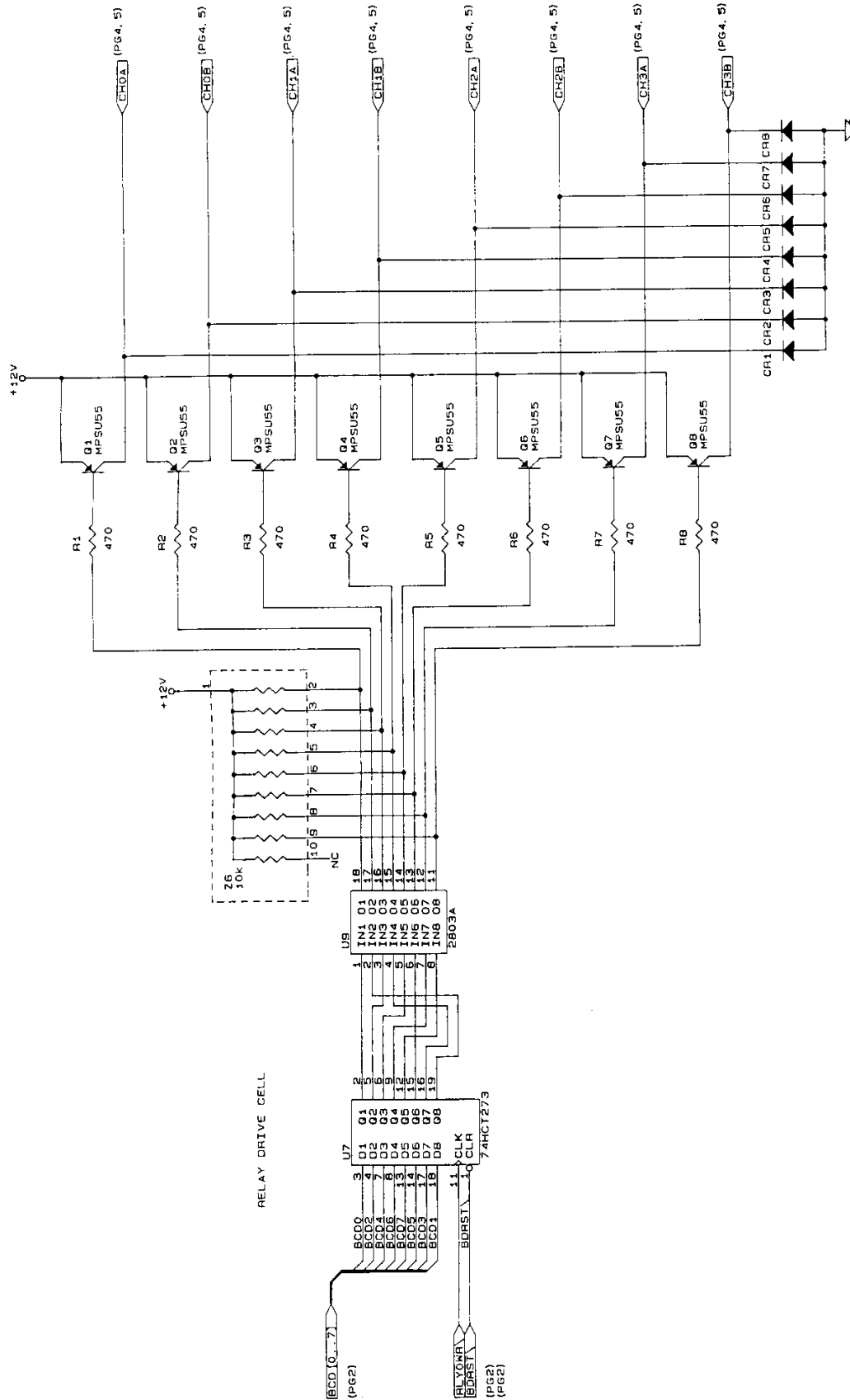
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431995	A

SCALE \_\_\_\_\_ SHEET 1 OF 5

4. CR1 THRU CR8 ARE 1N4004.
  3. K1 THRU K4 ARE SHOWN WITH PIN 2 LAST ENERGIZED.
  2. RESISTOR NETWORKS ARE IN OHMS. +/-2%.
  1. CAPACITOR VALUES ARE IN MICROFARADS. +/-10%. 100V UNLESS OTHERWISE SPECIFIED.
- NOTES: UNLESS OTHERWISE SPECIFIED

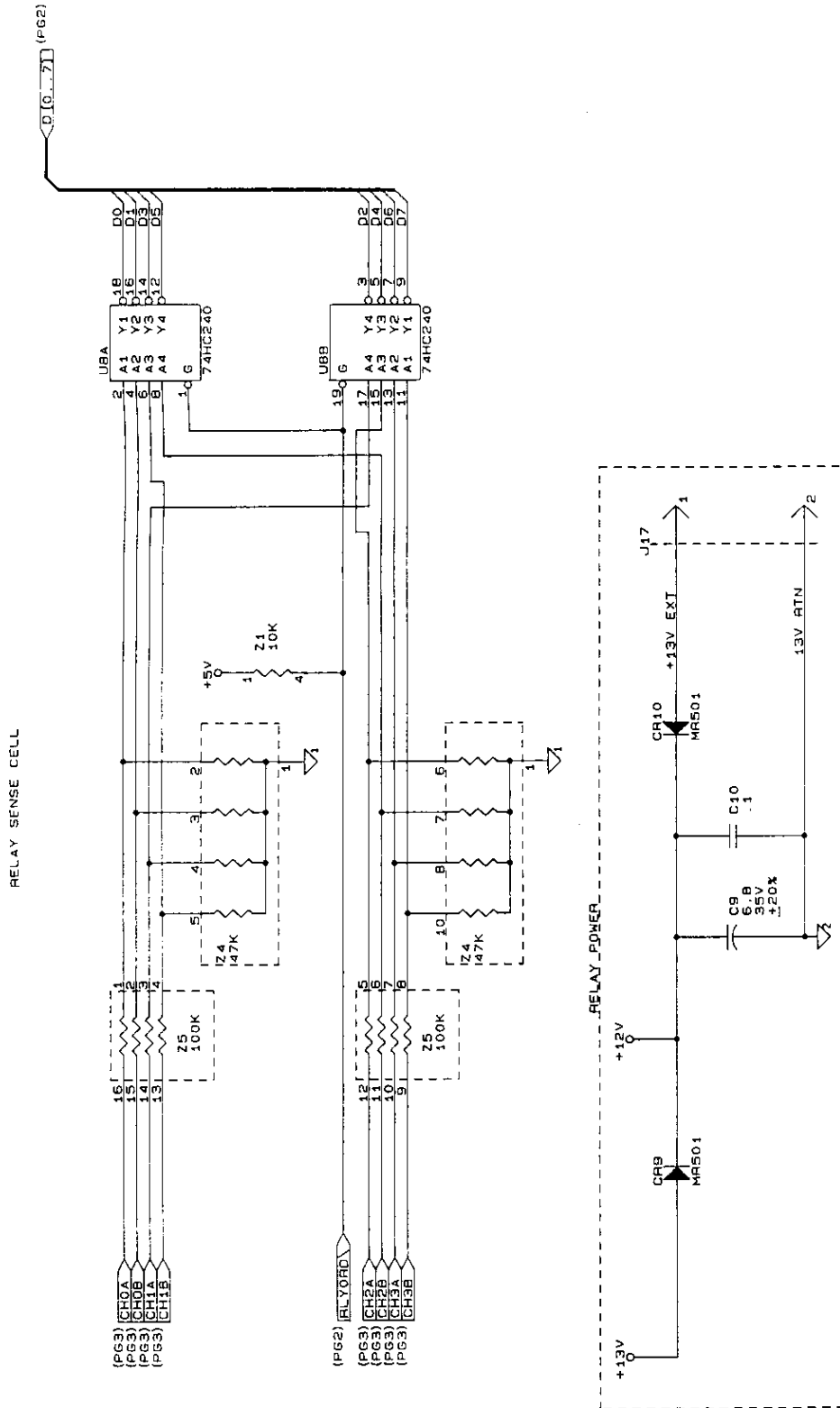


SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431995	A
SCALE		SHEET 2	OF 5

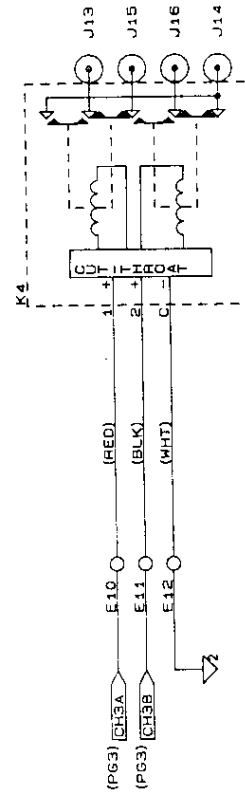
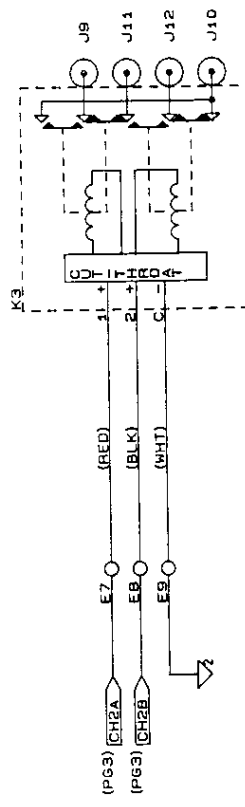
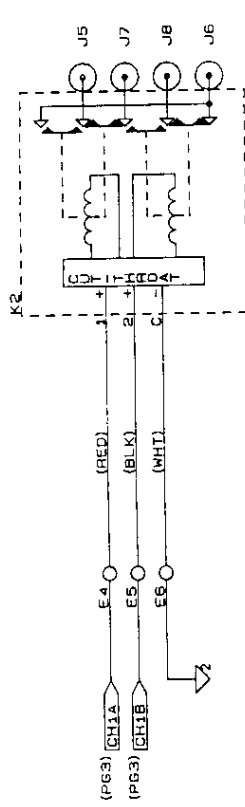
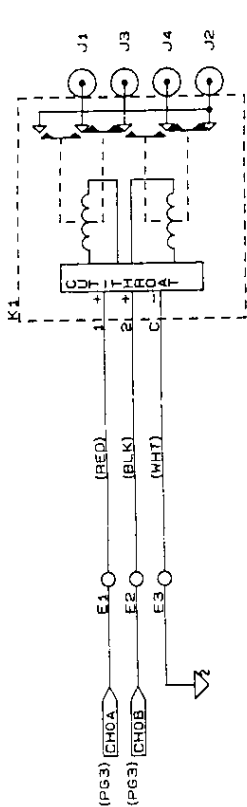
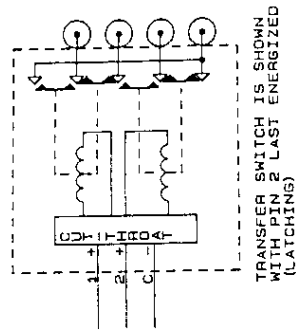
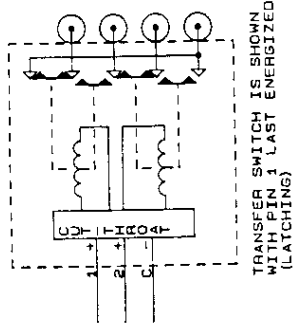


SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431995	A
SCALE		SHEET 3	OF 5

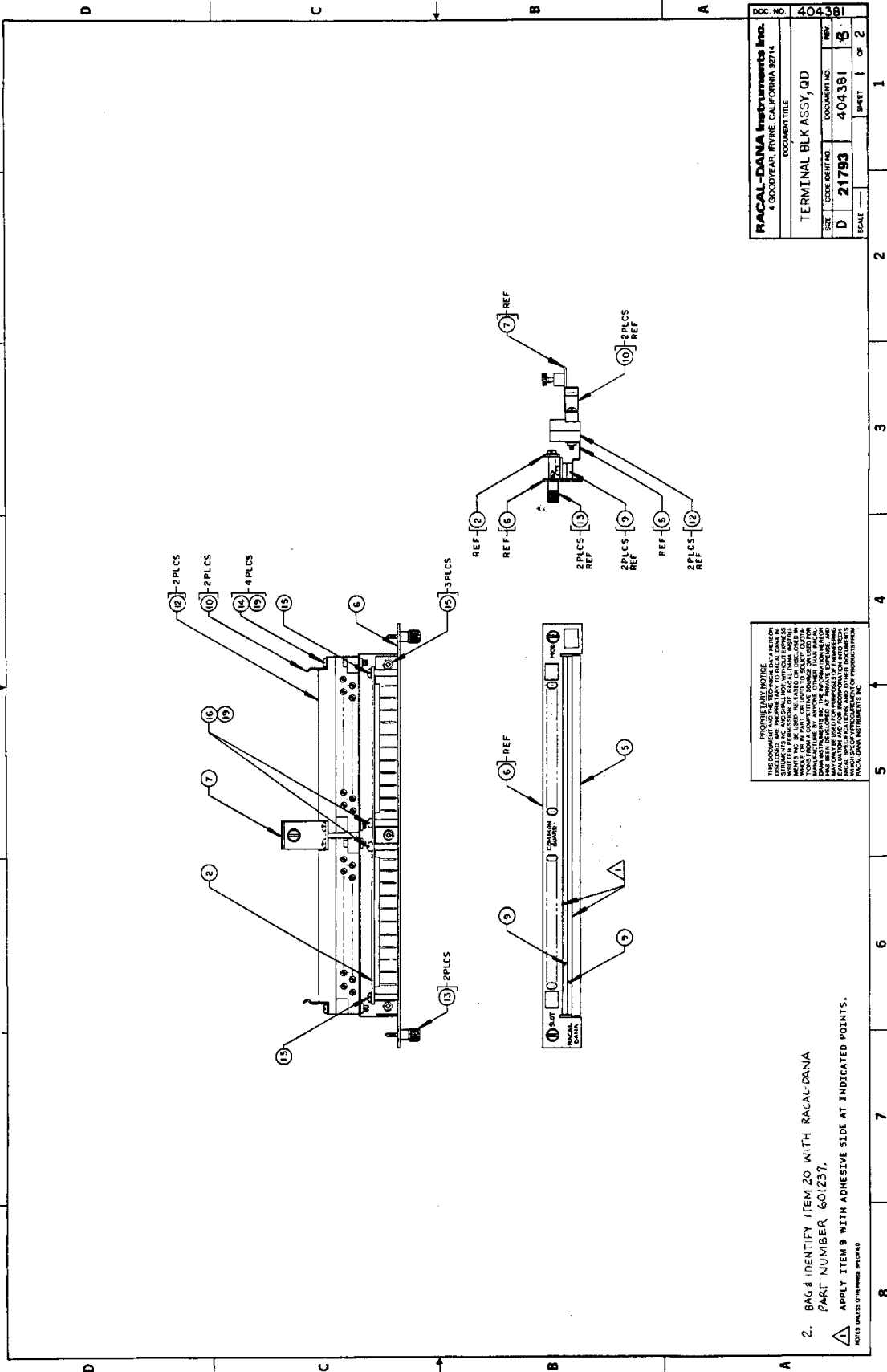




SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
B	21793	431995	A
SCALE		SHEET 4	OF 5



SIZE	CODE IDENT NO.	DOCUMENT NO.	REV
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SCALE	SHEET 5 OF 5		

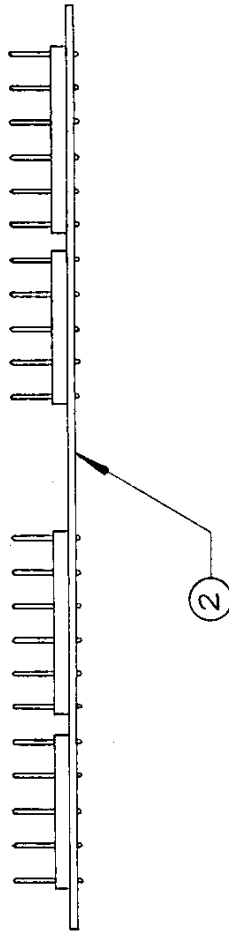
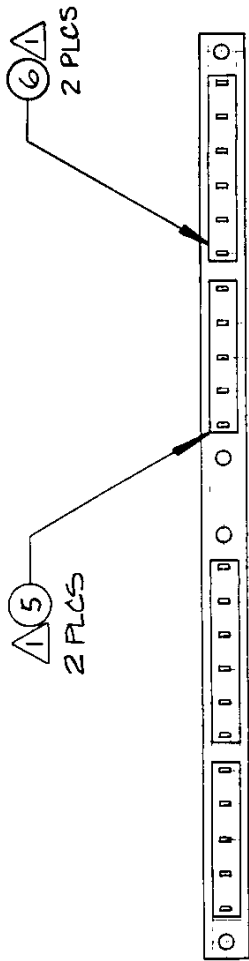


DOC. NO.		404381	
RACAL-DANA Instruments Inc. 4 GOODYEAR IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
TERMINAL BLK ASSY, QD			
REV	DATE	DESCRIPTION	BY
D	21793	404381	B
SCALE		SHEET	1 OF 2

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 RACAL-DANA INSTRUMENTS INC.

2. BAG # IDENTIFY ITEM 20 WITH RACAL-DANA PART NUMBER 601237.

▲ APPLY ITEM 9 WITH ADHESIVE SIDE AT INDICATED POINTS.  
 NOTES UNLESS OTHERWISE SPECIFIED



2. PCB HANDLING TO CONFORM TO CLEANING CODE A OF RACAL-DANA DOCUMENT 900325.

1. ITEM # 5 & 6 SHOULD BE FLUSH TO PCB BOARD.

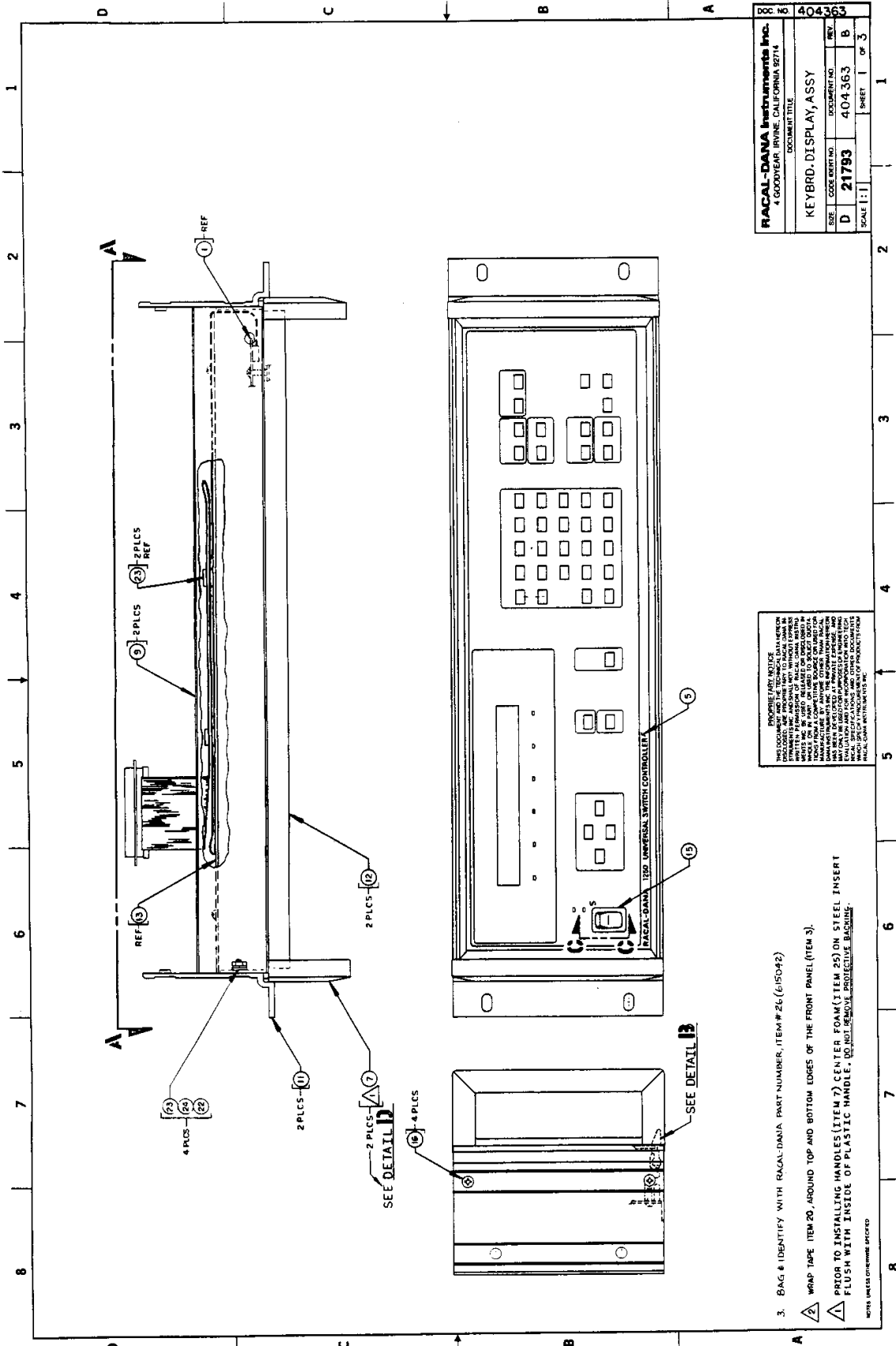
NOTES: UNLESS OTHERWISE SPECIFIED

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**RACAL-DANA Instruments Inc.**  
 4 GOODYEAR, IRVINE, CALIFORNIA 92714

DOCUMENT TITLE  
**PJB ASSY, SHIELD COM.**

SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
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SCALE	1/16" = 1"		SHEET 1 OF 2

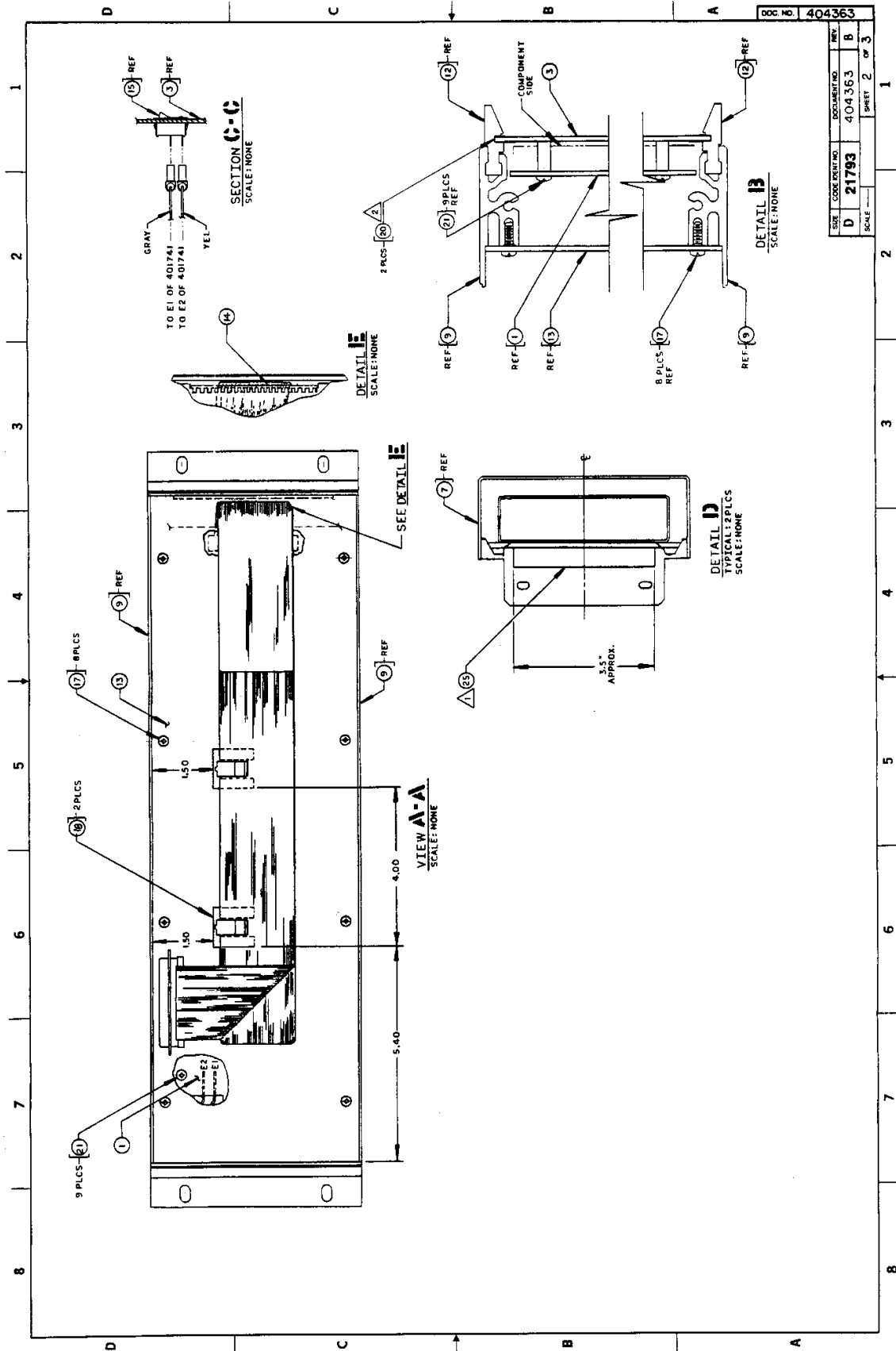


RACAL-DANA Instruments Inc.		DOC NO	404363
4 GOODFRIEND IRVINE, CALIFORNIA 92714		DOCUMENT TITLE	KEYBRD. DISPLAY, ASSY
SIZE	CODE	DOCUMENT NO	REV
D	21793	404363	B
SCALE 1:1			SHEET 1 OF 3

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3. BAG & IDENTIFY WITH RACAL-DANA PART NUMBER, ITEM # 26, (615042)
- ⚠️ WRAP TAPE ITEM 20 AROUND TOP AND BOTTOM EDGES OF THE FRONT PANEL (ITEM 3).
- ⚠️ PRIOR TO INSTALLING HANDLES (ITEM 7) CENTER FOAM (ITEM 25) ON STEEL INSERT FLUSH WITH INSIDE OF PLASTIC HANDLE. DO NOT REMOVE PROTECTIVE BARRIERS.

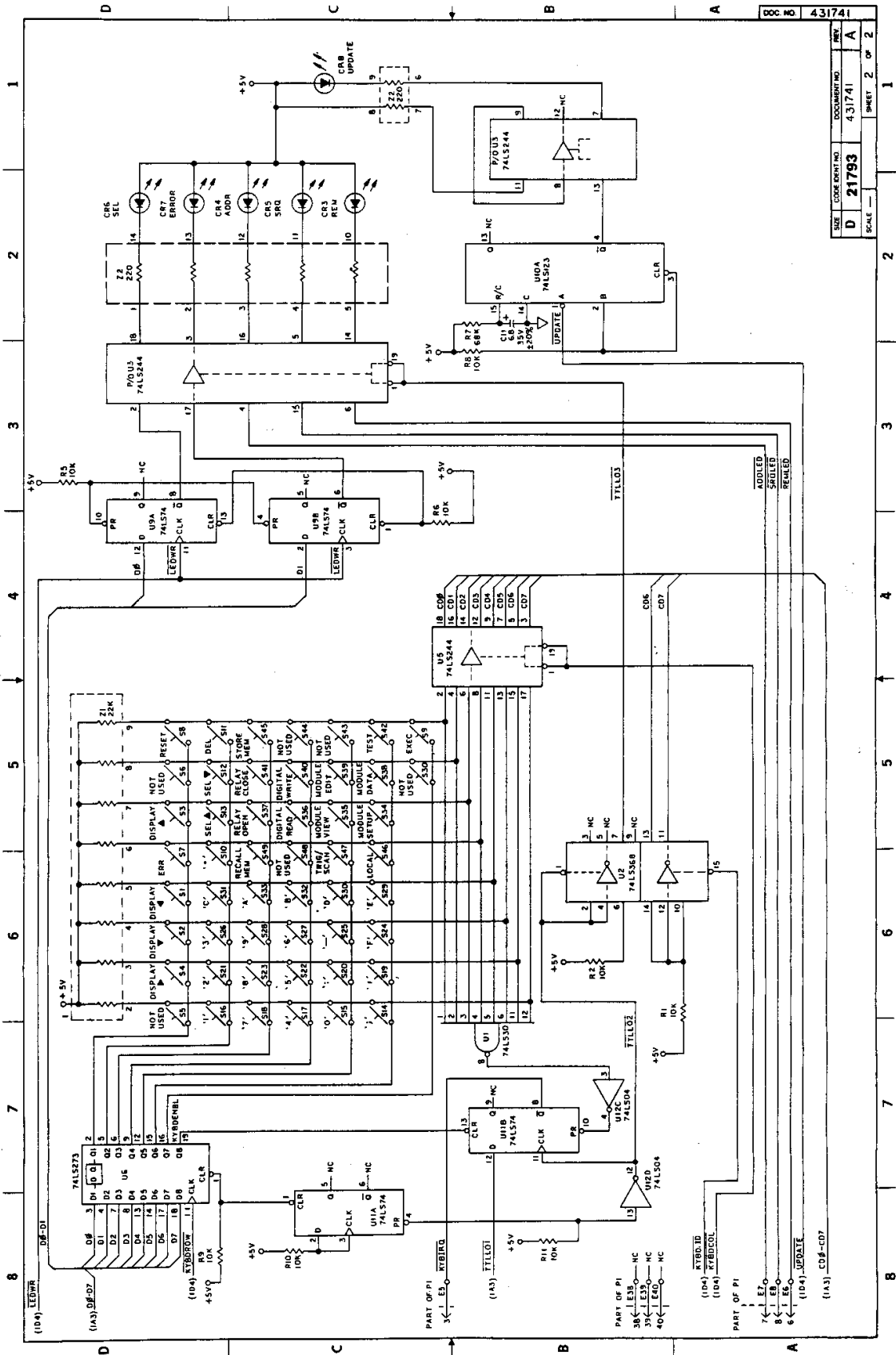
NOTES UNLESS OTHERWISE SPECIFIED



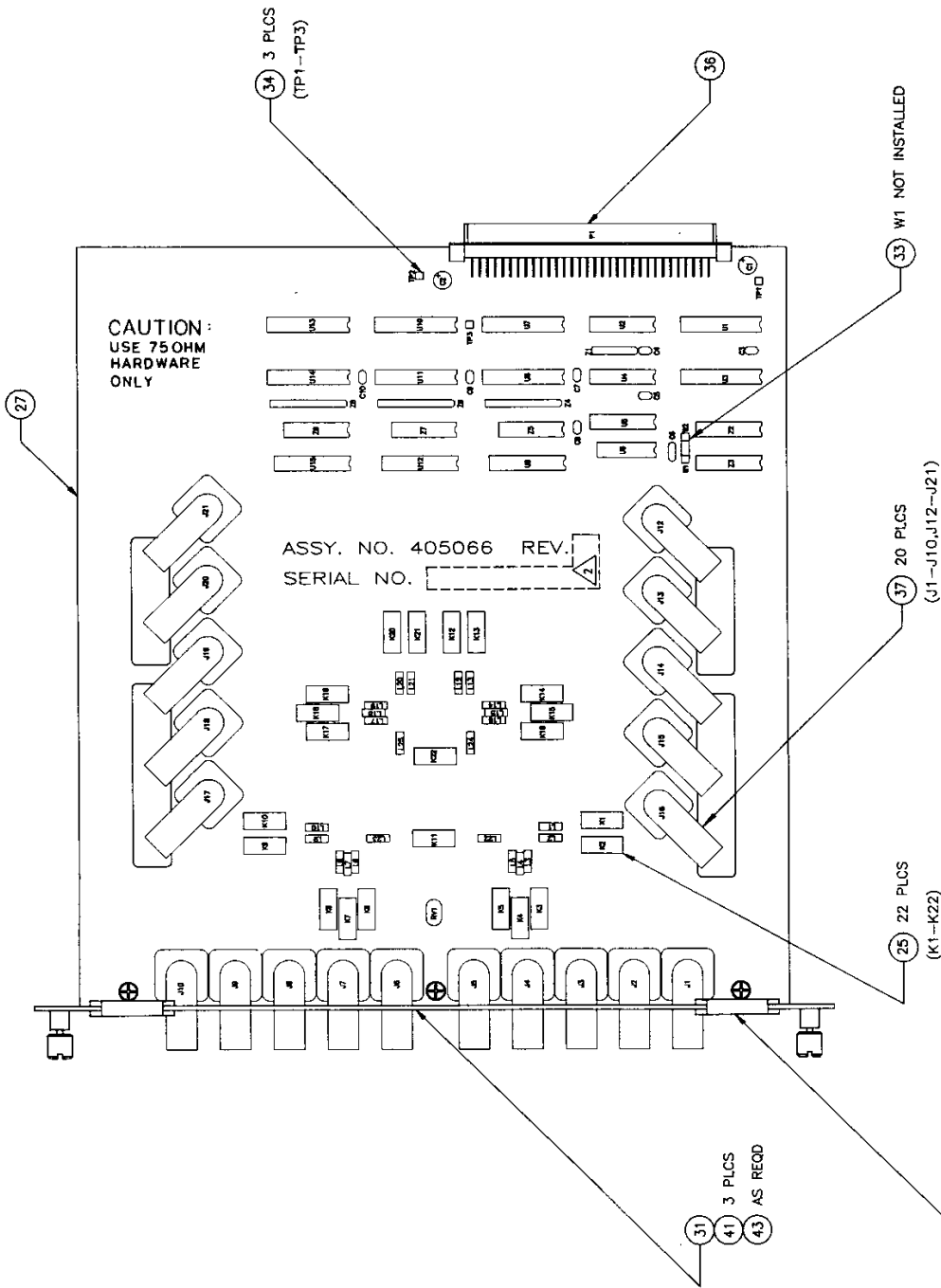








DOC NO	431741
SIZE	D
LOGE ENTRY NO	21793
DOCUMENT NO	431741
REV	A
SCALE	1
SHEET	2 OF 2



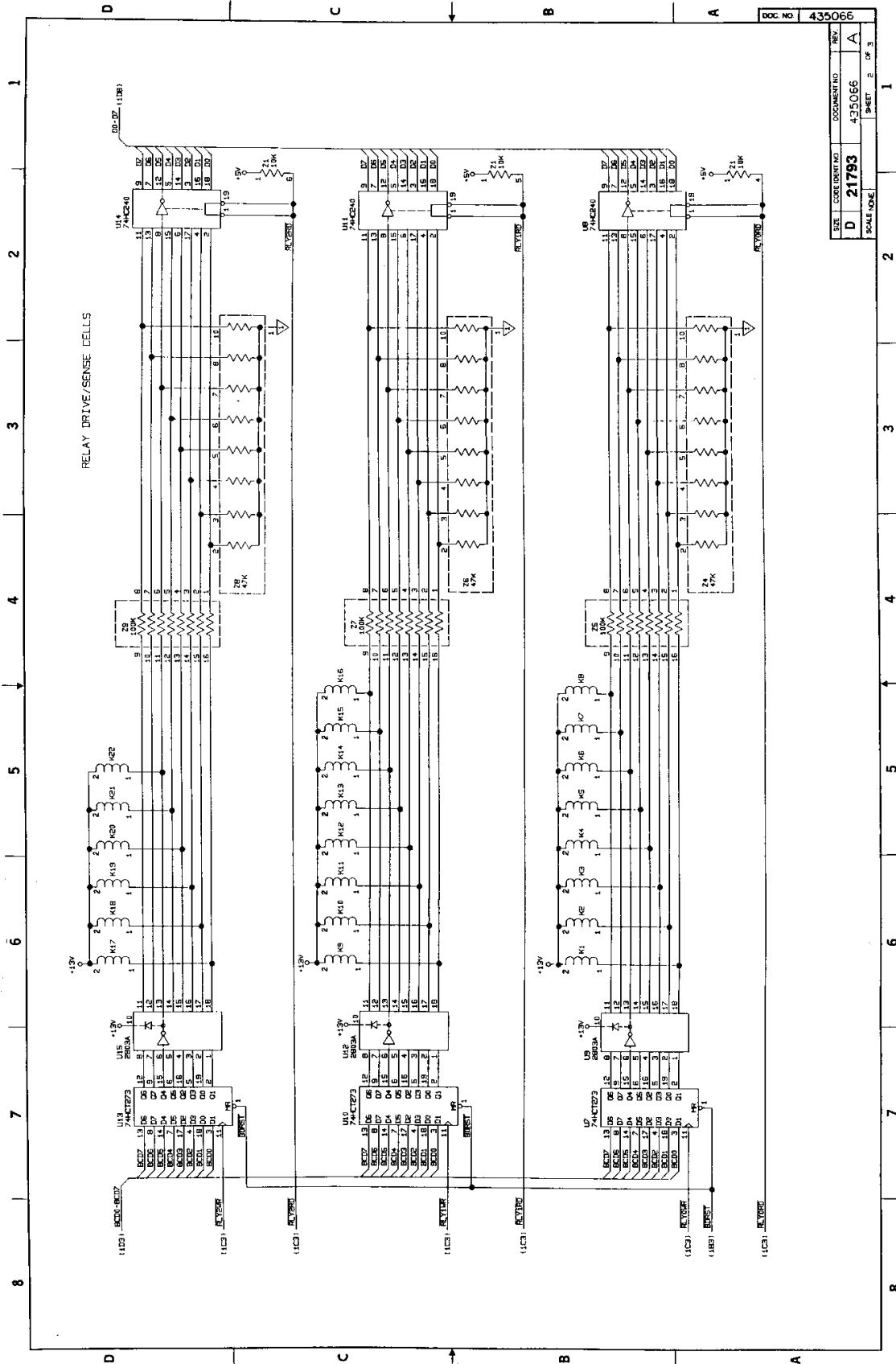
COMPONENT SIDE

<b>RACAL-DANA Instruments Inc.</b>			
4 GOODYEAR, IRVINE, CALIFORNIA 92714			
DOCUMENT TITLE			
PCB ASSY, 1250-750			
SIZE	CODE IDENT NO.	DOCUMENT NO.	REV.
D	21793	405066	A
SCALE	NONE	SHEET	1 OF 2

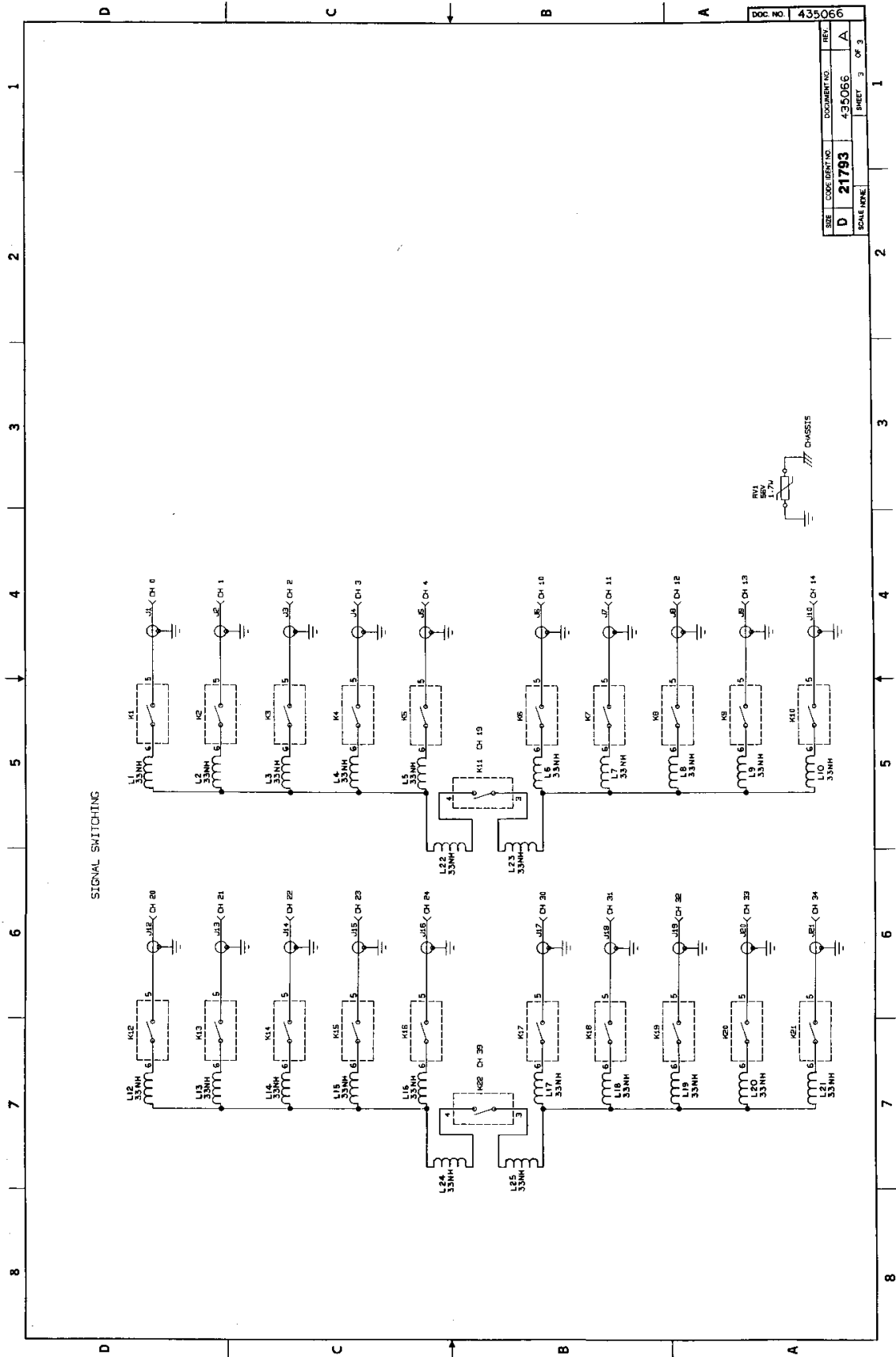
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3. HOLD IN ALIGNMENT CONNECTORS J1 THRU J10 TO ALLOW ASSEMBLY OF ITEM 31.
- INK STAMP SERIAL NUMBER AND CURRENT REVISION ON COMPONENT SIDE APPROX. WHERE SHOWN.
1. REFERENCE SCHEMATIC 435066.





DOC. NO.	435066
REV.	A
SIZE	D
COORDINATING NO.	21793
DOCUMENT NO.	435066
SCALE	NOTE
SHEET	2 OF 3



DOC. NO. 435066	
SIZE D	SCALE NONE
CODE 21793	DOCUMENT NO. 435066
SHEET 3	OF 3
REV. A	

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## Chapter 7

# CHASSIS PARTS LIST

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404361	CHASSIS ASSEMBLY.....	7-3
401744	PCB Assy., Interconnection .....	7-4
401743	PCB Assy., Computer.....	7-5
404363	POWER SUPPLY ASSEMBLY.....	7-8
401742	PCB Assy., Power Supply .....	7-9
401758	PCB Assy., Analog Bus .....	7-12

Manufacturers are identified by FSC numbers listed in the table on page 7-13, "List of Suppliers". The code numbers are from the Federal Supply Code for Manufacturers Cataloging Handbook H4-1, H4-2, and their supplements.

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# 1250 User Manual

## 404361 - CHASSIS ASSEMBLY

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
1	401744	PCB ASSY., INTERCONNECT	21793	401744
2	401758	PCB ASSY., ANALOG BUS	21793	401758
3	404362	POWER SUPPLY ASSY.	21793	404362
4	454830	FRONT PANEL	21793	454830
5	454833	CORNER POST, RH	21793	454833
6	454834	CORNER POST, LH	21793	454834
7	454835	PANEL, CENTER SUPPORT	21793	454835
8	454836	PLATE, CARD GUIDE	21793	454836
9	401743	PCB ASSY., COMPUTER	21793	401743
10	454845	CHASSIS RAIL (2 REQ'D)	21793	454845
12	454851	EXTRUSION, RACK FLANGE, 5.25 LG (2 REQ'D)	21793	454851
13	454852	OVERLAY, FRONT PANEL	21793	454852
15	454872	TRIM, SIDE PANEL (2 REQ'D)	21793	454872
16	454873	EXTRUSION, SIDE PANEL (2 REQ'D)	21793	454873
17	454874	TRIM, SIDE PANEL (2 REQ'D)	21793	454874
18	454875	COVER, TOP	21793	454875
19	454876	COVER, BOTTOM	21793	454876
20	454877	HANDLE, 5.25 (2 REQ'D)	21793	454877
21	601246	SWITCH, ROCKER, SPDT	SEE NOTE 1 TABLE 6.1	1801-1143
23	610887	SCREW, PFH, 6-32 X .375 (21 REQ'D)	08226	507C632R6
24	610890	SCREW, TAPTITE, THREAD FORMING, 6-32 X .375 (2 REQ'D)	78189	---
25	610909	SCREW, PPH, 6-32 X .500 (6 REQ'D)	78189	---
27	610925	SCREW, PPH, 6-32 X 1.00 (6 REQ'D)	78189	---
29	611062	FOOT, BUTTON, FAST (4 REQ'D)	06915	FF-004
30	611064	CARD GUIDE, 9.6 LG (12 REQ'D)	23880	1962F
31	615074	SCREW, PPH, 8-32 X .375 (4 REQ'D)	---	---
33	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (10 REQ'D)	78189	SEMS W/SQ CONE WA.
34	615046	SCREW, PPH, 4-40 X .500 (2 REQ'D)	---	---
35	617127	WASHER, LOCK, #4, LIGHT SERIES (2 REQ'D)	---	---
36	920962	LOCTITE, 242, MED STR	05972	242
41	615076	SCREW, PPH, 8-32 X .500 (4 REQ'D)	---	---
42	615057	SCREW, PPH, 6-32 X .250 (2 REQ'D)	---	---
47	920748	TAPE, DOUBLE SIDED, ADHESIVE, FOAM	23039	2132

## 401744 - PCB ASSY., INTERCONNECT

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR2	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR3	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR4	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR5	210071	CAMP, HI EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
J1	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J2	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J3	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J4	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J5	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J6	601228	CONNECTOR, PCB, 64 PIN	00779	532523-2
J7	601229	CONNECTOR, PLUG, 37 PIN	00779	745189-7
J8	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
Q1	200200	TRANSISTOR, NPN	21793	200200
Q2	200200	TRANSISTOR, NPN	21793	200200
U1	230767	IC, REGULATOR, 5V	27014	LM78L05AC
Z1	080022	RES NETWORK, CERMET, 220 OHM, 14P7R, 2%	11236	760-3-R220
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
9	411744	PCB, INTERCONNECT (UNLOADED)	21793	411744
12	600786	POST, MACHINE APPLIED STRIP (7 REQ'D: TP1-TP7)	00779	1-87022-0
16	610777	CABLE TIE	53421	T18R
17	611045	STANDOFF, SWAGE, .187 X .500 LG (2 REQ'D)	51506	41086-R-A-105-22
18	601238	TERMINAL, CRIMP, SPADE, 16-22 GA (2 REQ'D)	00779	2-520337-2
19	630014	CONNECTOR, RETAINER KIT, FEMALE SCREWLOCK	00779	205817-1
20	501376	TUBING, TEFLON, .036 ID, CLR	29005	TW20GA
21	523444	WIRE, TEFLON, STRANDED, 22G, YEL	---	---
22	523888	WIRE, TEFLON, STRANDED, 22G, GRAY	---	---
24	920962	LOCTITE, 242, MED. STR.	05972	242

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## 401743 - PCB ASSY., COMPUTER

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
C1	110143	CAP, TANTA, 1 MFD, 35V, 20%	05397	T368A105M035AS
C2-20	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C21	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C22	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C23-29	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C30	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C31	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C32	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C33	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	211083	DIODE, SILICO	81349	1N916B
CR2	211083	DIODE, SILICO	81349	1N916B
J2	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
J200	600567	CONNECTOR, RECEPTACLE	02660	31-236
J201	600567	CONNECTOR, RECEPTACLE	02660	31-236
J203	601253	CONNECTOR, GPIB, 24 PIN	00779	553811-3
Q1	200295	TRANSISTOR, N-CHAN, MOS FET	17856	VN0104N3
Q2	200298	TRANSISTOR, NPN	04713	2N3904
R1	000101	RES, CARBON, 100 OHM, 1/4W, 5%	81349	RC07GF101J
R2	010985	RES, METAL, 6.04K, 1/8W, 1%	81349	RN55C6041F
R3	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R4	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R5	010873	RES, METAL, 2.21K, 1/8W, 1%	81349	RN55C2211F
R6	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R7	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R8	010924	RES, METAL, 1.24K, 1/8W, 1%	81349	RN55C1241F
R9	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
R10	000201	RES, CARBON, 200 OHM, 1/4W, 5%	81349	RC07GF201J
S201	601278	SWITCH, DIP, RT. ANGLE, 6P	09353	BD06-AV
U1	230547	IC, QUAD COMPARATOR	27014	LM311N
U2	230547	IC, QUAD COMPARATOR	27014	LM311N
U3	230742	IC, DIGITAL, PRIORITY ENCODER	04713	SN7545KN
U4	230577	IC, OCTAL BUFFER	27014	74LS244

## 401743 - PCB ASSY., COMPUTER (CONT'D)

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
U5	230357	IC, DIGITAL, DUAL	27014	74LS73N
U6	230336	IC, HEX SCHMITT TRIGGER	01295	74LS14
U7	230780	IC, DIGITAL	04713	MC6840P
U9	230740	IC, MEMORY, RAM, 8K, 150 NS	52531	HM6264P-15
U11	230841	IC, EPROM	21793	230841
U12	230760	IC, DIGITAL, QUAD	27014	MM74HC37
U13	230719	IC, FAST NAND	07263	74F00
U14	230550	IC, OCTAL LATCH	27014	74LS374N
U15	230550	IC, OCTAL LATCH	27014	74LS374N
U16	230459	IC, OCTAL GPIB TRANS	01295	SN75160
U17	230793	IC, DIGITAL, GPIB CONTROLLER	01295	TMS9914ANL
U18	230782	IC, DIGITAL	07263	74F139PC
U19	230710	IC, DIGITAL, DECODER	07263	74F138
U20	230577	IC, OCTAL BUFFER	27014	74LS244
U21	230386	IC, 8-BIT REGISTER	27014	74LS273
U22	230779	IC, LINE DRIVER, QUAD 3-STATE OUTPUTS	04713	AM26LS31P
U23	230472	IC, OCTAL GPIB TRANS	01295	SN75161
U24	230758	IC, MEMORY, NON VOL	61394	DQ2816A-350
U26	230740	IC, MEMORY, RAM, 8K, ISONS	52531	HM6264P-15
U28	230842	IC, EPROM	21793	230842
U29	230744	IC, MICRO, 68000, 8 MHZ	04713	MC68000G8
U30	230428	IC, QUAD 2 INPUT OR GATE	27014	DM74LS32N
U31	230705	IC, DIGITAL	04713	74F04
U32	230550	IC, OCTAL LATCH	27014	74LS374N
U33	230577	IC, OCTAL BUFFER	27014	74LS244
U34	230779	IC, LINE DRIVER, QUAD 3-STATE OUTPUTS	04713	AM26LS31P
VR1	230551	IC, VOLTAGE REFERENCE	24355	AD589JH
Y1	921005	OSC, CLOCK, 8 MHZ, .01%	04713	RASCO-3
Z1	080077	RES NETWORK, 220K, 1.1W, 2%	11236	750-83-R220K
Z2	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z3	080076	RES NETWORK, 10K, .9W, 2%	11236	750-63-R10K
Z4	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z5	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z6,7	080020	RES NETWORK, CERMET, 10K, 8P7R, 2%	11236	750-81-R10K

## 401743 - PCB ASSY., COMPUTER (CONT'D)

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
Z8	080037	RES NETWORK, CERMET, 220 OHM, .9W, 6P5R, 2%	11236	750-61-R220
Z9	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
59	411743	PCB, COMPUTER (UNLOADED)	21793	411743
61	454815	PLATE, BUTCH, COMPUTER	21793	454815
63	600823	SOCKET, DUAL IN-LINE, 40-P	52072	CA40S-TS0-BC
64	600894	LUG, SOLDER (2 REQ'D)	86928	5413-20
66	600786	POST, MACHINE APPLIED STRIP (13 REQ'D: TP1-10, E1-3)	00779	1-87022-0
72	611053	TERMINAL, CRIMP (3 REQ'D)	00779	530553-2
77	630010	KIT, HARDWARE, STANDOFF, STUD MOUNT	00779	552633-3
78	616252	SCREW, PPH, SEMS ASSY., 4-40 X .312 (2 REQ'D)	78189	SEMS W/SQ CONE WA.
80	500009	TUBING, SHRINK, .120 ID, BLK	29005	RNF-100-1-1/8
82	500159	SLEEVING, PVC, .118 ID	92194	PVC-9
84	500132	WIRE, TEFLON, STRANDED, TWISTED PR, 24 GA BLK/WHT	---	---
85	524555	WIRE, TEFLON, STRANDED, 24 GA, GRN	---	---

## 404362 - POWER SUPPLY ASSEMBLY

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
B200	920982	FAN, BOXER, 34 CFM	28875	3115
J200	601219	CONNECTOR, PWR, EMI FILTER	05245	6J4
S200	601112	SWITCH, ROCKER, DPST	SEE NOTE 1 TABLE 6.1	1855.1102
T1	300105	TRANSFORMER, POWER, +5V, +13V	55167	2968
4	401742	PCB ASSY., POWER SUPPLY	21793	401742
7	454592	BOOT-CONN. INSULATOR	21793	454592
8	454829	CHASSIS, POWER SUPPLY	21793	454829
9	454881	PLATE, REAR	21793	454881
10	454994	BRACKET, POWER SUPPLY	21793	454994
12	500009	TUBING, SHRINK, .125 ID, BLK	29005	RNF-100-1-1/8
13	500025	WIRE, TEFLON, STRANDED, 20G, BLK	---	---
14	500116	WIRE, TEFLON, STRANDED, 20G, RED	---	---
15	500117	WIRE, TEFLON, STRANDED, 20G, GRN	---	---
16	500118	WIRE, TEFLON, STRANDED, 20G, BLU	---	---
17	500119	WIRE, TEFLON, STRANDED, 20G, YEL	---	---
18	500132	WIRE, TEFLON, STRANDED, 24G, TW PR, BLK/WHT	---	---
19	500215	WIRE, TEFLON, STRANDED, 18G, GRN/YEL	---	---
20	500229	WIRE, TEFLON, STRANDED, 20G, BRN	---	---
21	500230	WIRE, TEFLON, STRANDED, 20G, ORG	---	---
22	500233	WIRE, TEFLON, STRANDED, 20G, WHT	---	---
25	600745	TERMINAL, RECEPTACLE (4 REQ'D)	00779	60196-3

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### 404362 - POWER SUPPLY ASSEMBLY (CONT'D)

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
26	600022	LUG, SOLDER	83330	1416-6
27	601022	TERMINAL, RECEPTACLE (14 REQ'D)	00779	2-350800-2
30	610180	CLAMP, CABLE	09922	HP3N-7/32
31	610777	CABLE TIE (5 REQ'D)	53421	T18R
32	611107	WASHER, SHOULDER, #8 X .437 (4 REQ'D)	86928	5607-19
33	611122	SPACER, 1.00 LG, .250 O.D. (4 REQ'D)	06540	9236-A171-16
34	611123	SCREW, PPH, 8-32 X 2.625 (4 REQ'D)	---	---
35	611124	SCREW, PPH, 10-32 X .750 (4 REQ'D)	---	---
36	615060	SCREW, PPH, 6-32 X .437 (2 REQ'D)	---	---
37	616255	SCREW, PPH, SEMS ASSY., 6-32 X .312 (4 REQ'D)	78189	SEMS W/SQ CONE WA.
38	920580	FUSE, SLO-BLO, 1.5A, 250V	71400	MDX1-1/2
39	920729	LABEL, WARNING	21793	920729
41	921018	GRILL, FAN FILTER	62292	10020-1-5170
43	617005	NUT, HEX, 6-32 (3 REQ'D)	---	---
44	617006	NUT, HEX, 8-32	---	---
45	617103	WASHER, FLAT, #6, LIGHT SERIES (2 REQ'D)	---	---
47	617128	WASHER, LOCK, #6, LIGHT SERIES (2 REQ'D)	---	---

## 401742 - PCB ASSY., POWER SUPPLY

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
C1	110214	CAP, AE, 10000 MFD, 16V	00853	380-103-P-16-J04
C2	110214	CAP, AE, 10000 MFD, 16V	00853	380-103-P-16-J04
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	110217	CAP, AE, 1000 MFD, 35V, RADIAL	80031	3475KG102M035TMBS
C5	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C6	110222	CAP, ELECT, 1000 MFD, 16V, 20%	62643	SM16VB102M
C7	120355	CAP, MET. POLY, .033 MFD, 200V, 10%	56289	450P333X9250FD
C8	110221	CAP, ELECT, 470 MFD, 35V, 20%	62643	SM35VB471M
C9	110220	CAP, ELECT, 10000 MFD, 35V, +30%, -10%	90201	LP103S035E9P3
C10	120356	CAP, MET. POLY, .1 MFD, 100V, 10%	56289	450P104X9100FD
C11	110221	CAP, ELECT, 470 MFD, 35V, 20%	62643	SM35VB471M
C12	110221	CAP, ELECT, 470 MFD, 35V, 20%	62643	SM35VB471M
CR1	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR2	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR3	210004	DIODE, SILICO	81349	1N4004
CR4	210004	DIODE, SILICO	81349	1N4004
CR5	220019	DIODE, SILICO, ZENER	81349	1N752A
CR6	210004	DIODE, SILICO	81349	1N4004
CR7	210004	DIODE, SILICO	81349	1N4004
CR8	220004	DIODE, SILICO, ZENER	81349	1N961B
CR9	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR10	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR11	220098	DIODE, ZENER, 3.9V, 5%	04713	1N5990B
CR12	210004	DIODE, SILICO	81349	1N4004
CR13	210004	DIODE, SILICO	81349	1N4004
CR14	210107	DIODE, POWER, 6A, 50V	04713	MR750
CR15	210107	DIODE, POWER, 6A, 50V	04713	MR750
J8	410806	PCB, 20 PIN CONNECTOR BD	21793	410806
Q1	200131	TRANSISTOR, SILICO, NPN	01295	TIP29
Q2	200278	TRANSISTOR, POWER, SCR	04713	2N6504
Q3	200187	TRANSISTOR, SILICO, NPN	81349	2N3055
Q4	200298	TRANSISTOR, NPN	04713	2N3904
Q5	200187	TRANSISTOR, SILICO, NPN	81349	2N3055
Q6	200233	TRANSISTOR, SILICO, NPN	04713	MPS-A42



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### 401742 - PCB ASSY., POWER SUPPLY (CONT'D)

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
Q7	200131	TRANSISTOR, SILICO, NPN	01295	TIP29
Q8	200167	TRANSISTOR, PNP	04713	MPSU55
R1	040321	POT, CERMET, 1K, SIDE ADJ, 10%	73138	72XWR1K
R2	040321	POT, CERMET, 1K, SIDE ADJ, 10%	73138	72XWR1K
R3	012127	RES, METAL, 1.74K, 1/8W, 1%	81349	RN55C1741F
R4	000272	RES, CARBON, 2.7K, 1/4W, 5%	81349	RC07GF272J
R5	012126	RES, METAL, 4.75K, 1/8W, 1%	81349	RN55C4751F
R6	000220	RES, CARBON, 22 OHM, 1/4W, 5%	81349	RC07GF220J
R7	001781	RES, CARBON, 6.2 OHM, 1/4W, 5%	81349	RC07GF6R2J
R8	000681	RES, CARBON, 680 OHM, 1/4W, 5%	81349	RC07GF681J
R9	000223	RES, CARBON, 22K, 1/4W, 5%	81349	RC07GF223J
R10	000202	RES, CARBON, 2K, 1/4W, 5%	81349	RC07GF202J
R11	001721	RES, CARBON, 2.2 OHM, 1/2W, 5%	81349	RC20GF2R2J
R12	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R13	000223	RES, CARBON, 22K, 1/4W, 5%	81349	RC07GF223J
R14	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R15	000100	RES, CARBON, 10 OHM, 1/4W, 5%	81349	RC07GF100J
R16	000221	RES, CARBON, 220 OHM, 1/4W, 5%	81349	RC07GF221J
R17	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R18	000201	RES, CARBON, 200 OHM, 1/4W, 5%	81349	RC07GF201J
R19	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
R20	001705	RES, CARBON, 820 OHM, 1/2W, 5%	81349	RC20GF821J
R21	010965	RES, METAL, 1.21K, 1/8W, 1%	81349	RN55C1211F
R22	010872	RES, METAL, 1.54K, 1/8W, 1%	81349	RN55C1541F
R23	000622	RES, CARBON, 6.2K, 1/4W, 5%	81349	RC07GF622J
R24	040321	POT, CERMET, 1K, SIDE ADJ, 10%	73138	72XWR1K
R25	040320	POT, CERMET, 500 OHM, SIDE ADJ, 10%	73138	72XWR500
U1	230784	IC, LINEAR, VOLTAGE REGULATOR	04713	MC1723CP
U2	230547	IC, QUAD COMPARATOR	27014	LM339N
U3	310176	RELAY, SOLID STATE, 140 VAC, 1 AMP	59993	DP1110
U4	230784	IC, LINEAR, VOLTAGE REGULATOR	04713	MC1723CP
Z1	080040	RES NETWORK, CERMET, 22K, 1.1W, 8P4R, 2%	11236	750-83-R22K
63	411742	PCB, POWER SUPPLY (UNLOADED)	21793	411742

## 401742 - PCB ASSY., POWER SUPPLY (CONT'D)

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
66	600786	POST, MACHINE APPLIED STRIP (26 REQ'D)	00779	1-87022-0
67	600977	TAB, DISCONNECT (9 REQ'D: E1-9)	79963	895
68	601013	HEATSINK, INSULATOR, 7-MIL, PLASTIC (2 REQ'D)	55285	3223-07FR-05
71	601267	HEATSINK, DUAL	30161	5786B
72	601309	CONNECTOR, DIP, LOW PROFILE, 14-PIN (2 REQ'D)	91506	214-AG39D
73	601439	CONNECTOR, PCB, RECEPTACLE (4 REQ'D)	06776	NS-441-B1
76	610252	STANDOFF, SWAGE, 1/4D, 4-40 x .125 (2 REQ'D)	06540	9531B-B-0440-3A
77	610642	SCREW, NYLON, BINDER HD, 4-40 X .250 BLK (2 REQ'D)	95987	N-440 X 1/4
78	610851	WASHER, INSULATING, TIP-32 STYLE (2 REQ'D)	18565	60-11-5791-1674
79	610872	WASHER, FLAT, #4 SS (2 REQ'D)	---	---
80	611076	NUT, INSULATING, 6-32 (4 REQ'D)	78189	8956-06-01
81	616251	SCREW, PPH, SEMS ASSY, 4-40 x .250 (2 REQ'D)	78189	SEMS W/SQ CONE WA.
83	615061	SCREW, PPH, 6-32 X .500 (4 REQ'D)	---	---
84	617016	NUT, HEX, 4-40 (2 REQ'D)	---	--
85	617077	WASHER, INTERNAL LOCK, #4 (2 REQ'D)	---	---
86	617103	WASHER, FLAT, LIGHT SERIES, #6 (4 REQ'D)	---	---
88	617128	WASHER, LOCK, LIGHT SERIES, #6 (4 REQ'D)	---	---
91	910632	HEATSINK, TO - T3, MODIFIED	21793	910632

## 401758 - PCB ASSY., ANALOG BUS

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
J1	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
J2	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
J3	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
J4	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
J5	600670	CONNECTOR, 10 PIN	71785	252-10-30-160
1	411758	PCB, ANALOG BUS (UNLOADED)	21793	411758

## List of Suppliers

FSC	Name
00779	Amp, Inc. Harrisburg, PA
00853	Sangamo Electric Co. Pickens, SC
01295	Texas Instruments, Inc. Dallas, TX
02660	Amphenol Corp. Broadview, IL
02735	RCA (Solid State Div.) Somerville, NJ
03296	Nylon Moulding Temple City, CA
03508	General Electric Co. (Semi-Conductor Products Div.) Electronics Park, Syracuse, NY
04713	Motorola, Inc. (Semi-Conductor Products Div.) Phoenix, AZ
04963	3M Company St. Paul, MN
05245	Corcom, Inc. Chicago, IL
05276	Pomona Electronics Co., Inc. Pomona, CA
05397	Union Carbide Corp. (Materials Systems Div.) Cleveland, OH
05693	Cherry Commercial Fasteners Division of Textron, Inc. Santa Ana, CA
05972	Loctite Corp. Hartford, CT
06383	Panduit Corp. Tinley Park, IL

FSC	Name
06540	Amatom Electronic Hardware New Rochelle, NY
06776	Robinson Nugent Inc. New Albany, IN
06915	Richo Plastics Co. Chicago, IL
07263	Fairchild (Semi-Conductor Products Div.) Mountain View, CA
08226	Reliable Industries Southgate, CA
08261	Spectra-Strip Corp. Garden Grove, CA
09353	C & K Components Watertown, MA
09922	Burndy Corp. Norwalk, CT
11236	CTS of Berne, Inc. Berne, IN
12856	Micrometals City of Industry, CA
13103	Thermalloy, Inc. Dallas, TX
16059	Devcon Corp. Danvers, MA
17377	Accurate Products Hillside, NJ
17856	Siliconix, Inc. Santa Clara, CA
18324	Signetics Corp. Sunnyvale, CA
18565	Chromerics, Inc. Woburn, MA

FSC	Name
18677	Scanbe Manufacturing Co. El Monte, CA
19738	Avdel-Chobert Telesboro, NJ
21793	Racal-Dana Instruments Inc. Irvine, CA
23880	Stanford Applied Engineering Santa Clara, CA
24355	Analog Devices Norwood, MA
24931	Specialty Connector Co., Inc. Greenwood, IL
25088	Siemens Corp. (Comp. Group) Iselin, NJ
27014	National Semi-Conductor Corp. Santa Clara, CA
27264	Molex Products Co. Downers Grove, IL
28198	Positronic Industries, Inc. Springfield, MO
28875	IMC Magnetics Corp. Rochester, NH
29005	Storm Products Co. Los Angeles, CA
30161	Aavid Engineering Inc. Laconia, NH
34355	Advance Micro Devices Sunnyvale, CA
34359	Three (3) M Co. (Commercial Tape Division) St. Paul, MN
34785	Dek-Inc. St. Charles, IL

FSC	Name
46384	Penn Engineering & Manufacturing Co. Doylestown, PA
50434	Hewlett-Packard Co. (HPA Div.) Palo Alto, CA
50667	Dynatech/UZ Venice, CA
51506	Accurate Screw Machine Co. Nutley, NJ
51642	Centre Engineering Inc. State College, PA
52072	Circuit Assy. Corp. Costa Mesa, CA
52210	Getting Engr. & Mfg. Co. Spring Mills, PA
52531	Hitachi Magnetics Corp. Edmore, MI
53421	Tyton Corp. Milwaukee, WI
55167	Corona Magnetics Corona, CA
55210	Gettig Engrg & Mfg Co, Inc. Spring Mills, PA
55285	Bergquist Co., Inc. Minneapolis, MN
55322	Samtee, Inc. New Albany, IN
56289	Sprague Electric Co. (Pacific Div.) Los Angeles, CA
57856	Kel-Am Inc. Eldon, MO
58730	Thomas & Betts Co. Elizabeth, NJ

FSC	Name
58982	Precision Connector Designs Winchester, MA
59311	Communication Instruments El Segundo, CA
60975	Power-one Linear Products Camarillo, CA
61394	Seeq Technology San Jose, CA
61529	Aromat Corp. Cupertino, CA
61935	Schurter, Inc. Petaluma, CA
62643	United Chemicon Rosemont, IL
6T698	Plastiglide Manufacturing Corp. Hawthorne, CA
70903	Belden Corp. Chicago, IL
71279	Cambion Cambridge, MA
71400	Bussman Manufacturing (Division of McGraw & Edison Co.) St Louis, MO
71471	Aerovox Corp. Moneks Corner, SC
71707	Coto-Coil Co., Inc. Providence, RI
71785	TRW Electronic Components (Cinch Division) Elk Grove Village, IL
72982	Erie Technological Products, Inc. Erie, PA
73138	Beckman Instruments, Inc. Fullerton, CA

FSC	Name
73631	Curtis Industries Milwaukee, WI
75915	Littelfuse, Inc. Des Plaines, IL
76493	J.W. Miller Co. Compton, CA
78189	Illinois Tool Works, Inc. (Shakeproof Div.) Elgin, IL
79963	Zierick Mfg. Corp. New Rochelle, NY
80031	Mepco-Electra Morristown, NJ
81349	Military Specification
83330	Herman H. Smith, Inc. Brooklyn, NY
86928	Seastrom Mfg. Co. Glendale, CA
8Z390	Kurt Manufacturing Inc. Oceanside, CA
90201	Mallory Capacitor, Co. Indianapolis, IN
91506	Augat, Inc. Attleboro, MA
91637	Dale Electronics Inc. Columbus, NE
92194	Alpha Wire Elizabeth, NJ
95275	Vitramon, Inc. Bridgeport, CT
95987	Weckesser Co, Inc. Chicago, IL

FSC	Name
98291	Sealectro Corp. Mamaroneck, NY
99800	American Precision Industries Inc. (Delevan Division) East Aurora, NY
NOTE 1	Universal Components Co. Los Angeles, CA
NOTE 2	RLC Electronics Mt. Kisko, NY
NOTE 3	Worldnet Marketing Inc. Costa Mesa, CA

## Chapter 8

## MODULE PARTS LIST

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Manufacturers are identified by FSC numbers listed in the table on page 7-12, "List of Suppliers".  
The code numbers are from the Federal Supply Code for Manufacturers Cataloging Handbook H4-



1, H4-2, and their supplements.

404447 - OPTION 10, BREADBOARD ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401754	PCB ASSY., BREADBOARD	21793	401754
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

## 401754 - PCB ASSY., BREADBOARD (OPTION 10)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
CR1,2	210071	LAMP, HIGH EFFICIENCY RED, SOLID STATE	50434	HP5082-4650
CR3	220089	DIODE, ZENER	12969	TVS505
F1,2	920488	FUSE, 2A, 250V	75915	312.002
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT ANGLE, PLUG, 20 PIN	57856	PRE10-6101-15
R1	000221	RES, CARBON, 220 OHM, 1/4W, 5%	81349	RC07GF221J
R2	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230386	IC, 8-BIT REGISTER	27014	74LS273
U8	230577	IC, OCTAL BUFFER	27014	74LS244
U10	230386	IC, 8-BIT REGISTER	27014	74LS273
U11	230577	IC, OCTAL BUFFER	27014	74LS244
U13	230386	IC, 8-BIT REGISTER	27014	74LS273
U14	230577	IC, OCTAL BUFFER	27014	74LS244
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
26	411754	PCB, BREADBOARD (UNLOADED)	21793	411754
29	454855	SHIELD, MODULE, TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
40	610112	NUT, PRESS, SPL, 4-40	46384	KF2-440
45	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---

404448 - OPTION 12, ACTUATOR ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401753	PCB ASSY., ACTUATOR	21793	401753
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

## 401753 - PCB ASSY., ACTUATOR (OPTION 12)

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-10	310170	RELAY, 2 FORM A, 2 FORM B	61529	S2EB-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	410806	PCB, 20 PIN CONNECTOR	21793	410806
R1-20	600245	JUMPER, INSULATED	55210	L-2007-1LP
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
(28)	411753	PCB, ACTUATOR (UNLOADED)	21793	411753
(31)	454855	SHIELD, MODULE, TOP	21793	454855
(37)	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
(45)	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125 (3 REQ'D)	06540	9531B-B-0440-3A
(46)	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (7 REQ'D)	78189	SEMS W/SQ CONE WA.
(47)	610872	WASHER, FLAT, #4, SS (2 REQ'D)	---	---

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### 404455 - OPTION L12, ACTUATOR

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	401793	PCB ASSY., ACTUATOR	21793	401793
4	404388	QD ASSY., TERMINAL	21793	404388

### 404388 - QD ASSY., TERMINAL

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
5	454837	BRACKET, QD TERMINAL BLOCK	21793	454837
6	454849	PLATE, QD TERMINAL BLOCK	21793	454849
7	454999	BRACKET, INTERLOCK	21793	454999
9	454857	STRAIN RELIEF, SPONGE (2 REQ'D)	21793	454857
10	454860	SPRING, RETAINING, SINGLE (2 REQ'D)	21793	454860
12	601242	CONNECTOR, RECEPTICAL, EDGE/CABLE (2 REQ'D)	58982	PCD-1-B-22
13	611095	SCREW, CAPTIVE PANEL (2 REQ'D)	06540	6102-SS-0440
14	615050	SCREW, PPH, 4-40 X 1.00 (4 REQ'D)	---	---
15	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (3 REQ'D)	78189	---
16	920962	LOCTITE, 242, MED. STR.	05972	242
17	921041	LABEL SET, 1250 (2 REQ'D)	21793	921041

## 401793 - PCB ASSY., ACTUATOR (OPTION L12)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-10	310181	RELAY, 2 FORM A-B, 12V, LATCHING	61529	S2EB-L2-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
R1-20	6000245	JUMPER, INSULATED	55210	L-2007-1LP
U1	230637	IC, DIGITAL BUFFER	18324	N74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230825	IC, OCTAL LATCH	02735	74HCT273
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230825	IC, OCTAL LATCH	02735	74HCT273
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U29	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U32	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
28	411793	PCB, ACTUATOR LATCH (UNLOADED)	21793	411793
32	454855	SHIELD, MODULE TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---
48	610252	STANDOFF, SWAGE, 1/40, 4-40 X .125	06540	9531B-B-0440-3A

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### 401748 - PCB ASSY., DIGITAL I/O (OPTION 14)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3,4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C6-12	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C13	100117	CAP, CERAM, 470 PFD, 1000V, 20%	56289	C023B102E471M
C14-28	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
CR1-22	211083	DIODE, SILICO	81349	1N916B
CR23-38	220103	DIODE, ZENER	04713	1N977B
F1-16	921045	FUSE, 1/4A, 125V, SUB MIN.	75915	255.250
L1	310056	CHOKE, RF, .68 UH	76493	9230-16
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601191	CONNECTOR, PCB, 40P, RIGHT ANGLE	23880	RP6240D2RLSF
Q1	200298	TRANSISTOR, NPN	04713	2N3904
Q2-17	200271	TRANSISTOR, FET, POWER	17856	VN10KM
R1	000332	RES, CARBON, 3.3K, 1/4W, 5%	81349	RC07GF332J
R2-4	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R5-12	000472	RES, CARBON, 4.7K, 1/4W, 5%	81349	RC07GF472J
R13	010894	RES, METAL, 20K, 1/8W, 1%	81349	RN55C2002F
R14,15	010676	RES, METAL, 15K, 1/8W, 1%	81349	RN55C1502F
R16	010894	RES, CARBON, 20K, 1/8W, 1%	81349	RN55C2002F
R17-24	000472	RES, CARBON, 4.7K, 1/4W, 5%	81349	RC07GF472J
R25-40	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R41-43	000470	RES, CARBON, 47 OHM, 1/4W, 5%	81349	RC07GF470J
R44	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
U1	230547	IC, QUAD COMPARATOR	27014	LM339N
U2	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230768	IC, DIGITAL	04713	SN74LS139N
U5	230368	IC, DEMULTIPLEXER	27014	74LS138
U6	230637	IC, DIGITAL BUFFER	18324	N74LS244
U7	230825	IC, OCTAL LATCH	02735	74HCT273

## 401748 - PCB ASSY., DIGITAL I/O (OPTION 14) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U8	230796	IC, QUAD 2-INPUT NAND GATE	02735	74HCT00E
U9	230825	IC, OCTAL LATCH	02735	74HCT273
U10	230798	IC, DUAL D W/SET & RESET	02735	74HCT74E
U11	230414	IC, QUAD EXCLUSIVE OR GATE	27014	74LS86
U12	230843	IC, DIGITAL, BUFFER, 3-STATE OCTAL INV.	04713	MC74HCT240N
U13	230802	IC, OCTAL D-TYPE F-F, 3-STATE	02735	74HCT374
U14	230802	IC, OCTAL D-TYPE F-F, 3-STATE	02735	74HCT374
U15	230843	IC, DIGITAL, BUFFER, 3-STATE OCTAL INV.	04713	MC74HCT240N
U16	230802	IC, OCTAL D-TYPE F-F, 3-STATE	02735	74HCT374
U17	230806	IC, OCTAL TRANSPARENT LATCH, 3-STATE OUTPUT	02735	74HCT373E
U18	230802	IC, OCTAL D TYPE F-F, 3-STATE	02735	74HCT374
U19	230547	IC, QUAD COMPARATOR	27014	LM339N
U20	230547	IC, QUAD COMPARATOR	27014	LM339N
U21	230547	IC, QUAD COMPARATOR	27014	LM339N
U22	230547	IC, QUAD COMPARATOR	27014	LM339N
Z1	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
Z4	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
Z5	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
Z6	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
51	600786	POST, MACHINE APPLIED STRIP (4 REQ'D: TP1-4)	00779	1-87022-0
53	411748	PCB, DIGITAL I/O (UNLOADED)	21793	411748
54	454840	PLATE, DIGITAL INTERFACE	21793	454840
55	454996	SHIELD, UW MODULE	21793	454996
60	611095	SCREW, CAPTIVE PANEL (2 REQ'D)	06540	6102-SS-0440
62	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (10 REQ'D)	78189	---



404446 - OPTION 15, RELAY DRIVER ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401759	PCB ASSY., RELAY DRIVER	21793	401759
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

## 401759 - PCB ASSY., RELAY DRIVER (OPTION 15)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
F1	920488	FUSE, 2A, 250V	75915	312.002
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z10-12	080009	RES NETWORK, CERMET, 6.8K, 16P8R, 2%	11236	761-3-R6.8K

401759 - PCB ASSY., RELAY DRIVER (OPTION 15) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
26	411759	PCB, RELAY DRIVER (UNLOADED)	21793	411759
30	454855	SHIELD, MODULE, TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
40	610112	NUT, PRESS, SPL, 4-40	46384	KF2-440
44	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---
46	921023	CLIP, FUSE (2 REQ'D)	61935	0G751.0099
47	920735	SOCKET, IC, 16P (6 REQ'D)	71785	133-51-02-006

## 401954 - PCB ASSY., RELAY DRIVER (OPTION 15A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
CR1-3	231294	DIODE ARRAY, 16P8D	56289	TND908
F1	920488	FUSE, 2A, 250V	75915	312.002
J1-3	601726	CONNECTOR, D-SUB, RECEPT, 25 PIN	00779	745783-4
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
SW1-6	601699	SWITCH, DIP, 8 POS, LOW PROFILE	71450	207-8-LPST
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080133	RES NETWORK, CERMET, 68K, 10P9R	11236	750-101-R68K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080133	RES NETWORK, CERMET, 68K, 10P9R	11236	750-101-R68K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K

## 401954 - PCB ASSY., RELAY DRIVER (OPTION 15A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
Z8	080133	RES NETWORK, CERMET, 68K, 10P9R	11236	750-101-R68K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z10-15	080009	RES NETWORK, CERMET, 6.8K, 16P8R, 2%	11236	761-3-R6.8K
22	411954	PCB, RELAY DRIVER (UNLOADED)	21793	411954
26	454996	SHIELD, UV MODULE	21793	454996
27	455613	PLATE, CONNECTOR MOUNTING	21793	455613
30	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (8 REQ'D)	78189	---
40	611092	HARDWARE KIT, D-SUB, 4-40F (3 REQ'D)	00779	205817-3
42	920971	CLIP, FUSE (2 REQ'D)	75915	122088

## 401889 - PCB ASSY., 1250-16

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6.BUF, 35V, 20%	05397	T355F685M035A5
C3-5	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C6	100120	CAP, CERAM, 270 PF 100OV, 20%	56289	C023B102E271M
C7-11	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
J1-5	601725	CONNECTOR, D-SUB, RECEPT, 15 PIN	00779	745782-4
K1-18	310188	RELAY, POLAR, 4A. AMBER	61529	S4EB-12V
P1	601227	CONNECTOR, PCB, 64-PIN, SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE PLUG, 20 PIN	57856	PRE10-6101-15
TP1-3	600786	POST, TERMINAL, MACHINE APPLIED STRIP	00779	1-87022-0
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	SN74LS138N3
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DECODER	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N/A-1
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1-85	600245	JUMPER, INSULATED	52210	L-2007-1
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
(28)	411889	PCB, 1250-16 (UNLOADED)	21793	411889
(31)	454996	SHIELD, UV MODULE	21793	454996
(33)	455345	PLATE, SIGNAL INTERFACE	21793	455345
(41)	611092	HARDWARE KIT, D-SUB, 4-40F	00779	205817-3
(43)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (8 REQ'D)	78189	-
(46)	920962	LOCTITE, 242, MED STR	05972	272

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### 404445 - OPTION 20, POWER MODULE ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401757	PCB ASSY., POWER MODULE	21793	401757
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

## 401757 - PCB ASSY., POWER MODULE (OPTION 20)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
F1	920488	FUSE, 2A, 250V	75915	312.002
K1-10	310167	RELAY, POWER, 2 FORM C	61529	ST2E-DC12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
28	411757	PCB, POWER MODULE (UNLOADED)	21793	411757
32	454855	SHIELD, MODULE, TOP	21793	454855
35	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
40	610112	NUT, PRESS, SPL, 4-40	46384	KF2-440
41	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---
44	921023	CLIP, FUSE (2 REQ'D)	61935	0G751.0099



404444 - OPTION 30, SCANNER/MUX ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401755	PCB ASSY., SCANNER/MUX	21793	401755
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

404612 - OPTION 30C, SCANNER/MUX ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401755-001	PCB ASSY., SCANNER/MUX	21793	401755-001
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

404613 - OPTION 30D, SCANNER/MUX ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401755-002	PCB ASSY., SCANNER/MUX	21793	401755-002
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

## 401755 - PCB ASSY., SCANNER/MUX (OPTION 30) (-001 OPTION 30C) (-002 OPTION 30D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-21	310170	RELAY, ELECTRO MECHANICAL 2 FORM A, 2 FORM B	61529	S2EB-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
R1-11	600245	JUMPER, INSULATED	55210	L-2007-1LP
R12*	600245	JUMPER, INSULATED	55210	L-2007-1LP
R13-43	600245	JUMPER, INSULATED	55210	L-2007-1LP
R44*	600245	JUMPER, INSULATED	55210	L-2007-1LP
R45	000102	RES, CARBON, 1K, 1/4W, 5%	81349	RC07GF102J
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

\*NOT USED ON -002

## 401755 -PCB ASSY., SCANNER/MUX (OPTION 30) (-001 OPTION 30C) (-002 OPTION 30D) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W2	600245	JUMPER, INSUALTED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
28	411755**	PCB, SCANNER/MUX (UNLOADED)	21793	411755**
30	454855	SHIELD, MODULE, TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
45	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---

\*\* FOR -001 USE P/N 411755-001  
FOR -002 USE P/N 411755-002

## 404456 - OPTION L30, SCANNER/MUX LATCH

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	401792	PCB ASSY., SCAN/MUX	21793	401792
4	404388	QD ASSY., TERMINAL	21793	404388

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### 401792 - PCB ASSY., SCANNER/MUX LATCH (OPTION L30)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-21	310181	RELAY, 2 FORM A-B, 12V, LATCHING	61529	S2EB-L2-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
R1-44	600245	JUMPER, INSULATED	55210	L-2007-1LP
U1	230637	IC, DIGITAL BUFFER	18324	N74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7,8	230825	IC, OCTAL LATCH	02735	74HCT273
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10,11	230825	IC, OCTAL LATCH	02735	74HCT273
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13,14	230825	IC, OCTAL LATCH	02735	74HCT273
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U29	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U32	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U35	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
28	411792	PCB, SCANNER/MUX LATCH (UNLOADED)	21793	411792
32	454855	SHIELD, MODULE TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250	78189	---
48	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A

## 404707 - OPT. ASSY., 1250-30B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
(1)	401900	PCB ASSY., SCANNER/MUX	21793	401900
(3)	404381	TERMINAL BLOCK ASSY., QUICK DISCONNECT	21793	404381

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### 401900 - PCB ASSY., 1250-30B

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W2	600245	JUMPER, INSULATED	52210	L-2007-1
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z6	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z7	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z8	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z9	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
(28)	411900	PCB, 1250-30B (UNLOADED)	21793	411900
(30)	454855	SHIELD, MODULE, TOP	21793	454855
(45)	610252	STANDOFF, SWAGE, 1/40, 4-40X.125 (3 REQ'D)	06540	9531B-B-0440-3A
(46)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (7 REQ'D)	78189	SEMS W/SQ CONE WA.
(47)	610872	WASHER, FLAT, #4, SS (2 REQ'D)	---	---

### 404866 - FINAL ASSY., 1250-35

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
(1)	401961	PCB ASSY., 1260-35	21793	401961
(3)	601855-020	CONNECTOR, SGMC CABLE PLUG, 20 PIN	28198	SGMC-20-MOE100J0
(4)	601855-050	CONNECTOR, SGMC CABLE PLUG, 50 PIN (2 REQ'D)	28198	SGMC-50-MOE100J0
(5)	601857	CONTACT, SGMC MALE (120 REQ'D)	28198	MS422N

## 401961 - PCB ASSY., 1250-35

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6. BUF, 35V, 20%	05397	T355F685M035A5
C3-5	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C6	130177	CAPACITOR, CHIP, SMD, 270PF	95275	VJ1206A271KXAMT
C7-18	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
J1	601856-050	CONNECTOR, SMPL, PCB RECEPT.	28198	SMPL50F0T0LB
J2	601856-020	CONNECTOR, SMPL, PCB RECEPT.	28198	SMPL20F0T0LB
J3	601856-050	CONNECTOR, SMPL, PCB RECEPT.	28198	SMPL50F0T0LB
K1-53	310208	RELAY, 2 FORM C, 2P2T, 12V	61529	TQ2E-12V
P1	601785	CONNECTOR, PCB, RECEPTACLE, 64 PIN	00779	531787-2
P2	410806	PCB, 20 PIN CONNECTOR BD	21793	410806
TP1-3	601197	POST, TEST, .025 SQ	00779	6-87022-6
U1	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U2	231094	IC, DEMUX DECODER	18324	N74LS138D
U3	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U4	231096	IC, QUAD DIFF RECEIVER	01295	AM26LS32ACD
U5	231090	IC, DEMUX DECODER	18324	N74LS139D
U6	231093	IC, QUAD COMPARATOR	04713	LM339D
U7	231130	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U8	231091	IC, OCTAL BUFFER	18324	74HC240D
U9	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U10	231130	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U11	231091	IC, OCTAL BUFFER	18324	74HC240D
U12	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U13	231130	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U14	231091	IC, OCTAL BUFFER	18324	74HC240D
U15	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U16	231130	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U17	231091	IC, OCTAL BUFFER	18324	74HC240D
U18	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U19	231130	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U20	231091	IC, OCTAL BUFFER	18324	74HC240D
U21	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U22	231130	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U23	231091	IC, OCTAL BUFFER	18324	74HC240D



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## 401961 - PCB ASSY., 1250-35

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
U24	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U25	231130	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U26	231091	IC, OCTAL BUFFER	18324	74HC240D
U27	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U28	231094	IC, DEMUX DECODER	18324	N74LS138D
W15-16	601208-016	CONNECTOR, PLUG, 3 PIN	21793	601208-016
Z1	080116	RES NETWORK, 16P8R, 10K	73138	628-AL-103J
Z2	080115	RES NETWORK, 16P8R, 1K	73138	628-AL-102J
Z3	080114	RES NETWORK, 16P8R, 15K	73138	628-AL-153J
Z4	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z5	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z6	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z7	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z8	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z9	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z11	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z12	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z13	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z14	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z16	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z17	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z18	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z19	080118	RES NETWORK, 16PR, 100K	73138	628-AL-104J
(23)	411961	PCB, 1250-35 (UNLOADED)	21793	411961
(26)	454996	SHIELD, UW MODULES	21793	454996
(27)	455649	PANEL, FRONT, 1250-35	21793	455649
(34)	601195	PLUG, JUMPER, LOW PROFILE (2 REQ'D)	00779	531220-2
(43)	611095	SCREW, CAPTIVE PANEL (2 REQ'D)	06540	6102-SS-0440
(44)	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125 (2 REQ'D)	06540	9531B-B-0440-3A
(45)	615012	SCREW, PPH, 2-56X.125 (6 REQ'D)	-	-
(46)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (12 REQ'D)	78189	SEMS W/SQ CONE WA.
(47)	920962	LOCTITE, 242, MED STR.	05972	242
(48)	610872	WASHER, FLAT, #4 SS (2 REQ'D)	---	---

## 404443 - OPTION 40, MATRIX MODULE ASSY.

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401756	PCB ASSY., MATRIX MODULE	21793	401756
3	404381	TERMINAL BLOCK ASSY., Q.D.	21793	404381

## 401756 - PCB ASSY., MATRIX MODULE (OPTION 40)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-20	310170	RELAY, ELECTRO MECHANICAL 2 FORM A, 2 FORM B	61529	S2EB-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N

## 401756 - PCB ASSY., MATRIX MODULE (OPTION 40) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
28	411756	PCB, SCANNER/MUX (UNLOADED)	21793	411756
30	454855	SHIELD, MODULE TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
45	610252	SCREW, SWAGE, 1/4D, 4-40 X .125	06540	9531B-8-0440-3A
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---

404457 - OPTION L40, MATRIX LATCH

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	401791	PCB ASSY., MATRIX LATCH	21793	401791
4	404388	QD ASSY., TERMINAL	21793	404388

## 401791 - PCB ASSY., MATRIX LATCH (OPTION L40)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
K1-20	310181	RELAY, 2 FORM A-B, 12V, LATCHING	61529	S2EB-L2-12V
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT ANGLE, PLUG, 20-PIN	57856	PRE10-6101-15
U1	230637	IC, DIGITAL BUFFER	18324	N74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230825	IC, OCTAL LATCH	02735	74HCT273
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230825	IC, OCTAL LATCH	02735	74HCT273
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U29	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U32	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
28	411791	PCB, SCANNER/MUX LATCH (UNLOADED)	21793	411791
32	454855	SHIELD, MODULE TOP	21793	454855
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
46	616251	SCREW, PPH, SEMS ASSY., 4-40 x .250 (5 REQ'D)	78189	---
48	610252	STANDOFF, SWAGE, 1/4D, 4-40 X .125	06540	9531B-B-0440-3A

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### 404711 - OPT. ASSY., 1250-40B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
(1)	401896	PCB ASSY., 1250-40B	21793	401896
(3)	404381	TERMINAL BLOCK ASSY., QUICK DISCONNECT	21793	404381

## 401896 - PCB ASSY., 1250-40B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6.BUF, 35V, 20%	05397	T355F685M035A5
C3-5	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C6	100120	CAP, CERAM, 270 PF 1000V, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
K1-20	310188	RELAY, POLAR, 4A. AMBER	61529	S4EB-12V
P1	601227	CONNECTOR, PCB, 64-PIN, SOCKET PLUG	00779	531796-2
P2	601241	CONNECTOR, RT. ANGLE PLUG, 20 PIN	57856	PRE10-6101-15
TP1-3	601197	POST, TEST, .025 SQ	00779	6-87022-6
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	SN74LS138N3
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DECODER	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N/A-1
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z6	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z7	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z8	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z9	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
(25)	411896	PCB, 1250-40B (UNLOADED)	21793	411896
(29)	454855	SHIELD, MODULE, TOP	21793	454855
(42)	610252	STANDOFF, SWAGE, 1/4D, 4-40X.125	06540	95318-B-0440-3A
(43)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (5 REQ'D)	78189	-



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### 404712 - OPT. ASSY., 1250-45

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
(1)	401898	PCB ASSY., 1250-45	21793	401898
(3)	404381	TERMINAL BLOCK ASSY., QUICK DISCONNECT	21793	404381

### 404712-001 - OPT. ASSY., 1250-45A

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
(1)	401898-001	PCB ASSY., 1250-45A	21793	401898-001
(3)	404381	TERMINAL BLOCK ASSY., QUICK DISCONNECT	21793	404381

## 401898 - PCB ASSY., 1250-45 &amp; 401898-001 - PCB ASSY., 1250-45A

REF. DESIG.	RACAL INSTR P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6. BUF, 35V, 20%	05397	T355F685M035A5
C3-5	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C6	130177	CAPACITOR, CHIP, SMD, 270PF	95275	VJ1206A271KXAMT
C7-18	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
K1-52	310190	RELAY, ELECTROMECHANICAL, 2P2T, 12V	61529	DS2YE-S-DC12V
P1	601785	CONNECTOR, PCB, RECEPTACLE, 64 PIN	00779	531787-2
P2	410806	PCB, 20 PIN CONNECTOR BOARD	21793	410806
U1	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U2	231094	IC, DEMUX DECODER	18324	N74LS138D
U3	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U4	231096	IC, QUAD DIFF RECEIVER	01295	AM26LS32ACD
U5	231090	IC, DEMUX DECODER	18324	N74LS139D
U6	231093	IC, QUAD COMPARATOR	04713	LM339D
U7	231130	IC, D-TYPE FLIP-FLOP	18324	PC74HC273
U8	231091	IC, OCTAL BUFFER	18324	74HC240D
U9	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U10	231130	IC, D-TYPE FLIP-FLOP	18324	PC74HC273
U11	231091	IC, OCTAL BUFFER	18324	74HC240D
U12	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U13	231130	IC, D-TYPE FLIP-FLOP	18324	PC74HC273
U14	231091	IC, OCTAL BUFFER	18324	74HC240D
U15	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U16	231130	IC, D-TYPE FLIP-FLOP	18324	PC74HC273
U17	231091	IC, OCTAL BUFFER	18324	74HC240D
U18	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U19	231130	IC, D-TYPE FLIP-FLOP	18324	PC74HC273
U20	231091	IC, OCTAL BUFFER	18324	74HC240D
U21	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U22	231130	IC, D-TYPE FLIP-FLOP	18324	PC74HC273
U23	231091	IC, OCTAL BUFFER	18324	74HC240D

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### 401745 - 200 MHZ, 4:1 (OPTION 50)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-21	601231	CONNECTOR, BNC, PC MOUNT	00779	227161-2
K1-22	310169	RELAY, REED 1 FORM A	71707	CR-7101-12-1110
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7 W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	55210	ULN-2803A

## 401745 - 200 MHZ, 4:1 (OPTION 50) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
27	411745	PCB, 200 MHZ (UNLOADED)	21793	411745
29	454854	SHIELD, RF MODULE	21793	454854
31	454870	PLATE, RF INTERFACE	21793	454870
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
40	610389	GROMMET, CATERPILLAR	03296	G51H-B
45	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
46	616251	SCREW, PPH, SEMS ASSY. 4-40 X .250 (10 REQ'D)	78189	---
48	920962	LOCTITE, 242, MED. STR.	05972	242

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### 401749 - 2/4:1 M X 500 MHZ (OPTION 51A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C0238102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-10	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-10	310168	RELAY, RF, 2 FORM C	59311	12103J302
K11A	310168	RELAY, RF, 2 FORM C	59311	12103J302
K11B	310168	RELAY, RF, 2 FORM C	59311	12103J302
RV1	220102	VARISTOR, 56V, 1.7 W-S	03508	V562A2
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

## 401749 - 2/4:1 M X 500 MHZ (OPTION 51A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
29	411749	PCB, 500 MHZ (UNLOADED)	21793	411749
32	454841-1	PLATE, RF INTERFACE	21793	454841-1
33	454997	SHIELD, UW MODULE	21793	454997
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
45	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
46	616251	SCREW, PPH, SEMS ASSY. 4-40 X .250 (12 REQ'D)	78189	---
47	617127	WASHER, LOCK, #4, LIGHT SERIES (2 REQ'D)	---	---

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### 404368 - 4/4:1 M X 500 MHZ (OPTION 51B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-21	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-10	310168	RELAY, RF, 2 FORM C	59311	12103J302
K11A	310168	RELAY, RF, 2 FORM C	59311	12103J302
K11B	310168	RELAY, RF, 2 FORM C	59311	12103J302
K12-22	310168	RELAY, RF, 2 FORM C	59311	12103J302
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

## 404368 - 4/4:1 M X 500 MHZ (OPTION 51B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W2	600245	JUMPER, INSULATED	55210	L-2007-ILP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
29	411749	PCB, 500 MHZ (UNLOADED)	21793	411749
32	454842-1	PLATE, RF INTERFACE	21793	454842-1
33	454854	SHIELD, RF MODULE	21793	454854
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
44	610389	GROMMET, CATERPILLAR	03296	G51H-B
46	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
47	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (8 REQ'D)	78189	---
48	617127	WASHER, LOCK, #4, LIGHT SERIES (2 REQ'D)	---	---



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### 401750 - 2/4:1 TREE, 1 GHZ (OPTION 52A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-10	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-12	310168	RELAY, RF, 2 FORM C	59311	12103J302
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

## 401750 - 2/4:1 TREE, 1 GHZ (OPTION 52A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
29	411750	PCB, QUAD, 4:1 TREE, 1 GHZ (UNLOADED)	21793	411750
31	454841-2	PLATE, RF INTERFACE, 1 GHZ H	21793	454841-2
32	454854	SHIELD, RF MODULE	21793	454854
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
45	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
46	616251	SCREW, PPH, SEMS ASSY. 4-40 X.250 (10 REQ'D)	78189	---
48	920962	LOCTITE, 242, MED. STR	05972	242

## 404369 - 4/4:1 TREE, 1 GHZ (OPTION 52B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-22	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-24	310168	RELAY, RF, 2 FORM C	59311	12103J302
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

## 404369 - 4/4:1 TREE, 1 GHZ (OPTION 52B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	751-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
29	411750	PCB, QUAD, 4:1 TREE, 1GHZ (UNLOADED)	21793	411750
31	454842-2	PLATE, RF INTERFACE, 1 GHZ F	21793	454842-2
32	454854	SHIELD, RF MODULE	21793	454854
37	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
44	610389	GROMMET, CATERPILLAR	03296	G51H-8
45	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
46	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (10 REQ'D)	78189	---
48	920962	LOCTITE, 242, MED. STR	05972	242

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### 401790 - PCB ASSY., 4/4:1 TREE RF (OPTION L52B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7-11	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C12	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C13	110125	CAP, TANTA, 2.2 MFD, 35V, 20%	05397	T368B225M035AS
J1-20	601203	CONNECTOR, BNC, RT. ANGLE	05276	4788
K1-28	310180	RELAY, ELECTROMAGNETIC	61529	S2M-L2-12V-H10
L1	310132	CHOKE, RF, .47 UH, 10%	99800	1025-12
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
R1	010400	RES, METAL, 200 OHM, 1/8W, .1%	81349	RN55C2003B
R2	010921	RES, METAL, 825 OHM, 1/8W, 1%	81349	RN55C8250F
R3-6	000226	RES, CARBON, 22M, 1/4W, 5%	81349	RC07GF226J
U1	230637	IC, DIGITAL BUFFER	18324	N74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230637	IC, DIGITAL BUFFER	18324	N74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230825	IC, OCTAL LATCH	02735	74HCT273
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230825	IC, OCTAL LATCH	02735	74HCT273
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230825	IC, OCTAL LATCH	02735	74HCT273
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

## 401790 - PCB ASSY., 4/4:1 TREE RF (OPTION L52B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U16	230825	IC, OCTAL LATCH	02735	74HCT273
U17	230825	IC, OCTAL LATCH	02735	74HCT273
U18	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U19	230844	IC, LINEAR	27014	LM317T
U29	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U32	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U35	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U38	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	751-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
40	411790	PCB, QUAD 4:1 TREE RF (UNLOADED)	21793	411790
44	454842	PLATE, RF INTERFACE	21793	454842
45	454997	SHIELD, UHF MODULE	21793	454997
48	600786	POST, MACHINE APPLIED STRIP (4 REQ'D: TP1-4)	00779	1-87022-0
56	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
57	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (10 REQ'D)	78189	---
60	920962	LOCTITE, 242, MED. STR.	05972	242

## 404642 - PCB ASSY., 1250-54B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6.BUF, 35V, 20%	05397	T355F685M035A5
C3-5	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C6	100120	CAP, CERAM, 270 PF 1000V, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C11-59	R-21-1801	CAP, CHIP, 10NF	95275	VJ1206Y103MF
J1-20	601822	CONN., CPAX, RECEPT, 5P, 50 OHM BNC	24931	28JR428-1
J21-36	601787	CONNECTOR, COAXIAL, RECEPT	98291	51-053-000
K1-24	310168	RELAY, RF, 2 FORM C	01526	3SAV2590A2
P1	601227	CONNECTOR, PCB, 64-PIN, SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7W	03508	V56ZA2
TP1-3	600786	POST, TEST, .025 SQ	00779	6-87022-6
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	SN74LS138N3
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DECODER	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N/A-1
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

## 404642 - PCB ASSY., 1250-54B

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1-2	600245	JUMPER, INSULATED	52210	L-2007-1
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z6	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z7	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z8	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z9	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
(32)	410792	PCB, 1250-54B (UNLOADED)	21793	410792
(35)	455322-001	PLATE RF, BNC	21793	455322-001
(36)	455330	SHIELD, RF	21793	455330
(48)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (10 REQ'D)	78189	-



## 401895 - PCB ASSY., 1250-55

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-2	110126	CAP, TANTA, 6. BUF, 35V, 20%	05397	T355F685M035A5
C3-5	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
C6	130177	CAPACITOR, CHIP, SMD, 270PF	95275	VJ1206A271KXAMT
C7-66	R-21-1801	CAP, CHIP, 10 NF	95275	VJ1206Y103MF
K1-28	310194	RELAY, HIGH FREQUENCY 75 OHM	61529	RGIE-12V
J1-20	601821	CONNECTOR, COAXIAL, BNC, 50 OHM	24931	28JR-427-1
J21-36	601781	CONNECTOR, COAXIAL, RECEPT, 75 OHM	98291	51-153-0000
P1	601785	CONNECTOR, PCB, RECEPTACLE, 64 PIN	00779	531787-2
RV1	220102	VARISTOR, 56V. 1.7 W/S	03508	V56ZA2
TP1-3	601197	POST, TEST, .025 SQ	00779	6-87022-6
U1	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U2	231094	IC, DEMUX DECODER	18324	N74LS138D
U3	231092	IC, TRI-STATE BUFFER	18324	74LS244D
U4	231096	IC, QUAD DIFF RECEIVER	01295	AM26LS32ACD
U5	231090	IC, DEMUX DECODER	18324	N74LS139D
U6	231093	IC, QUAD COMPARATOR	04713	LM339D
U7	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U8	231091	IC, OCTAL BUFFER	18324	74HC240D
U9	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U10	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D
U11	231091	IC, OCTAL BUFFER	18324	74HC240D
U12	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
U13	231095	IC, D-TYPE FLIP-FLOP	18324	74HCT273D

## 401895 - PCB ASSY., 1250-55

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U14	231091	IC, OCTAL BUFFER	18324	74HC240D
U15	231098	IC, SOIC TRANSISTOR	56289	ULN-2803LW
Z1	080116	RES NETWORK, 16P8R, 10K	73138	628-AL-103J
Z2	080115	RES NETWORK, 16P8R, 1K	73138	628-AL-102J
Z3	080114	RES NETWORK, 16P8R, 15K	73138	628-AL-153J
Z4	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z5	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z6	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z7	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
Z8	080117	RES NETWORK, 16P8R, 47K	73138	628-AL-473J
Z9	080118	RES NETWORK, 16P8R, 100K	73138	628-AL-104J
(25)	411895	PCB, 1250-55 (UNLOADED)	21793	411895
(28)	455322-001	PLATE, RF, BNC	21793	455322-001
(38)	616251	SCREW, PPH, SEMS ASSY., 4-40X.250 (3 REQ'D)	78189	-
(39)	920962	LOCTITE, 242, MED STR	05972	242

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### 401751 - PCB ASSY., 18 GHZ X 2 MODULE (OPTION 60A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C8	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C9	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C10	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210070	DIODE, POWER, 3 AMP	04713	MR501
CR2	210070	DIODE, POWER, 3 AMP	04713	MR501
J12	601244	CONNECTOR, PLUG, RT. ANGLE, 2P	27264	22-12-2024
K2	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
K3	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N

## 401751 - PCB ASSY., 18 GHZ X 2 MODULE (OPTION 60A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
26	411751	PCB, 18/28 GHZ MODULE (UNLOADED)	21793	411751
28	454848-060	PLATE, UWAVE INTERFACE	21793	454848-060
30	454996	SHIELD, UW MODULE	21793	454996
32	524999	WIRE, TEFLON, STRANDED, 24G, BLK	---	---
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	615019	SCREW, PPH, 2-56 X .625 (4 REQ'D)	---	---
40	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (12 REQ'D)	78189	---
42	617002	NUT, HEX, 2-56 (4 REQ'D)	---	---
44	617101	WASHER, FLAT, #2, LIGHT SERIES (4 REQ'D)	---	---

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### 404370 - PCB ASSY., 18 GHZ X 4 MODULE (OPTION 60B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C8	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C9	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C10	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210070	DIODE, POWER, 3 AMP	04713	MR501
CR2	210070	DIODE, POWER, 3 AMP	04713	MR501
J12	601244	CONNECTOR, PLUG, RT. ANGLE, 2P	27264	22-12-2024
K1	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
K2	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
K3	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
K4	601233	SWITCH, COAX, SPDT, 18 GHZ	50667	D3-412A001
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244

## 404370 - PCB ASSY., 18 GHZ X 4 MODULE (OPTION 60B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
26	411751	PCB, 18/28 GHZ MODULE (UNLOADED)	21793	411751
28	454839-1	PLATE, UWAVE INTERFACE	21793	454839-1
30	454996	SHIELD, UW MODULE	21793	454996
32	524999	WIRE, TEFLON, STRANDED, 24G, BLK	---	---
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	615019	SCREW, PPH, 2-56 X .625 (8 REQ'D)	---	---
40	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (12 REQ'D)	78189	---
42	617002	NUT, HEX, 2-56 (8 REQ'D)	---	---
44	617101	WASHER, FLAT, #2, LIGHT SERIES (8 REQ'D)	---	---
45	601236	TERMINAL, CRIMP, SNAP-IN, 22-30 GAUGE (2 REQ'D)	27264	08-55-0110
46	601245	CONNECTOR, HOUSING, 2 POS RECEPTACLE	27264	22-01-2026

## 404371 - PCB ASSY., 26 GHZ X 2 MODULE (OPTION 61A)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C8	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C9	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T3688685M035AS
C10	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210070	DIODE, POWER, 3 AMP	04713	MR501
CR2	210070	DIODE, POWER, 3 AMP	04713	MR501
J12	601244	CONNECTOR, PLUG, RT. ANGLE, 2P	27264	22-12-2024
K2	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
K3	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN

## 404371 - PCB ASSY., 26 GHZ X 2 MODULE (OPTION 61A) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
26	411751	PCB, 18/28 GHZ MODULE (UNLOADED)	21793	411751
28	454848-061	PLATE, UWAVE INTERFACE	21793	454848-061
30	454996	SHIELD, UW MODULE	21793	454996
32	524999	WIRE, TEFLON, STRANDED, 24G, BLK	---	---
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	615019	SCREW, PPH, 2-56 X .625 (4 REQ'D)	---	---
40	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (12 REQ'D)	78189	---
42	617002	NUT, HEX, 2-56 (4 REQ'D)	---	---
44	617101	WASHER, FLAT, #2, LIGHT SERIES (4 REQ'D)	---	---



## 404372 - PCB ASSY., 26 GHZ X 4 MODULE (OPTION 61B)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C4	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1 KV, 20%	56289	C023B102E271M
C7	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C8	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C9	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C10	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1	210070	DIODE, POWER, 3 AMP	04713	MR501
CR2	210070	DIODE, POWER, 3 AMP	04713	MR501
J12	601244	CONNECTOR, PLUG, RT. ANGLE, 2P	27264	22-12-2024
K1	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
K2	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
K3	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
K4	601232	SWITCH, COAX, SPDT, 26 GHZ	SEE NOTE 2 TABLE 6.1	SR-2MIN-H-26
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
U1	230577	IC, OCTAL BUFFER	27014	74LS244

## 404372 - PCB ASSY., 26 GHZ X 4 MODULE (OPTION 61B) (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
W1	600245	JUMPER, INSULATED	55210	L-2007-1LP
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
26	411751	PCB, 18/28 GHZ MODULE (UNLOADED)	21793	411751
28	454839-2	PLATE, UWAVE INTERFACE	21793	454839-2
30	454996	SHIELD, UW MODULE	21793	454996
32	524999	WIRE, TEFLON, STRANDED, 24G, BLK	---	---
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP1-3)	00779	1-87022-0
39	615019	SCREW, PPH, 2-56 X .625 (8 REQ'D)	---	---
40	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (12 REQ'D)	78189	---
42	617002	NUT, HEX, 2-56 (8 REQ'D)	---	---
44	617101	WASHER, FLAT, #2, LIGHT SERIES (8 REQ'D)	---	---
46	601236	TERMINAL, CRIMP, SNAP-IN, 22-30 GAUGE (2 REQ'D)	27264	08-55-0110
47	601245	CONNECTOR, HOUSING, 2 POS RECEPTACLE	27264	22-01-2026

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## 401995 - PCB ASSEMBLY - 1250-65

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1	100126	CAP, TANTA, 6.8 UF, 35V, 20%	05397	T355F685M035A5
C2	110126	CAP, TANTA, 6.8 UF, 35V, 20%	05397	7355F685M035A5
C3	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C4	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C5	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C6	100120	CAP, CERAM, 270 PF 1000V, 20%	56289	C023B102E271M
C7	100062	CAP. CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C8	100062	CAP, CERAM, .01 UF 100V, 10%	05397	C320C103K1R5CA
C9	110126	CAP, TANTA, 6.8UF, 35V, 20%	05397	T355F685M035A5
C10	100133	CAP, CERAM, 1UF, LOW PROFILE, 20%	72982	8131LP-100-Z5U-1
CR1-CR8	210004	DIODE, SILICON	81349	1N4004
CR9	210070	DIODE, POWER, 3A	04713	MR501
CR10	210070	DIODE, POWER, 3A	04713	MR501
J7	601244	CONNECTOR, PLUG, RT. ANGLE, 2-PIN	27264	22-12-2024
K1-K4	602012	SWITCH, COAXIAL, 18GHz	12598	SR-TMIN-H-L
P1	601227	CONNECTOR, PCB, 64-PIN, SOCKET PLUG	00779	531796-2
Q1-Q8	200167	TRANSISTOR, PNP	04713	MPSU55
R1-R8	001730	RES. CARBON, 470 OHM, 1/2W, 5%	81349	RC20GF471J
TP1	600786	POST. TERMINAL, MACHINE APPLIED STRIP	00779	1-87022-0
TP2	600786	POST. TERMINAL, MACHINE APPLIED STRIP	00779	1-87022-0
TP3	600786	POST. TERMINAL, MACHINE APPLIED STRIP	00779	1-87022-0
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	SN74LS138N3
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DECODER	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N/A-1
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL INVERTING TRI-STATE BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A

## 401995 - PCB ASSEMBLY - 1250-65

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
Z1	080005	RES NETWORK, 6P8R, 10K, 2%, .9W	11236	750-61-R10K
Z2	080008	RES NETWORK, 16P8R, 1K, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, 16P8R, 15K, 2%	11236	761-3-R15K
Z4	080070	RES NETWORK, 10P9R, 47K, 2%	11236	750-101-R47K
Z5	080072	RES NETWORK, 16P8R, 100K, 2%	11236	761-3-R100K
Z6	080015	RES NETWORK, 10P9R, 10K, 5%	71450	750-101-R10K
34	411995	PCB, 1250-65 (UNLOADED)	21793	411995
38	455817	PANEL, FRONT MICROWAVE	21793	455817
39	454855-001	SHIELD, MICROWAVE MODULE	21793	454855-001
41	500056	TUBING, SHRINK, CLR, 3/16 DIA	---	---
42	524000	WIRE, TEFLON, STRANDED, 24 GA, WHT	---	---
43	524222	WIRE, TEFLON, STRANDED, 24 GA, RED	---	---
44	524999	WIRE, TEFLON, STRANDED, 24 GA, BLU	---	---
53	610899	TIE, CABLE, SELF-LOCKING, 1/16 x 2 (4 REQ'D)	58730	TY-232M
54	611095	SCREW, CAPTIVE PANEL, SLOTTED (2 REQ'D)	06540	6101-SS-0440
55	615013	SCREW, PPF, 2-56 x .188 (8 REQ'D)	---	---
58	616151	SCREW, PPH, SEMS, ASSY, 4-40 x .250 (9 REQ'D)	78189	---

## 404381 - TERMINAL BLOCK ASSY., QUICK DISCONNECT (OPTION 80)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	401761	PCB ASSY., SHIELD COMMON	21793	401761
5	454837	BRACKET, Q.D. TERMINAL BLOCK	21793	454837
6	454838	PLATE, Q.D. TERMINAL BLOCK	21793	454838
7	454999	BRACKET, INTERLOCK	21793	454999
9	454857	STRAIN RELIEF, SPONGE (2 REQ'D)	21793	454857
10	454860	SPRING, RETAINING, SINGLE (2 REQ'D)	21793	454860
12	601242	CONNECTOR, RECEPT., EDGE/CABLE (2 REQ'D)	58982	PCD-1-B-22
13	611095	SCREW, CAPTIVE PANEL (2 REQ'D)	06540	6102-SS-0440
14	615050	SCREW, PPH, 4-40 X 1.00 (4 REQ'D)	---	---
15	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (5 REQ'D)	78189	---
16	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---
17	921041	LABEL SET, 1250 (2 REQ'D)	21793	921041
19	920962	LOCTITE, 242, MED. STR	05972	242
20	601237	TERMINAL, CRIMP, SNAP-IN, 22-26 GAUGE	00779	102106-2

## 401761 - PCB ASSY., SHIELD COMMON

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
2	411761	PCB, SHIELD COMMON (UNLOADED)	21793	411761
5	601839-005	CONNECTOR, HEADER, 5 POST (2 REQ'D)	21793	601839-005
6	601733-006	CONNECTOR, HEADER, 6 POST (2 REQ'D)	21793	601733-006

## 404363 - OPTION 90, KEYBOARD DISPLAY

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
1	401741	PCB ASSY., KEYBOARD DISPLAY	21793	401741
3	454831	PANEL, FRONT	21793	454831
5	454853	OVERLAY, CONTROL PANEL	21793	454853
7	454877	HANDLE (2 REQ'D)	21793	454877
9	454890	EXTRUSION, HOUSING FRAME (2 REQ'D)	21793	454890
11	454892	EXTRUSION, RACK FLANGE, DISPLAY (2 REQ'D)	21793	454892
12	454893	EXTRUSION, HOUSING BEZEL (2 REQ'D)	21793	454893
13	454894	PLATE, REAR, DISPLAY	21793	454894
14	610389	GROMMET, CATERPILLAR	03296	651H-B
15	601246	SWITCH, ROCKER, SPDT	SEE NOTE 1 TABLE 6.1	1801-1143
16	610887	SCREW, PFH, 6-32 X .375 (4 REQ'D)	08226	507C632R6
17	610890	SCREW, TAPTITE, THREAD FORMING, 6-32 X .375 (8 REQ'D)	78189	---
18	610912	CLIP, FLAT, CABLE (2 REQ'D)	34785	031-0100
21	616251	SCREW, PPH, SEMS ASSY., 4-40 X .250 (9 REQ'D)	---	---
22	617006	NUT HEX, 8-32 (4 REQ'D)	---	---
23	617104	WASHER, FLAT, #8, LIGHT SERIES (4 REQ'D)	---	---
24	617129	WASHER, LOCK, #8, LIGHT SERIES (4 REQ'D)	---	---
25	910655	SPEC., TAPE, FOAM	34359	4042
26	615042	SCREW, PPH, 4-40 X .250 (2 REQ'D)	---	---

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### 401741 - PCB ASSY., KEYBOARD DISPLAY

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1-6	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C7	100117	CAP, CERAM, 470 PFD, 1000V, 20%	56289	C023B102E471M
C8	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
C9	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C11	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C12	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C13	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C14	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C15	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C16-18	100133	CAP, CERAM, .1 MFD, LOW PROFILE, 20%	72982	8131LP-100-651-104M
CR1-8	210108	DIODE, LIGHT EMITTING, RED	25088	L DH5122
DS1	210110	DIODE, LIGHT EMITTING	50434	HPDL-2416
DS2	210110	DIODE, LIGHT EMITTING	50434	HPDL-2416
DS3	210110	DIODE, LIGHT EMITTING	50434	HPDL-2416
DS4	210110	DIODE, LIGHT EMITTING	50434	HPDL-2416
P1	601239	CABLE ASSY.	21793	601239
R1	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R2	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R3	000221	RES, CARBON, 220 OHM, 1/4W, 5%	81349	RC07GF221J
R4	000471	RES, CARBON, 470 OHM, 1/4W, 5%	81349	RC07GF471F
R5	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R6	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R7	000683	RES, CARBON, 68K, 1/4W, 5%	81349	RC07GF683J
R8	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R9	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R10	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
R11	000103	RES, CARBON, 10K, 1/4W, 5%	81349	RC07GF103J
U1	230402	IC, DIGITAL	27014	74LS30N
U2	230619	IC, HEX, TRI-STATE INV. BUFFER	01295	SN74LS368
U3	230637	IC, DIGITAL	18324	N74LS244

## 401741 - PCB ASSY., KEYBOARD DISPLAY (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
U4	230637	IC, DIGITAL BUFFER	18324	N74LS244
U5	230637	IC, DIGITAL BUFFER	18324	N74LS244
U6	230386	IC, 8-BIT REGISTER	27014	74LS273
U7	230336	IC, HEX SCHMITT TRIGGER	01295	74LS14
U8	230367	IC, DIGITAL DIVIDER	27014	74LS93
U9	230350	IC, DIGITAL DUAL	27014	74LS74
U10	230237	IC, DUAL ONE-SHOT	01295	SN74LS123N
U11	230350	IC, DIGITAL DUAL	27014	74LS74
U12	230234	IC, 14-DIP, HEX INVERTER	01295	SN74LS04N
U13	230368	IC, DEMULTIPLEXER	27014	74LS138
U14	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
Z1	080042	RES NETWORK, 22K, 10P9R	11236	750-101-R22K
Z2	080022	RES NETWORK, CERMET, 220 OHM, 14P7R, 2%	11236	760-3-R220
Z3	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
Z4	080015	RES NETWORK, 10K, 5%	91637	CSP-10E-01103J
39	411741	PCB, KEYBOARD DISPLAY (UNLOADED)	21793	411741
41	523444	WIRE, TEFLON, STRANDED, 22G, YEL	---	---
42	523888	WIRE, TEFLON, STRANDED, 22G, GRAY	---	---
43	601211	SWITCH, PUSH BUTTON (44 REQ'D)	21793	601211
45	601238	TERMINAL, CRIMP, 18 GA (2 REQ'D)	00779	2-520337-2
47	220000013	TERMINAL, SOLDER (4 REQ'D: TP1-4)	21793	220000013
51	921007	CAP, SWITCH, GRAY (44 REQ'D)	21793	921007



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405066 - 75 OHM RF MUX 4(1x4) - OPTION 750

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
C1,2	110126	CAP, TANTA, 6.8 MFD, 35V, 20%	05397	T368B685M035AS
C3-5	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
C6	100120	CAP, CERAM, 270 PFD, 1KV, 20%	56289	C023B102E271M
C7-10	100062	CAP, CERAM, .01 MFD, 100V, 10%	72982	8121-100-W5R0-103K
J1-10, 12-21	601777	CONNECTOR, COAX RECEPTACLE, 75 OHM	91836	2027-5-9
K1-22	310234	RELAY, REED, 1P1T, 12V	71707	9402-12-03 1110
L1-10, 12-25	R-23-7246	INDUCTOR, RF AXIAL LEAD, 33 NH, 10%	71279	551-5172-03-02-00
P1	601227	CONNECTOR, PCB, 64 SOCKET PLUG	00779	531796-2
RV1	220102	VARISTOR, 56V, 1.7 W-S	03508	V56ZA2
U1	230577	IC, OCTAL BUFFER	27014	74LS244
U2	230368	IC, DEMULTIPLEXER	27014	74LS138
U3	230577	IC, OCTAL BUFFER	27014	74LS244
U4	230766	IC, INTERFACE, DIFFERENTIAL	27014	DS26LS32CN
U5	230768	IC, DIGITAL	04713	SN74LS139N
U6	230547	IC, QUAD COMPARATOR	27014	LM339N
U7	230825	IC, OCTAL LATCH	02735	74HCT273
U8	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U9	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U10	230825	IC, OCTAL LATCH	02735	74HCT273
U11	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U12	230774	IC, TRANSISTOR ARRAY	56289	ULN-2803A
U13	230825	IC, OCTAL LATCH	02735	74HCT273
U14	230771	IC, OCTAL, 3-STATE INV. BUFFER	04713	MC74HC240N
U15	230774	IC, TRANSISTOR ARRAY	55210	ULN-2803A

## 405066 - 75 OHM RF MUX 4(1x4) - OPTION 750 (CONT'D)

REF. DESIG.	RACAL-DANA P/N	DESCRIPTION	FSC	MANU P/N
W2	600245	JUMPER, INSULATED	55210	L-2007-1LP
Z1	080005	RES NETWORK, CERMET, 10K, 6P5R, 2%	11236	750-61-R10K
Z2	080008	RES NETWORK, CERMET, 1K, 16P8R, 2%	11236	761-3-R1K
Z3	080013	RES NETWORK, CERMET, 15K, 16P8R, 2%	11236	761-3-R15K
Z4	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z5	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z6	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z7	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
Z8	080070	RES ARRAY, 9 RES, 47K	11236	750-101-R47K
Z9	080072	RES ARRAY, 8 RES, 100K	11236	761-3-R100K
27	415066	PCB, 1250-750 (UNLOADED)	21793	415066
31	455322-003	PLATE, RF, BNC	21793	455322-003
34	600786	POST, MACHINE APPLIED STRIP (3 REQ'D: TP 1-3)	00779	1-87022-0
39	610389	GROMMET, CATERPILLAR	03296	G51H-B
41	616251	SCREW, PPH, SEMS ASSY. 4-40 X .250 (3 REQ'D)	78189	---
43	920962	LOCTITE, 242, MED. STR.	05972	242

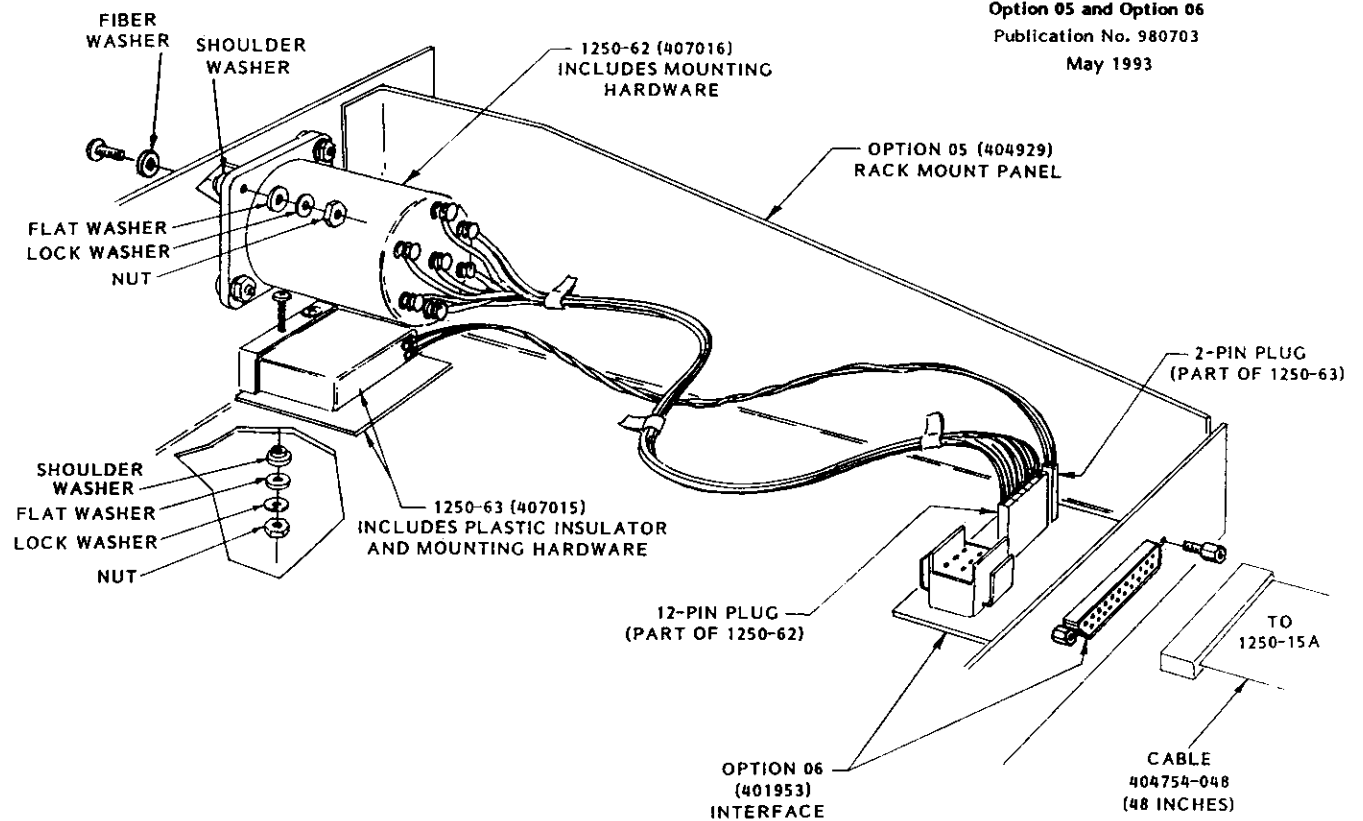
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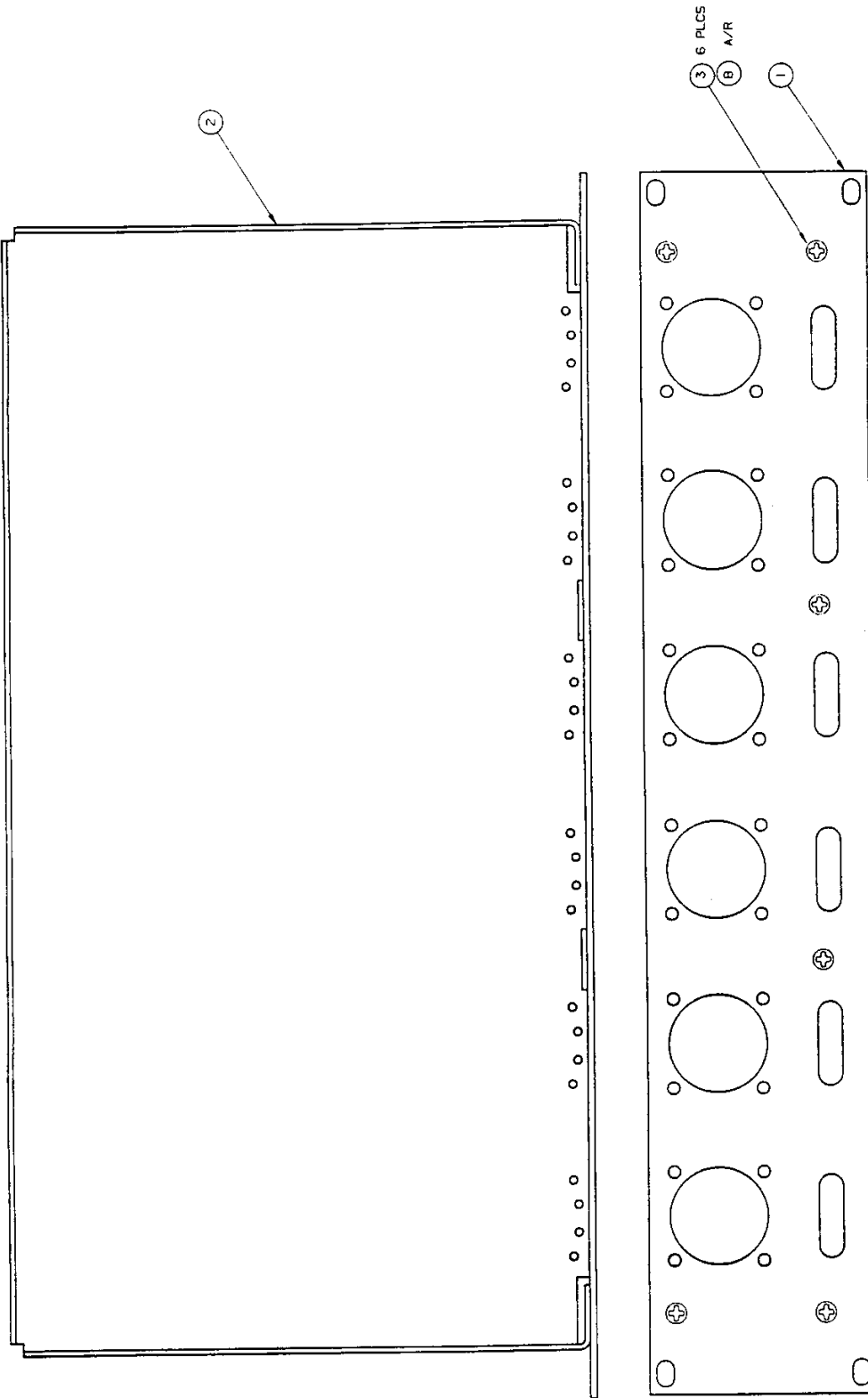
ASSEMBLY INSTRUCTION SHEET

FOR 1250-62, 1250-63,  
Option 05 and Option 06

Publication No. 980703

May 1993



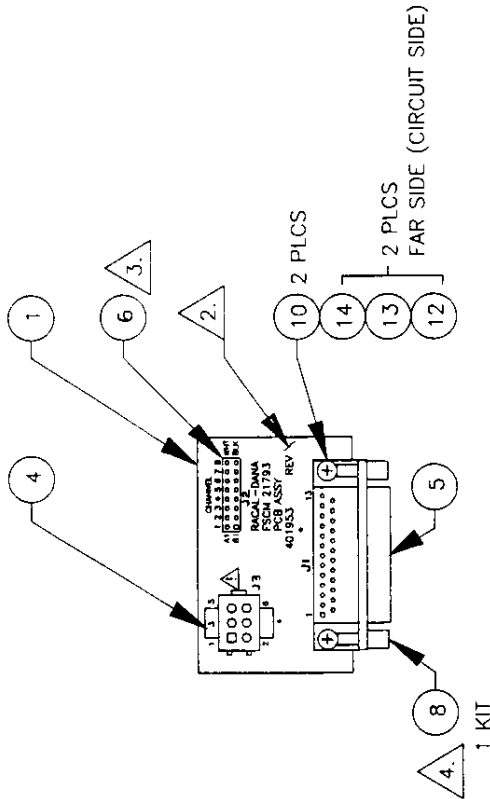


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DOCUMENT TITLE			
<b>CHASSIS ASSY, OPT 05</b>		DOCUMENT NO	REV
SIZE	CODE IDENT NO	<b>404929</b>	<b>B</b>
SCALE	1/1	SHEET	1 OF 1

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- 4. DISCARD ALL EXTRA HARDWARE PACKAGED W/ITEM 8 AND INSTALL SCREW LOCK AT J1 (ITEM 5). (WILL BE REMOVED BY CUSTOMER AND INSTALLED THRU PANEL.)
- 3. INSTALL ITEM 6 WITH SHORT PINS INSTALLED IN PCB (ITEM 1).
- 2. INKSTAMP LATEST REV. ON COMPONENT SIDE IN INDICATED AREA.
- 1. REFERENCE SCHEMATIC 431953.

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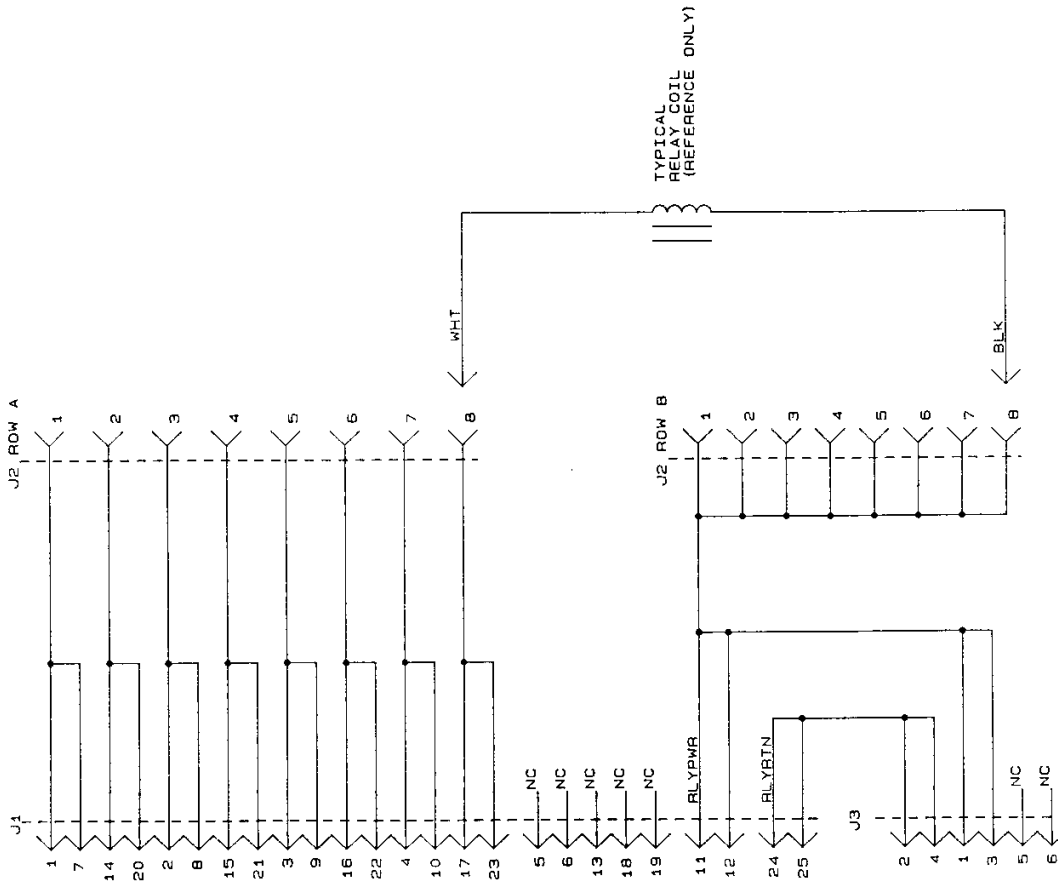
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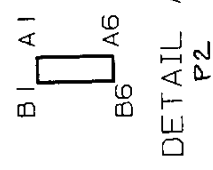
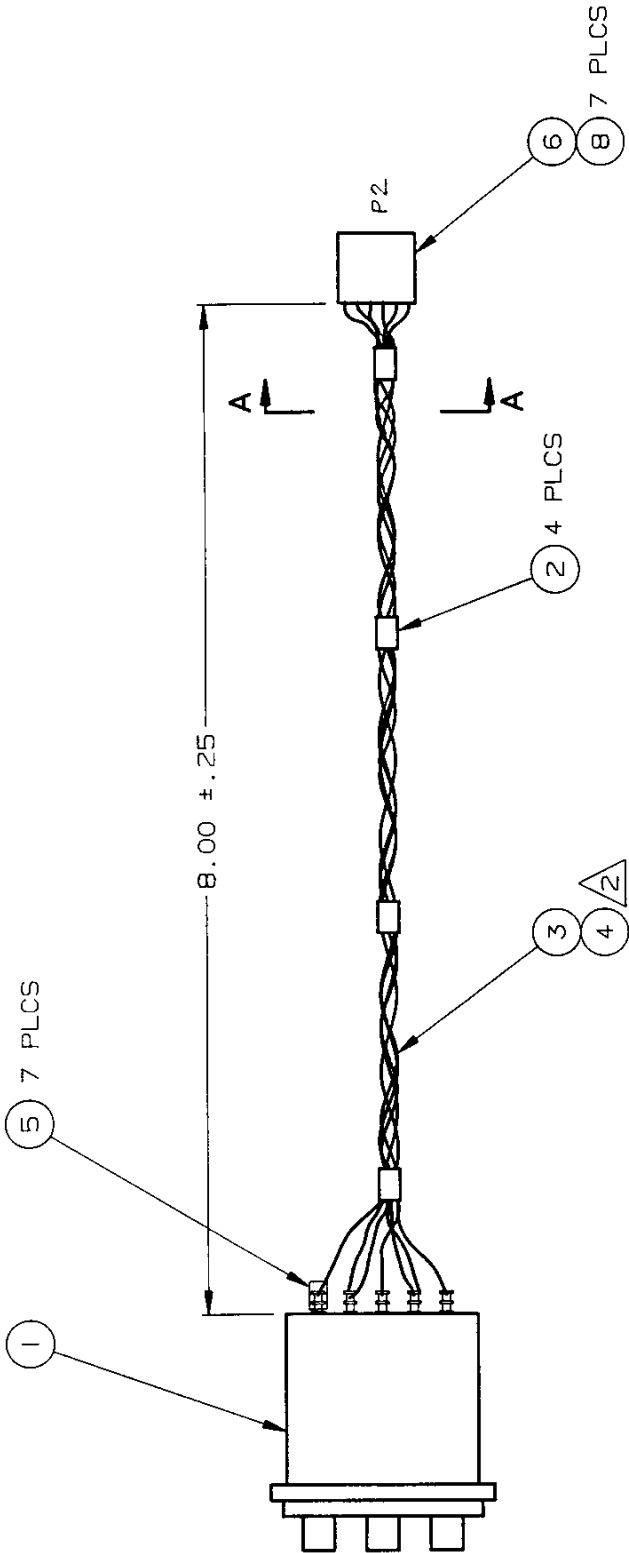
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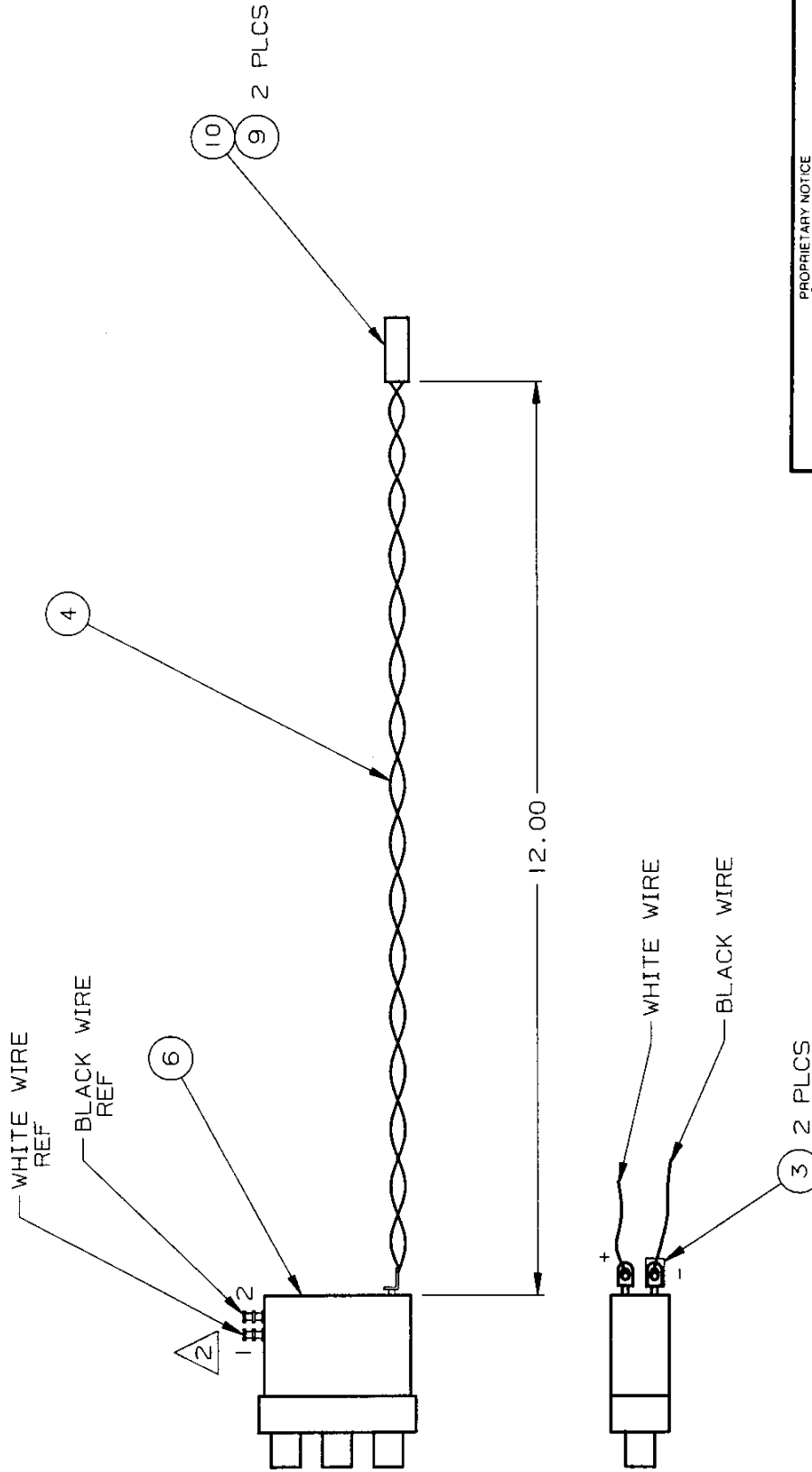
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RELAY ASSY, SP6T 18 GHZ	
SIZE	CODE IDENT NO
B	21793
REV	DOCUMENT NO
B	407016
SCALE	SHEET   OF 3
1:1	1 OF 3

- 2 SEE SHEET 3 FOR WIRE LIST.
- 1 BAG ITEMS 7, 9, 10, 12-14 LISTED ON PL AND COMPLETED CABLE IDENTIFY AS P/N 407016 AND CURRENT REVISION LETTER.

NOTES: UNLESS OTHERWISE SPECIFIED







- 2 ALTERNATE TERMINAL LOCATION ON SOME VENDOR RELAYS.
- 1 BAG ITEMS 1, 8, 13-16 LISTED ON PL AND COMPLETED CABLE. IDENTIFY AS P/N 407015 AND CURRENT REVISION LETTER.

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SIZE	CODE IDENT NO	DOCUMENT NO	REV
B	21793	407015	A
SCALE	L / 1	SHEET	1 OF 2

NOTES: UNLESS OTHERWISE SPECIFIED

## 404929 CHASSIS ASSY., OPT. 05

REF DESIG	RACAL-DANA P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
{1}1	455782	FRONT PANEL, OPTION 05	21793	455782
{2}1	455783	CHASSIS OPT. 05	21793	455783
{3}6	615558	SCREW, PFH, 100 DEG., CSK, 6-32 X .375	-	-
{4}24	610947	WASHER, SHOULDER, #6	86928	5607-73
{5}24	611620	WASHER, FIBER FLAT, #6	83330	2160
{6}12	610719	WASHER, SHOULDER, #4	06540	2705-18763-N116
{7}3	455785	INSULATOR, SWITCH COAX	21793	455785
{8}A/R	920962	LOCTITE, 242, MED STR.	05972	272

## 401953 PCB ASSY., DISCRETED RELAY, OPT. 06

REF DESIG	RACAL-DANA P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
J1	601722	CONNECTOR, PLUG, D-SUB, 25-PIN	59610	DBE25P-731
J2	601731	CONNECTOR, PCB, PLUG, 16-PIN	52072	CA-D16-23B-43
J3	601218	CONNECTOR, PWR, PLUG, 6-PIN	00779	19-350258-1
{1}1	411953	PCB DISCRETE RELAY (UNLOADED)	21793	411953
{8}1	611092	HARDWARE KIT, D-SUB, 4-40 THD, FEMALE	00779	205817-3
{10}2	615043	SCREW, PPH, 4-40X.312	-	-
{12}2	617016	NUT, HEX, 4-40	---	---
{13}2	617102	WASHER, FLAT, #4, LIGHT SERIES	-	-
{14}2	617127	WASHER, LOCK, #4, LIGHT SERIES	-	-

## 1250 User Manual

### 407016 - 1250-62 RELAY ASSY., SP6T 18 GHZ

REF DESIG	RACAL-DANA P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
{1}1	1310203	RELAY, 1P6T, 18 GHZ	150667	HQ6-412K3-F
{2}4	1610777	CABLE TIE	116956	108-432
{3}A/R	1524000	WIRE, TEFLON STRANDED, 24 GA, WHT	-	-
{4}A/R	1524999	WIRE, TEFLON STRANDED, 24 GA, BLU	-	-
{5}A/R	1500009	TUBING, SHRINK, . 12 ID, BLK	129005	RNF-100-1-1/8
{6}1	1601511-012	CONNECTOR, RECEPT, 12-PIN	100779	12-530902-0
{7}4	1610935	WASHER, SHOULDER, #6	186928	15607-72
{8}7	1611053	TERMINAL, CRIMP	100779	1530553-2
{9}4	1611620	WASHER, FIBER FLAT, #6	183330	12160
{10}4	1615062	SCREW, PPH, 6-32 X .625	-	-
{12}4	1617005	NUT, HEX, 6-32	-	-
{13}4	1617103	WASHER, FLAT, LIGHT, #6	-	-
{14}4	1617128	WASHER, LOCK, #6, LIGHT SERIES	-	-

### 407015 - 1250-63 RELAY ASSY., SPDT 18 GHZ

REF DESIG	RACAL-DANA P/N	DESCRIPTION	FSC	MANUFACTURER'S P/N
{1}1	1455785	INSULATOR, SWITCH COAX	121793	1455785
{3}A/R	1500009	TUBING, SHRINK, . 12 ID, BLK	129005	RNF-100-1-1/8
{4}A/R	1500132	WIRE, TEFLON TWISTED PAIR, 24 GA, BLK/WHT	-	-
{6}1	1601233	SWITCH, COAX, SPDT, 18 GHZ	125656	12S1A31
{8}2	1610719	WASHER, SHOULDER, #4	106540	12705-18763-N116
{9}2	1611053	TERMINAL, CRIMP	100779	1530553-2
{10}1	1611054	CONNECTOR, CABLE, 2-PIN	100779	1530554-1
{13}2	1615049	SCREW, PPH, 4-40 X .875	-	-
{14}2	1617004	NUT, HEX, 4-40	-	-
{15}2	1617102	WASHER, FLAT, #4, LIGHT SERIES	-	-
{16}2	1617127	WASHER, LOCK, #4, LIGHT SERIES	-	-

## List of Suppliers

FSC	SUPPLIER
00779	AMP, INC. HARRISBURG, PA
05972	LOCTITE CORP. HARTFORD, CT
06540	AMATOM ELECTRONIC HARDWARE NEW ROCHELLE, NY
16956	DENNISON MFG. CO. FRAMINGTON, MA
21793	RACAL-DANA INSTRUMENTS INC. IRVINE, CA
25656	DB PRODUCTS INC. PASADENA, CA
29005	STORM PRODUCTS CO. LOS ANGELES, CA
50667	DYNATECH MICROWAVE TECH CALABASAS, CA
52072	CIRCUIT ASSY. CORP. COSTA MESA, CA
59610	SOURIAU INC. VALENCIA, CA
83330	HERMAN H. SMITH, INC. BROOKLYN, NY
86928	SEASTROM MFG. CO. GLENDALE, CA