SC SERIES

SERVICE MANUAL

C A S CORPORATION

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CHAPTER-I
THE GENERAL INTRODUCTIONS

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A. THE PREFACE

Thank you for purchasing our CAS scale.
This scale has been designed with CAS reliability, under rigid quality control
and with outstanding performance.
Your departments can enjoy with this high quality reliable CAS product.
This electronic load cell scale eliminates all the moving parts and furnish
an accurate digital display of all information.
We believe that your needs will be satisfied and you will have proper reliability
with in variable weight.
This manual will help you with proper operations and care of the SC series.
Please keep it handy for the future references.

B. THE PRECAUTIONS

1. Check the power voltage.
2. Put the scale on a flat and stable place.
3. Level the scale with four adjusters.
   An air bubble of the level should be centered.
4. Plug into an AC outlet 10 minutes before operations.
5. Keep the scale away from strong E.M.I. noises.
6. This scale must be installed in a dry and liquid free environment.
7. Do not expose the scale to sudden temperature change.
8. Do not expose the scale to sudden impact.

C. THE SPECIFICATIONS

M O D E L	SC - 05P	SC - 10P	SC - 25P
MAX. CAPACITY	5,000g / 10 lbs	10,000g / 25lbs	25,000g / 50lbs
MIN . GRADUATION	1g / 0.002 lb	2g / 0.005lb	5g / 0.01lb
RESOLUTION	1 / 5,0 0 0		
INTERNAL RESOLUTION	1 / 1 0 0,0 0 0		
LACK OF SAMPLE	25g / 0.05 lb	50g / 0.125 lb	125g / 0.25 lb
LACK OF UNIT WEIGHT	0.5g / 0.001 lb	1g / 0.0025 lb	2.5g / 0.005 lb
MIN. U/W	0.0 5 g	0.1 g	0.25 g
MAX. U/W MEMORY	1,0 0 0		
DISPLAY	5 DIGITS (WEIGHT), 5 DIGITS (U/W), 5 DIGITS (COUNT)		
INDICATION LAMPS	ZERO, TARE, LACKED SAMPLE, LACKED U/W, g, lb		
TARE DEDUCTION	- 4,9 9 9 g	- 9,9 9 8 g	- 9,9 9 5 g
POWER SOURCE	110, 220 VAC / 50, 60 HZ		
POWER CONSUMPTION	APPROX. 10W		
TRAY SIZE (mm/inch)	372(W) × 278(D) / 14.6(W) × 11(D)		
PRODUCT SIZE(mm/inch)	388(W) × 365(D) × 150(H) / 15.3(W) × 14.4(D) × 5.9(H)		

D. SEALING METHOD

①
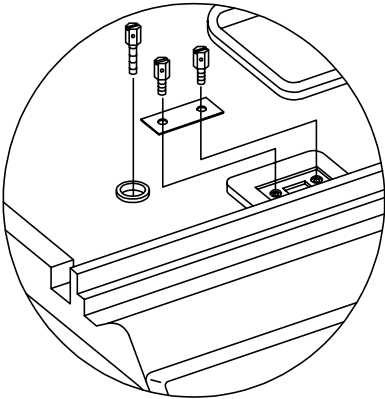
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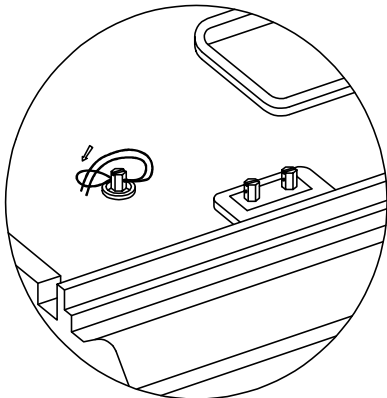
⑥

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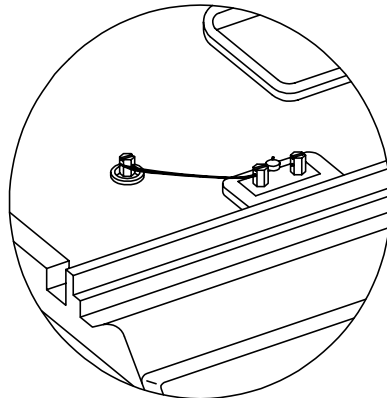
CHAPTER-II
THE CALIBRATIONS

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A. GENERAL SPAN CALIBRATION

In this chapter, we explained about calibration and those calibration should be done
for the gravity difference of each nation.
To calibrate span on the gravity difference,   A.2 and A.3 processes could be skipped.
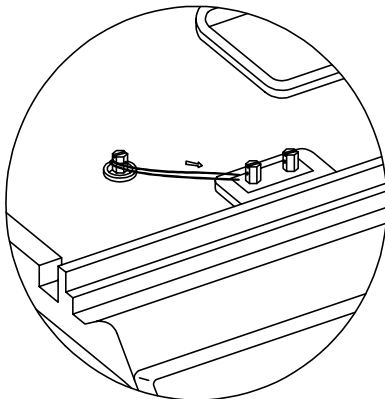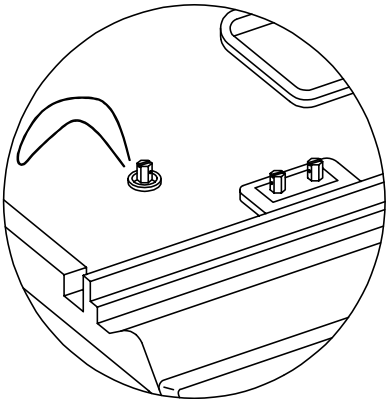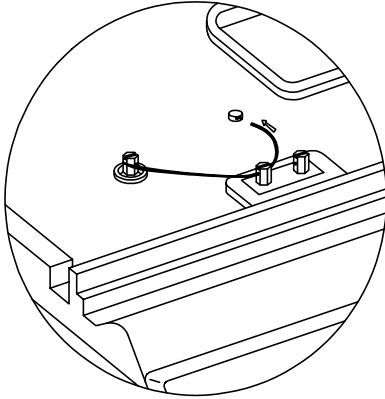
```
 _____                        _____
|    |  |          |                          |      | |         |
|____|__|_____|    ○    CAL              |_____|_|_____|       CAL
|_____|                      |_____|
      NORMAL   MODE                              CALIBRATION  MODE
```
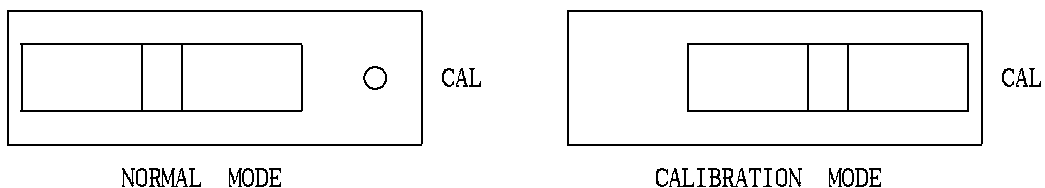
A.1 SET TO THE CALIBRATION MODE

1. Put off CAL switch cover and set the calibration switch to the right as shown in
   above.
2. Turn on the power switch. "CAL" will be flickered three times and then disappeared.

A.2 CHECKING THE ZERO POINT

1. Put the tray on and read the zero point by pressing **C** key and **5** key .
2. It is O.K when the value exist within 0 through 50,000 on the count display column.

A.3 CHECKING THE ZERO VALUE

1. Make the weight display column to "0" by pressing zero key and load full weight.
2. It is normal when the reading is higher than 100,000, but the display can show only
   5 digits. For instance, 100,000 displays as 0.

A.4 SPAN ADJUSTMENT

This product is available to calibrate by selecting Metric system of Pound system.
Therefore, do the calibration after set-up condition according to following TABLE 1.
(NOTE : Available to skip in case of calibrate with Metric system.)
Press C key and 4 key, "C set" would be displayed in weight display column
as below.   After this, begin entering refer to the TABLE 1.

```
 _____
|   _____    _____       |
|  |   C   s e t    |  |            1   |       |  step counter
|  |_____|  |_____|       |
|                       _____        |
|                      |          X  X  |       |  condition factor
|                      |_____|       |
|_____|
```
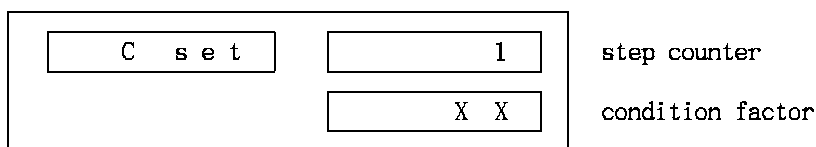
Press **STORE** key to go to next step and after finishing 4 times entering, display
shows "End" message.

<< TABLE 1. >>

C + 4		SC - 05P		SC - 10P		SC - 25P	
		METRIC	POUND	METRIC	POUND	METRIC	POUND
STEP	1	0 0		0 0		0 0	
STEP	2	0 0	8 0	0 1	8 1	0 2	8 2
STEP	3	0 0		0 0		0 0	
STEP	4	0 0		0 0		0 0	

1. Empty the tray and press **C** key. And, press **3** key.
   you can see "ULOAd" in weight display column and if SET key has pressed, "Stable" will be displayed first and perform count down itself 9 through 0.
2. Then "LOAd" will be displayed.
   Now load full weight and press SET key again. After counting down, "End" message displayed and it will be off.
3. When the fine span trimming is needed, remove the weight from the tray and press **1** key. Next, load full weight.
   This time, displayed value "0" means 100,000 and all of those displayed 1 count means 100,001. Therefore, if 2 is displayed, fine span trimming should be performed by pressing **7** key twice to decrease or **7** key and **9** key to increase.
   (It is recommended that the tolerence is ± 1.)

A.5 RETURN TO THE NORMAL MODE

1. Empty the tray and press **C** key and next, press **0** key.
   Now, this scale return to the normal mode.
2. Return the CAL switch to normal position(initial position.)

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CHAPTER-III
THE PART REPLACEMENTS

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A. REPLACEMENT OF THE LOAD CELL

A.1 REPLACEMENT OF THE LOAD CELL

1) Remove the tray and separate platform by loosen hex wrench bolts.
   Next, loosen four bolts to remove the upper case.
2) Disconnect load cell wire connected with analog board by soldering.
3) Separate load cell from the bracket to replace it with a new one.
4) Connect load cell wire to analog board(Refer to wiring diagram.)

A.2 CORRECTION ECCENTRICITY

1) Put the platform on the load cell but do not cover with upper case.
2) Put off CAL switch cover on the upper case and set the CAL switch to the right.
3) Turn on power switch. "CAL" will be flickered three times and be blank.
4) Read the output value from load cell by pressing 5 key.
5) ZERO key clears the weight column to "0", if it is needed.
6) Measure with a quarter weight of full capacity by turns as shown in below.
   And check an each point is within +- 1 count tolerance with 1/4 of a full load..
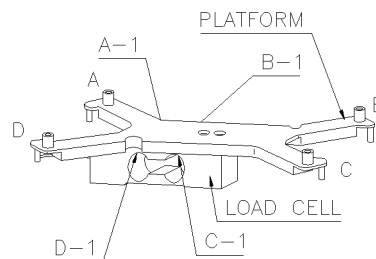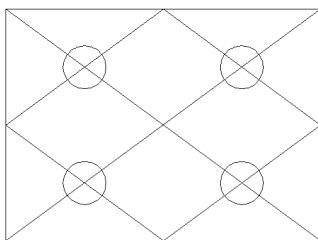
7) Compare all of four values that output from load cell.
   Maximum value is regarded as a base and grind the place in load cell where shows
   less than other value.
8) Perform repeatedly to adjust the value within 5 counts tolerance.

A.3 CALIBRATION
   Refer to Chapter II.

B. REPLACEMENT OF THE ANALOG CIRCUIT BOARD

B.1 REPLACEMENT OF ANALOG CIRCUIT BOARD

1) Separate tray, platform and upper case each other.
2) Disconnect load cell wire and separate the connector of CN2.
3) Loosen two bolts at the bottom of analog P.C.B.
4) Replace the circuit with a new one.

B.2 CALIBRATION
Refer to Chapter II.

C. REPLACEMENT OF KEYBOARD

C.1 REPLACEMENT OF KEYBOARD

1) Put off upper case and separate tail of membrane switch from CN3 on display P.C.B.
2) Disconnect membrane switch from upper case(key board pannel).
3) Replace with a new one.

C.2 KEY TEST

1) Set the CAL switch to the CAL position and press the 2 key to go to key test mode.
2) Check buzzer sound and key code by pressing each key except C key .

C.3 RETURN TO NORMAL MODE

1) Turn the CAL switch to the left to go to normal position.
2) Turn off power switch and turn on again.

CHAPTER-IV
THE TRANSFORMER

A. THE TRANSFORMER
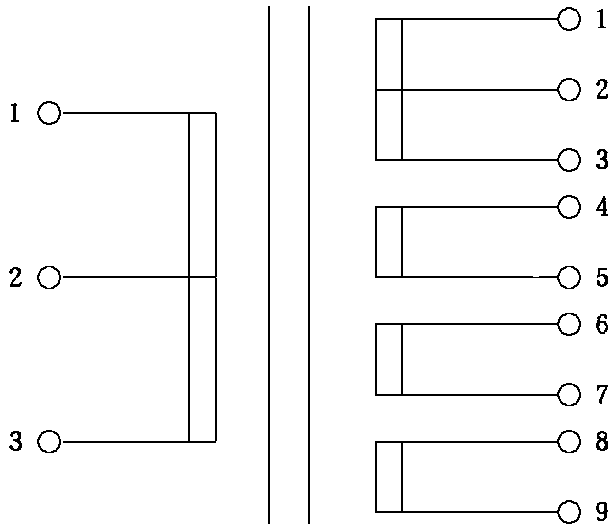
QUALITY OF LEAD WIRE AND LENGTH						
	NO.	COLOR	WIRE LENGTH	TREATMENT (mm)	mA	V
INPUT	1	WHITE	150 mm	± 10		0
	2	BROWN	〃	〃		110
	3	RED	〃	〃		220
OUTPUT	1	BLACK	300 mm	〃	700	1.65
	2	BROWN	〃	〃	0	0
	3	RED	〃	〃	700	1.65
	4	ORANGE	〃	〃	120	25.5
	5	YELLOW	〃	〃		
	6	GREEN	〃	〃	500	8.5
	7	BLUE	〃	〃		
	8	PURPLE	〃	〃	120	14
	9	BRAY	〃	〃		

✱ CORE : 57×25 mm
✱ 50Hz / 60Hz

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CHAPTER-V
THE SCHEMATICS AND THE DIAGRAMS

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A.1 MAIN CIRCUIT DIAGRAM

A.2 DISPLAY CIRCUIT DIAGRAM

B. WIRING DIAGRAM
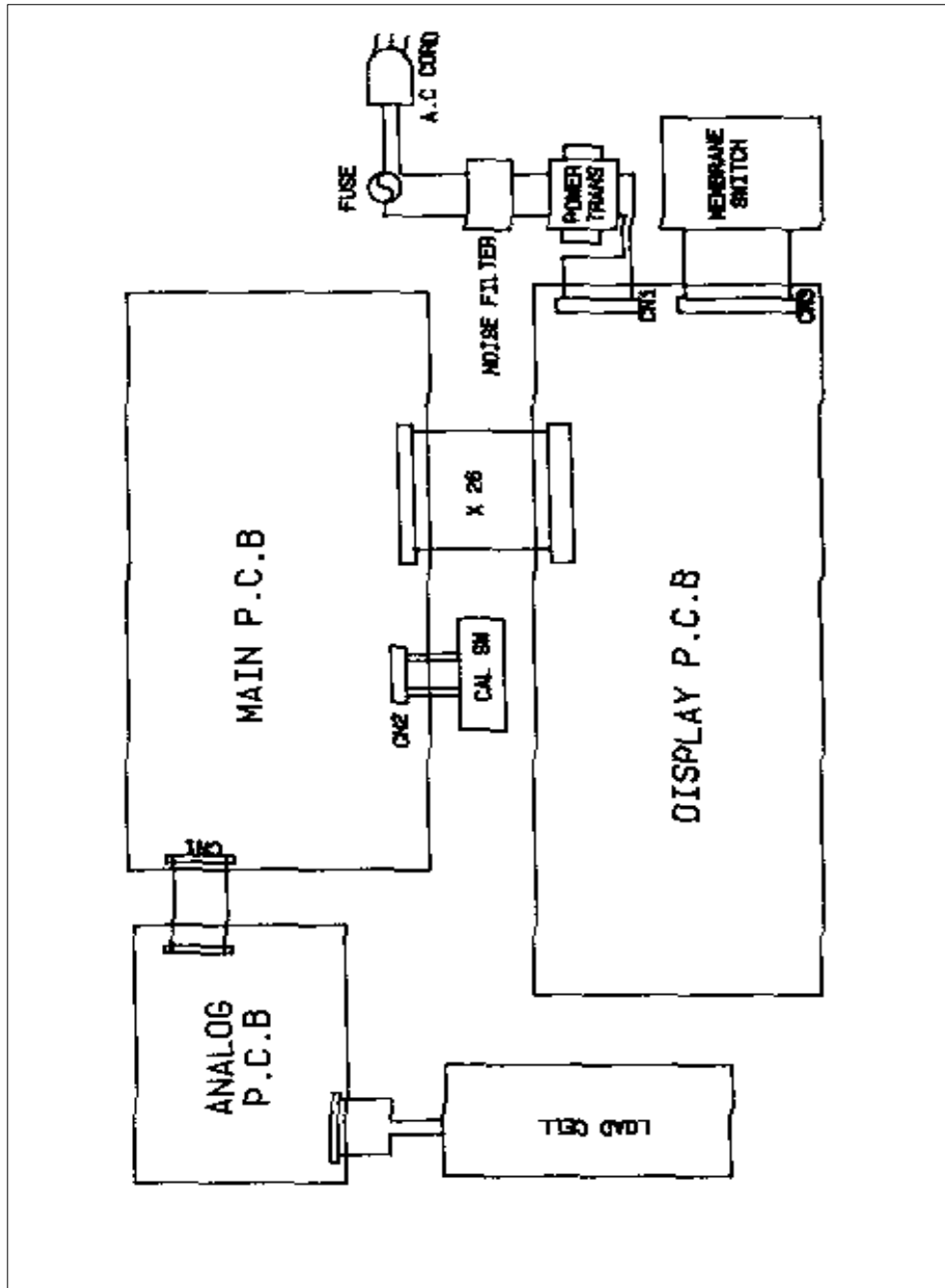
C. PARTS LOCATION

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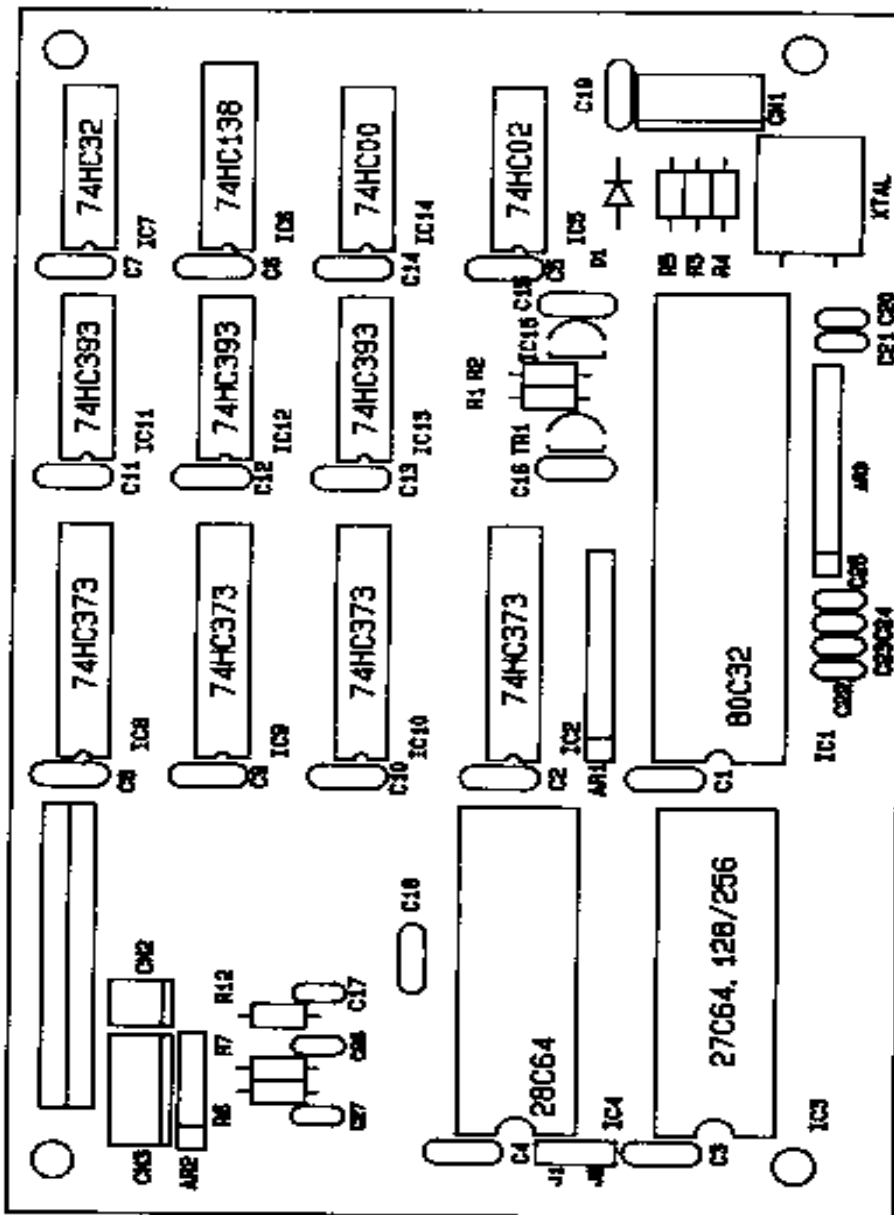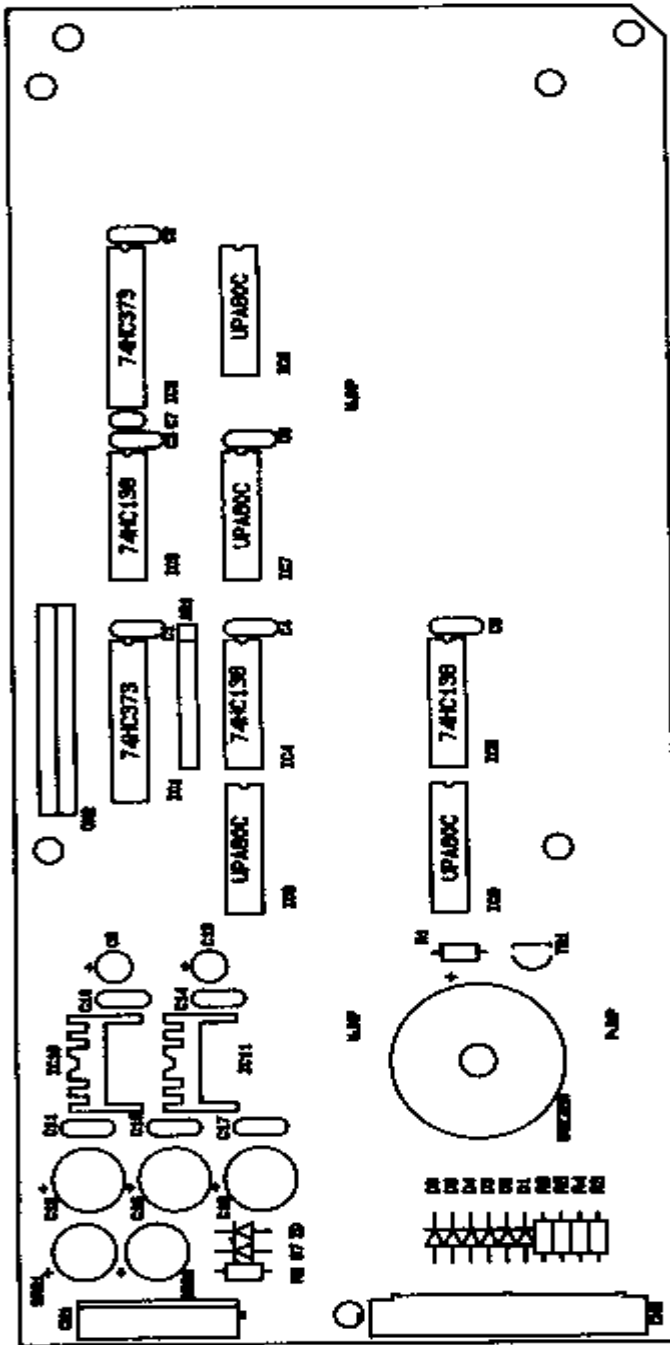
CHAPTER-VI
THE OTHERS

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A. FOR THE SERIAL INTERFACES

THE PROTOCOLS FOR THE CAS STANDARD SERIAL INTERFACE

BELOW SPECIFICATIONS ARE STANDARD PROTOCOL FOR THE RS-232C INTERFACE.
THIS IS HALF-DUPLEX COMMUNICATION RS-232C.

A.1 THE COMMUNICATION AGREEMENTS

1. BAUD RATE -> 9,600 BPS
2. DATA BIT -> 8 BIT
3. STOP BIT -> 1 BIT
4. PATIRITY BIT -> NO
5. COMMUNICATION LEVEL -> RS-232C LEVEL
6. DATA FORMAT -> ASCII
7. THE COMMAND DEFINITIONS

6-1. "ENQ" -> 05H	6-7. "EOT" -> 04H
6-2. "ACK" -> 06H	6-8. "DC1" -> 11H
6-3. "NAK" -> 15H	6-9 "DC2" -> 12H
6-4. "SOH" -> 01H	6-10. "DC3" -> 13H
6-5. "STX" -> 02H	6-11. "DC4" -> 14H
6-6. "ETX" -> 03H	

A.2 THE WIRE CONNECTIONS

A.2.1 THE WIRE CONNECTIONS OF THE D-SUB 9 PIN CONNECTOR OF A COMPUTER SIDE


```
        SCALE                                          COMPUTER
   TXD(PIN 2) ─────────────────────────────────────── RXD(PIN 2)
   RXD(PIN 3) ─────────────────────────────────────── TXD(PIN 3)
   GND(PIN 7) ─────────────────────────────────────── GND(PIN 5)
                                                    ┌─ RTS(PIN 7)
                                                    └─ CTS(PIN 8)
                                                    ┌─ DTR(PIN 4)
                                                    └─ DSR(PIN 6)
```
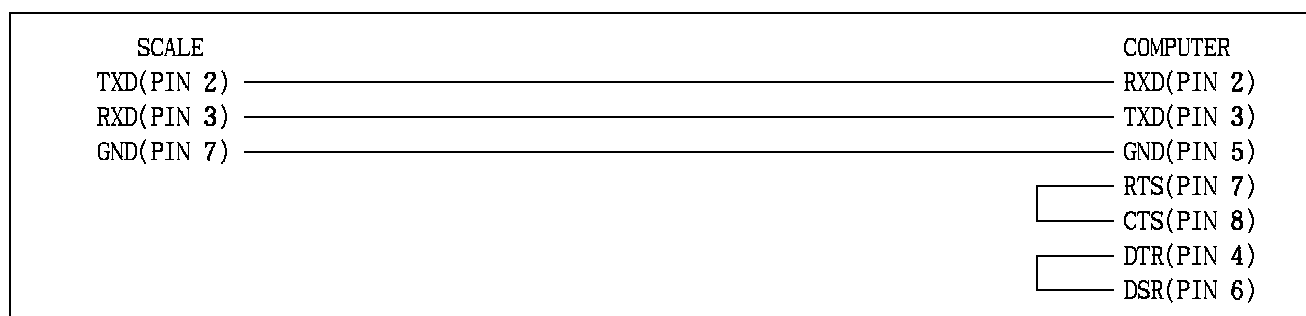
A.2.2 THE WIRE CONNECTIONS OF THE D-SUB 25 PIN CONNECTOR OF A COMPUTER SIDE

```
          SCALE                                        COMPUTER
       TXD(PIN 2) ──────────────────────────────────── RXD(PIN 3)
       RXD(PIN 3) ──────────────────────────────────── TXD(PIN 2)
       GND(PIN 7) ──────────────────────────────────── GND(PIN 7)
                                               ┌─────── RTS(PIN 4)
                                               ├─────── CTS(PIN 5)
                                               └─────── DCD(PIN 8)
                                               ┌─────── DSR(PIN 6)
                                               └─────── DTR(PIN 20)
```

A.3 THE PROTOCOL

```
        SCALE SIDE              │                       │    COMPUTER SIDE
                                │      "ENQ(05H)"        │
                                │<──────────────────────│ 1. COMPUTER SENDS "ENQ"
                                │                        │
  2. SCALE SENDS "ACK"          │      "ACK(06H)         │
     WHERE, NO ANSWER FROM THE  │───────────────────────>│
     COMPUTER WITHIN 3 SECONDS  │                        │
     SCALE VOIDS THIS REQUEST.  │ "DC1" FOR WEIGHT DATA  │ 3. COMPUTER SENDS "DC1"
                                │                        │    OR "DC2"
                                │ "DC2" FOR ALL DATA     │
                                │<──────────────────────│
                                │                        │
  4. SCALE SENDS DATA BLOCKS    │    SENDS DATA BLOCKS   │
                                │───────────────────────│
                                │───────────────────────│
                                │                        │
```
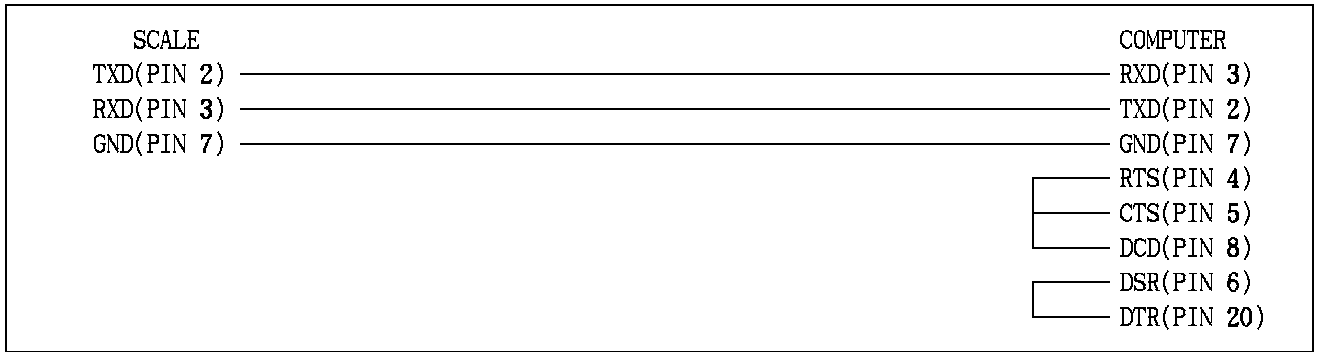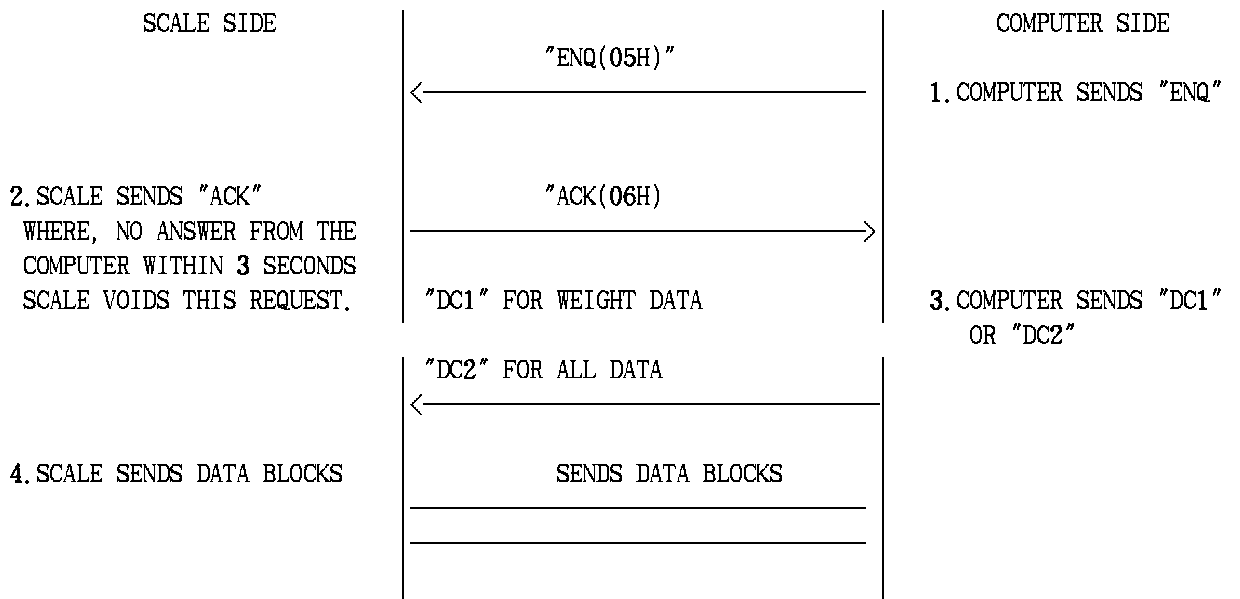
A.4. THE DATA TRAINS

1. THE DATA TRAINS FOR THE "DC1"

SOH	STX	STA	SIGN	W 5	W 4	W 3	W 2	W 1	W 0	UN1	UN0	BCC	ETX	EOT

└ COMMANDS ┘ └──────────────── DATA BLOCK ────────────────┘ └ COMMANDS ┘

REMARKS :
.STA -> A WEIGH STATUS OF THE SCALE
      SCALE IS STABLE -> "S" , NOT STABLED -> "U"
.SIGN ->SIGN OF THE WEIGHT DATA
      ZERO AND POSITIVE WEIGHT -> " " , NEGATIVE WEIGHT -> "-" ,
      OVER LOAD -> "F"
.W5 THROUGH W0 -> WEIGHT DATA
      BUT ALL "F"s WHEN THE SCALE IS PUT ON OVER LOAD.
.UN1 THROUGH UN0 -> UNIT OF WEIGHT(kg OR 1b)
.BCC -> BLOCK CHECK CHARACTER
      BCC IS CREATED BY EXCLUSIVE ORED OF A DATA BLOCK.

2. THE DATA TRAINS FOR THE "DC2"

SOH	STX	P 7	P 6	P 5	P 4	P 3	P 2	P 1	P 0	BCC	ETX

STX	STA	SIGN	W 5	W 4	W 3	W 2	W 1	W 0	UN1	UN0	BCC	ETX

STX	P 7	P 6	P 5	P 4	P 3	P 2	P 1	P 0	BCC	ETX	EOT

REMARKS :
.STA -> A WEIGH STATUS OF THE SCALE
      SCALE IS STABLE -> "S" , NOT STABLED -> "U"
.SIGN ->SIGNS OF THE WEIGHT DATA
      ZERO AND POSITIVE WEIGHT -> " " , NEGATIVE WEIGHT -> "-" ,
      OVER LOAD -> "F"
.P7 THROUGH P0 -> PRICE DATA
      IF THE OVER FLOW IS HAPPEN IN PRICE, ALL "F"s WILL FILL TO DATA BLOCK OF THE PRICE.
.W5 THROUGH W0 -> WEIGHT DATA
      BUT ALL "F"s WHEN THE SCALE IS PUT ON OVER LOAD.
.UN1 THROUGH UN0 -> UNIT OF WEIGHT(kg OR 1b)
.BCC -> BLOCK CHECK CHARACTER
      BCC IS CREATED BY EXCLUSIVE ORED OF EACH DATA BLOCKS.

B. EXPLODED VIEW

REV : 00

3P AC Cord
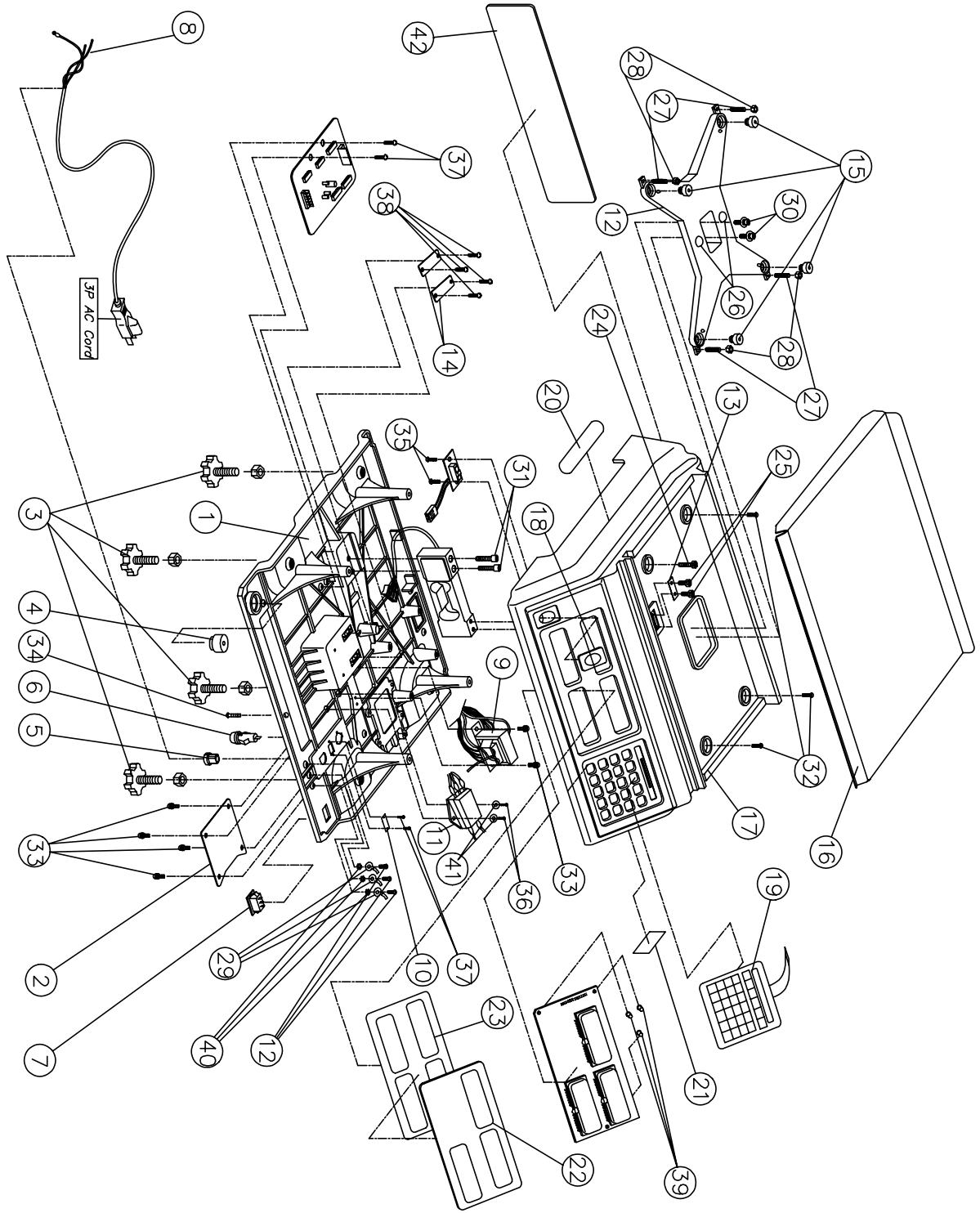
C. FULL PARTS LIST

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION
01		ASS'Y ELECT PART	SC-SERIES	SET	1	
02		ASS'Y MAIN PCB	SC-SERIES	SET	1	
03	6114-A00-0581	MAIN PCB	6114-A00-0581	EA	1	
04	6202-A00-0000	IC (C-MOS)	74HC00P	EA	1	IC14
05	6202-A00-0002	IC (C-MOS)	74HC02P	EA	1	IC5
06	6202-A00-0032	IC (C-MOS)	74HC32	EA	1	IC7
07	6202-A00-0138	IC (C-MOS)	74HC138	EA	1	IC6
08	6202-E00-0373	IC (C-MOS)	74HC373	EA	4	IC2,8-10
09	6202-A00-0393	IC (C-MOS)	74HC393	EA	3	IC11-13
10	6204-C00-8032	IC (M.C.U)	80C32	EA	1	IC1
11	6218-E00-8054	IC (RESET)	8054ALB	EA	1	IC15
12	6220-C00-2864	IC (EP-ROM)	KM28C64-20	EA	1	IC4
13	6222-C00-2764	IC (EPROM)	27C64	EA	1	IC3
14	6280-AA0-1015	TRANSISTOR	2SA1015	EA	1	TR1
15	6286-A00-4004	POWER DIODE	IN4004	EA	1	D1
16	6300-A00-0028	IC SOCKET	28 PIN	EA	1	IC3
17	6534-A00-1000	RESISTOR	CFR 100Ω	EA	3	R3,4,5
18	6534-K00-0010	RESISTOR	CFR 1KΩ	EA	3	R2,6,7
19	6534-K00-0022	RESISTOR	CFR 2.2 KΩ	EA	1	R12
20	6534-K00-0047	RESISTOR	CFR 4.7KΩ	EA	1	R1
21	6545-E01-5103	NETWORK RESISTOR	M5-1-103J	EA	1	AR2
22	6545-E01-9103	NETWORK RESISTOR	M9-1-103J	EA	2	AR1,3
23	6710-A00-0010	CERAMIC-CON.	10pF/50V	EA	2	C20,21
24	6710-A00-0100	CERAMIC-CON.	100pF/50V	EA	7	C22~27
25	6714-A25-0001	MONOLITHIC-CON.	0.1UF/25V	EA	18	
26	7104-A00-5529	CRYSTAL	5.52960 MHZ	EA	1	XTAL
27	7804-A00-0005	CONNECTOR	LW0640-05	EA	1	CN1
28	7804-A00-0002	CONNECTOR	LWL0640-02	EA	1	CN2
29	7805-A00-0005	CONNECTOR	LWL0640-05	EA	1	CN3
30	7840-A00-9299	CONNECTOR (FEMALE)	200-113T	EA	2	

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION
01		ASS'Y DISPLAY PCB	SC-SERIES	SET	1	
02	6124-A00-0251	DISPLAY P.C.B	6124-A00-0250	EA	1	
03	6202-A00-0138	IC (C-MOS)	74HC138	EA	3	I.C 3,4,5
04	6202-E00-0373	IC (C-MOS)	74HC373	EA	2	I.C 1,2
05	6206-E00-0080	IC (DRIVER)	uPA 80C	EA	4	I.C 6,7,8,9
06	6218-A00-7805	IC (REGULATOR)	7805	EA	1	I.C 11
07	6218-A00-7810	IC (REGULATOR)	7810	EA	1	I.C 10
08	6280-A00-1015	TRANSISTOR	2SA1015	EA	1	TR1
09	6285-A00-0153	BRIDGE DIODE	RB-153	EA	2	BRG1,2
10	6286-A00-4004	POWER DIODE	IN4004	EA	1	D7
11	6288-A00-4736	ZENER DIODE	6.8V/1W	EA	1	ZD
12	6287-A00-4148	SWITCHING DIODE	IN4148	EA	6	D1,2,3,4,5,6
13	6534-A00-1000	RESISTOR	CFR 100Ω	EA	4	R3,4,5,6
14	6534-K00-0047	RESISTOR	CFR 4.7KΩ	EA	1	R1
15	6534-K00-0300	RESISTOR	CFR 30KΩ	EA	1	R2
16	6545-E01-9103	NETWORK RESISTOR	M9-1-103J	EA	1	AR1
17	6702-A16-1000	ELECTRIC CON.	1000UF/16V SG	EA	1	C16
18	6704-A25-0470	ELECTRIC CON.	470μF/25V SG	EA	1	C12
19	6704-A50-0220	ELECTRIC CON.	220μF/50V SG	EA	1	C18
20	6704-A16-0100	ELECTRIC CON.	100μF/16V	EA	2	C9,13
21	6710-A00-0100	CERAMIC-CON.	100pF/50V	EA	1	C7
22	6714-A25-0001	MONOLITHIC-CON.	0.1μF/25V	EA	11	C1-6,10,11,14,15
23	7004-A00-0070	BUZZER	20BP-4F	EA	1	BUZZER
24	7204-E00-0709	F.I.P & V.F.D	6D15B	EA	3	
25	7674-A00-0080	PCB SUPPORTER	DASC-8N	EA	4	
26	7804-A00-0009	CONNECTOR	LW 0640-09	EA	1	CN1
27	7840-A00-0011	MEMB. SW. CONNECT	FCZ254-11S	EA	1	CN3
28	7840-A00-9294	CONNECTOR (MALE)	929400-40 (MALE)	EA	0.670	

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION
29	1050-A00-0320	HEAT SINK	SY-200	EA	2	I.C 10,11
30	1502-A00-0306	TAPPING SCREW	M3 * 6	EA	4	PCB SUPPORTER
31	1505-A00-0308	PAN SCREW	M3*0.5*8	EA	2	WITH HEAT SINK
32	2607-A00-0000	F.I.P CUSHION	30*20*2t	EA	3	WITH F.I.P
01		ASS'Y ANALOG PCB	SC-10P	SET	1	
02	6144-A00-0202	ANALOG PCB	6144-A00-0202	EA	1	
03	6202-A00-4001	IC (C-MOS)	4001BF	EA	1	IC7
04	6202-E00-4066	IC (C-MOS)	14066	EA	1	IC6
05	6214-A00-0393	IC (LINEAR)	LM-393	EA	1	IC4
06	6216-E00-4082	IC (OP-AMP)	4082	EA	3	IC2,3,5
07	6216-E00-0177	IC (OP-AMP)	OP-177	EA	1	IC1
08	6287-A00-4148	SWITCHING DIODE	IN4148	EA	1	D1
09	6506-K00-0010	RESISTOR	MFR 1KΩ -F	EA	2	R6,11
10	6506-K00-1000	RESISTOR	MFR 100KΩ -F	EA	3	R5,9,13
11	6506-M00-0010	RESISTOR	MFR 1MΩ -F	EA	1	R12
12	6530-FLA-0205	PRECISION RESISTO	FLAY 20K500B	EA	2	R1,2
13	6534-K00-0047	RESISTOR	CFR 4.7KΩ	EA	1	R18
14	6534-K00-0100	RESISTOR	CFR 10KΩ	EA	3	R10,15,20
15	6534-K00-0470	RESISTOR	CFR 47KΩ	EA	1	R14,19
16	6534-K00-1500	RESISTOR	CFR 100KΩ	EA	2	R7,8
17	6549-E00-0022	NETWORK RESISTOR	3B-45-ME5	EA	1	AR1
18	6700-A16-0010	TANTAL	10uF/16V	EA	2	EC1,2
19	6722-A00-0105	POLYESTER CONDENS	1uF/63V BOX	EA	1	C8
20	6722-A00-0224	POLYESTER CONDENS	0.22uF/63V BOX	EA	1	C7
21	6722-A00-0474	POLYESTER CONDENS	0.47UF/63V BOX	EA	3	C5,6,12
22	6720-U00-0100	MONOLITHIC-CON.	0.1UF/25V	EA	11	
23	7804-A00-0005	CONNECTOR	LW 0640-05	SET	1	CN2

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION
01		ASS'Y CAL SW PCB	S - 2000	SET	1	
02	6134-A00-0270	CAL SW. PCB	6134-A00-0070	EA	1	
03	7744-A00-0002	SLIDE SWITCH	1 NCA-2	EA	1	
04	7862-A00-0208	CONNECTOR WIRE	2 PIN*80m/m	EA	1	
01	1LC003	LOAD CELL ASS'Y	15 Kg	SET	1	
02	6504-A00-4600	RESISTER 1/4W	M.F.R 460Ω D	EA	1	
03	8003-A00-5228	AL MATERIAL	A2024-T81	Kg	0.685	
04	8013-A00-1050	CAS BALCO	90Ω	EA	1	
05	8013-A00-2050	SHIELD WIRE ASS'Y	ANGEL-256mm	EA	1	
06	8013-E00-0040	STRAIN GAGE	J2A-13-S0033K	EA	4	
07	8023-K00-0001	F-P.C.B	ANGEL-MB	EA	1	

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION

MECHANICAL PARTS

BODY , UPPER ASS'Y

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION
01	1100-A00-0050	BODY	S-2000	EA	1	
02	1034-A00-0260	BOTTOM COVER	84*70*1t	EA	1	
03	2600-A00-1051	ADJUST BOLT	M8 S-2000	EA	4	
04	1715-A00-0020	W/L GAUGE	φ15*8 S-2000	EA	1	
05	7654-A00-0632	CORD STOPPER	6NR32	EA	1	
06	7534-A00-0031	FUSE HOLDER	FH-30(S-2000)	EA	1	
07	7745-A00-0112	ON/OFF SWITCH	SL112A	EA	1	
08	7564-A00-0020	AC CORD(A)	7A750V 2P 2.5M	EA	1	
09	7504-A00-0050	POWER TRANS(57)	110/220V 50〜60Hz	EA	1	
10	1050-A00-0060	SELECT S/W COVER	30*13*0.5t(AL)	EA	1	
11	7514-A00-0020	NOISE FILTER	CN2-F30 (NFK-103T)	EA	1	
12	1100-A00-0550	PLATFORM	322*180*32	EA	1	
13	1004-A00-0080	SPAN HOLE COVER	39.8*9.8*1t	EA	1	
14	1004-A00-0122	CONNECT HOLE COVER	32.2*12.4*0.6	EA	2	
15	2600-A00-0060	PLATFORM RUBBER	φ20*16	EA	4	
16	1002-A00-0061	TRAY	SC-10	EA	1	
17	1700-A00-0060	UPPER CASE	388*365*95	EA	1	
18	1708*A00-2040	W/L GAUGE COVER	29.7*18.7*1t	EA	1	
19	2100-SC0-0010	MEMBRANE S/W	SC ENGLISH	EA	1	
20	1810-A00-0010	SPEC PLATE	ANGEL-ENGLISH	EA	1	
21	9010-A00-0060	STICKER	ON/OFF-S2000	EA	1	
22	1720-S01-1010	DISPLAY COVER	SC-10P(A) ENGLISH	EA	1	
23	2607-A00-0400	D/P COVER TAPE	S-2000 A	EA	1	
24	1082-A00-2020	SEALING BOLT	M4*0.7*13(S2000)	EA	1	

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION
25	1082-A00-2010	SEALING BOLT	M4*0.7*6(S2000)	EA	2	
26	2600-A00-1130	BUMPON(S2000 P/F)	SJ-5003	EA	2	
27	1532-A00-0415	STUD WRENCH BOLT	M4*0.7*15	EA	4	
28	1550-A00-0400	HEXAGON NUT	M4*0.7	EA	4	
29	7585-A00-1478	EARTH TERMINAL	GP140078	EA	3	
30	1531-S01-0620	WASHER WRENCH BOLT	M6*1.0*20(SUS)	EA	2	
31	1530-S00-0625	WRENCH BOLT	M6*1.0*25(SUS)	EA	2	
32	1515-S00-0416	TRUSS SCREW	M4*0.7*16(SUS)	EA	3	
33	1506-A00-0408	WASHER PAN SCREW	M4*0.7*8	EA	6	
34	1505-A00-0416	PAN SCREW	M4*0.7*16	EA	1	
35	1505-A00-0406	PAN SCREW	M4*0.7*6	EA	5	
36	1505-N00-0308	PAN SCREW	M3*0.7*8	EA	2	
37	1505-A00-0306	PAN SCREW	M3*0.7*6	EA	4	
38	1505-N00-0306	PAN SCREW	M3*0.7*6	EA	4	
39	1502-A00-0310	TAPPINHG SCREW-2	M3*0.7*10	EA	3	
40	3364-A00-0150	TOOTH WASHER	φ4.3*8.5*0.45	EA	3	
41	1560-A00-0305	FLAT WASHER	φ3.2*6*0.5	EA	2	
42	1720-A00-1040	D/P COVER - B	S-2000 PLU	EA	1	
43	7524-A00-6025	FUSE(UL)	0.25A/250V	EA	1	
44	7570-B00-0015	LEAD WIRE	0.18*20C*150m/m	EA	2	
45	7570-G00-0011	LEAD WIRE	0.18*20C100m/m	EA	1	
46	7624-A00-0100	TIE BAND	100mm	EA	1	
47	7870-A00-0520	FLAT CABLE CONNECTOR	5P*5P*200(RS-232)	EA	2	

C/T BOX ASS'Y

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION
01	7524-A00-6025	FUSE (UL)	0.25A/250V	EA	1	
02	9002-A00-0026	MANUAL	SC-TYPE (ENGLISH)	EA	1	
03	9050-A00-0605	FUSE POLY BAG	50*60*0.05t(ACCY)	EA	1	
04	9050-A00-2517	MANUAL POLY BAG	170*250*0.05t	EA	1	

NO	MAT'L CODE	PARTS NAME	SPECIFICATION	UNIT	Q'TY	LOCATION
05	9050-A00-6550	SET POLY BAG	500*650*0.05t(S2000)	EA	1	
06	9053-A00-0010	SILICAGEL	10g	EA	2	
07	9103-A00-2000	C/T BOX S-2000-1	600*430*235	EA	1	
08	9103-A00-2002	C/T BOX S-2000-2	630*455*575	EA	0.5	
09	9120-A00-5942	PAD - S-2000	590*420	EA	1	
10	9200-A00-2000	STYROPOL BOX	420*245*167(S-2000)	SET	1	
11	9203-A00-3604	STYROPOL PAD	365*40*63(S-2000)	EA	1	

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APPENDIX
DEVICE SPECIFICATION

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MAIN CIRCUIT DIAGAM
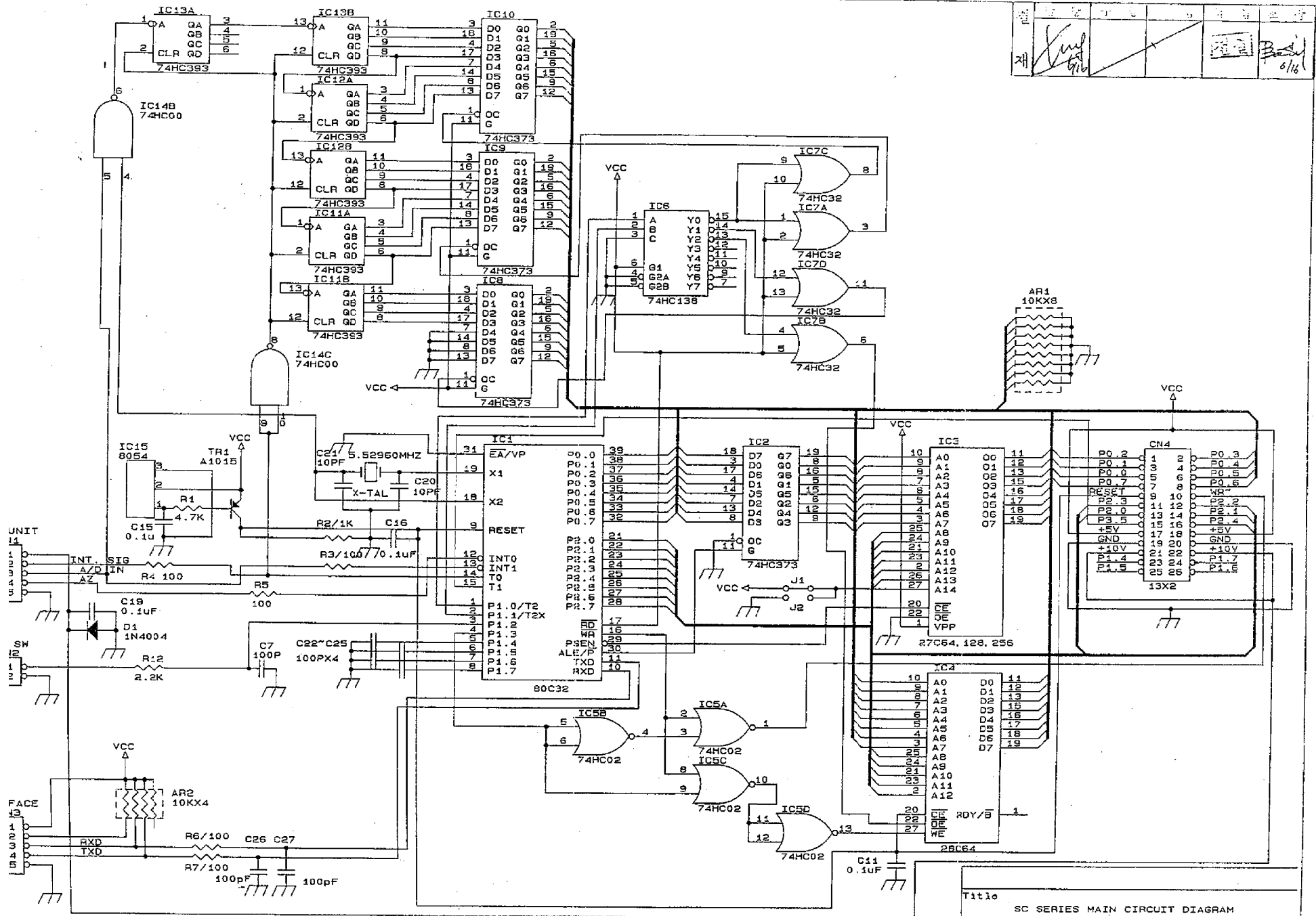
SC SERIES MAIN CIRCUIT DIAGRAM

3) DISPLAY CIRCUIT DIAGRAM
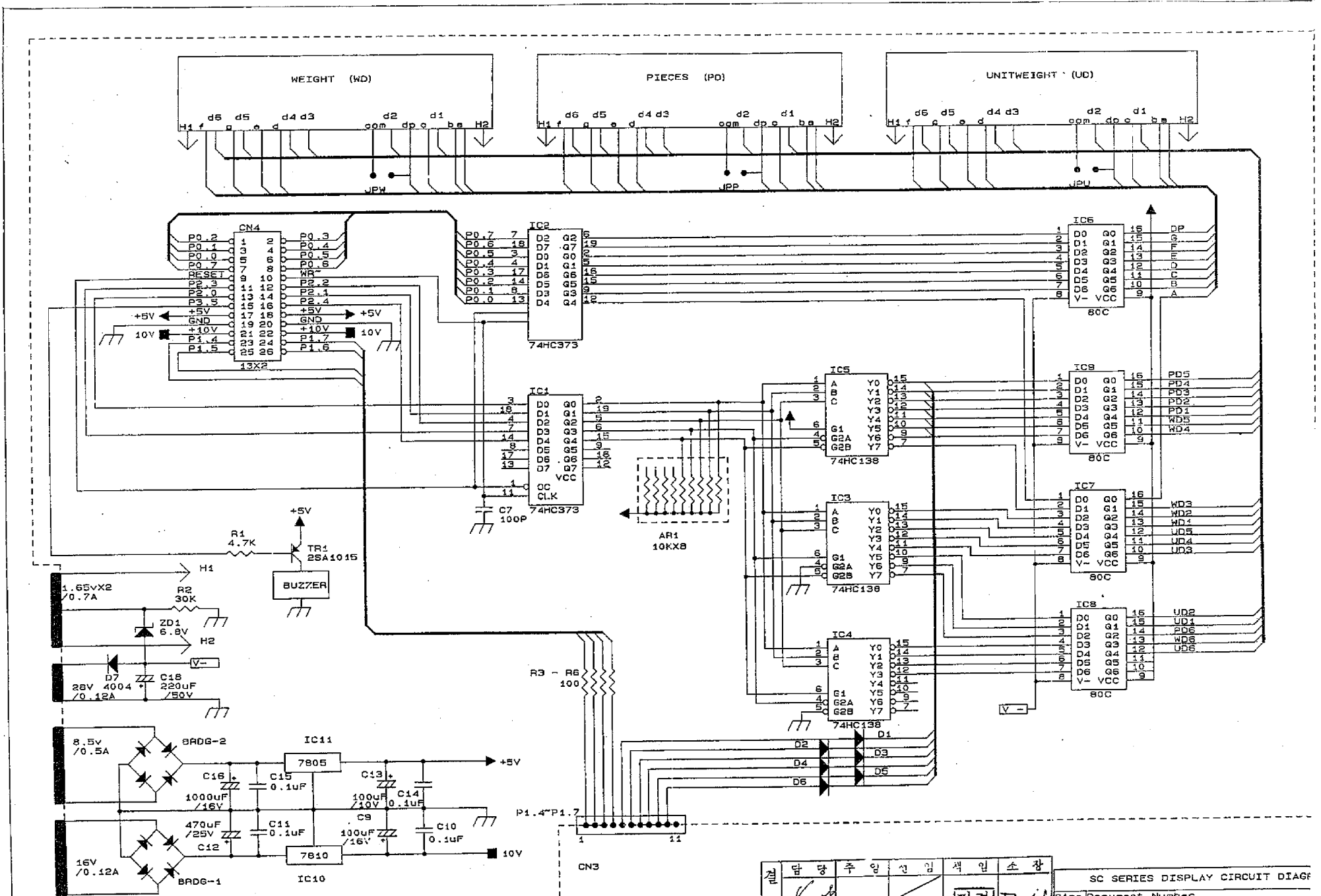
SC SERIES DISPLAY CIRCUIT DIAGRAM