

SK/SK-D SERIES

MAINTENANCE MANUAL

DIGITAL SCALE

SK-1000/SK-1000D

SK-2000/SK-2000D

SK-5000/SK-5000D

SK-10K/SK-10KD

SK-20K/SK-20KD

SK-30K/SK-30KD

AND

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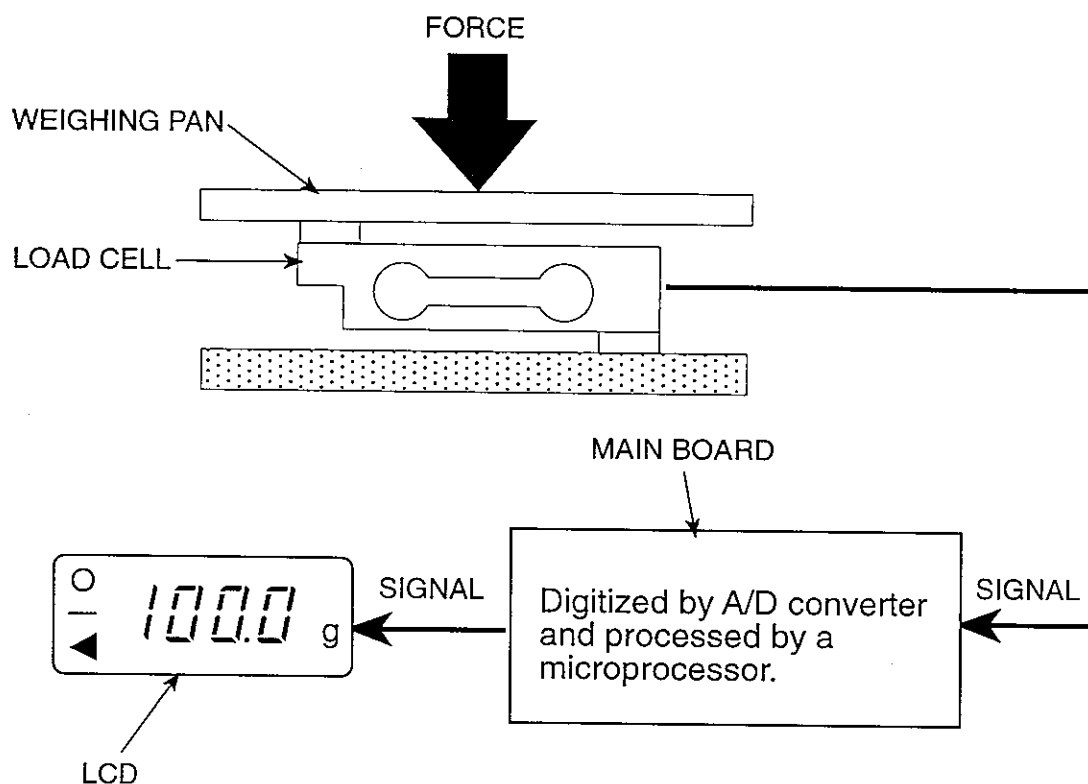
1 Introduction

The SK series compact scale consists of functional units.
Defective units can be easily replaced for maintenance.



2 Operational principle

The SK series is a load cell type electronic scale. The operational principle is shown in the figure below. Force applied on the weighing pan is detected by the load cell. The load cell generates an analog signal, which is converted into a digital signal by the main board A/D converter which is processed by a Microprocessor. The processed data is displayed on a LCD.





3 Parts Names

► REAR

Sprit level

► TOP

Weighing platform

► FRONT

Display

ON/OFF key
Turns the scale
power on/off.

UNITS key
It is used for calibration.

RE-ZERO key
Sets display to zero or
subtracts weight of a container.

► BOTTOM

Battery cover

Batteries.
*Batteries are not included

AC adaptor plug

► DISPLAY

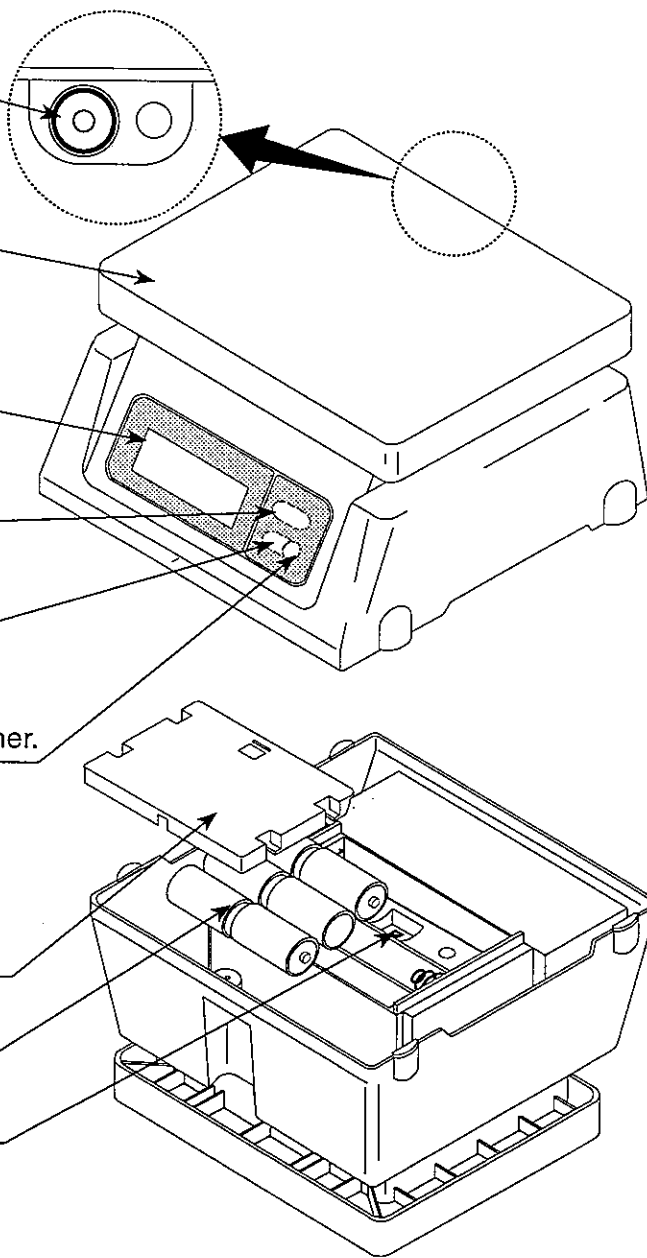
STABLE indicator
Indicates when the reading
is stable.

Polarity

NET indicator
Indicates when NET weight
is displayed.
(Tare function is used.)

ZERO indicator
Indicates when the scale
zero is correct.

Weighing unit, g

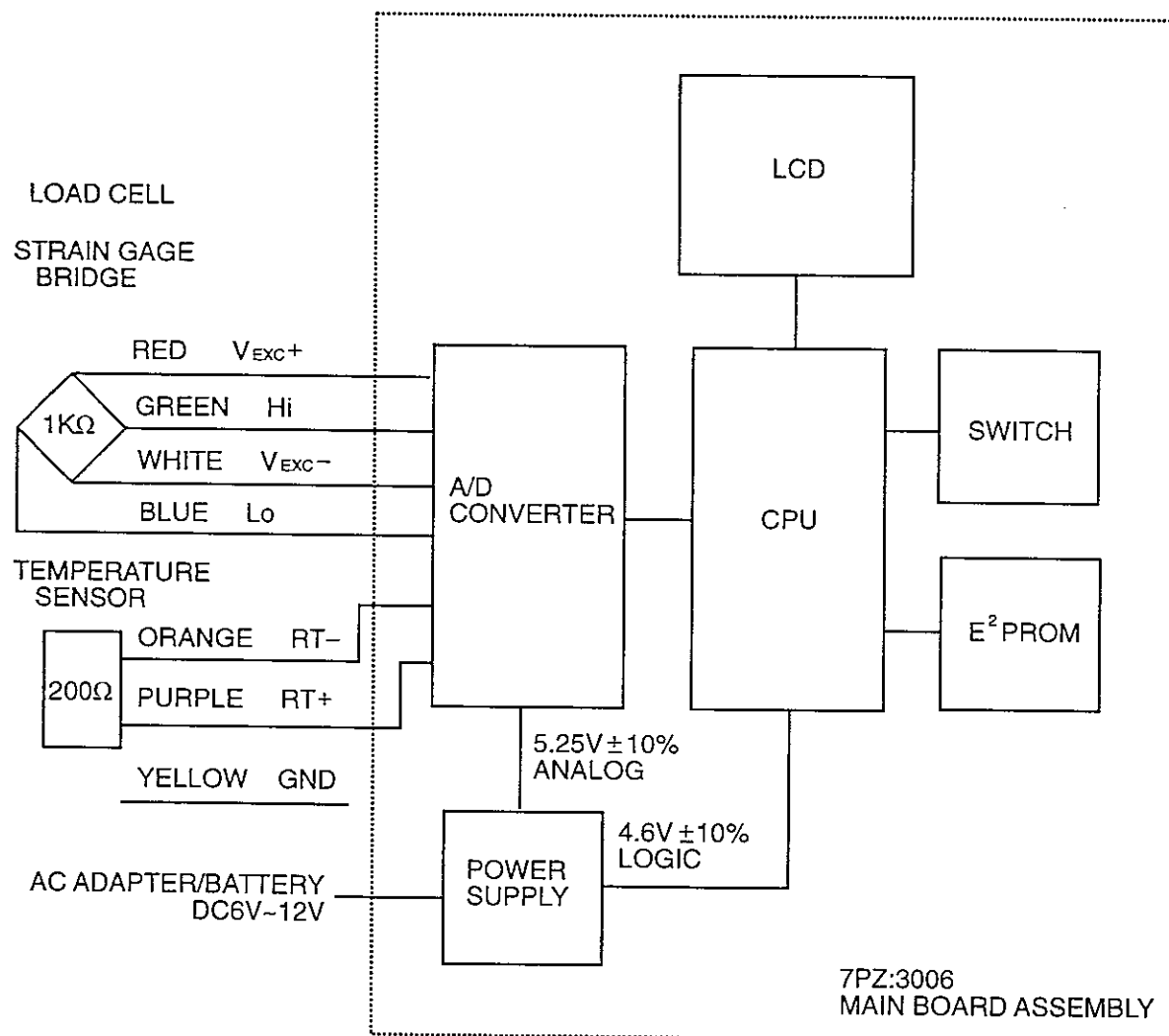




4 Block diagram

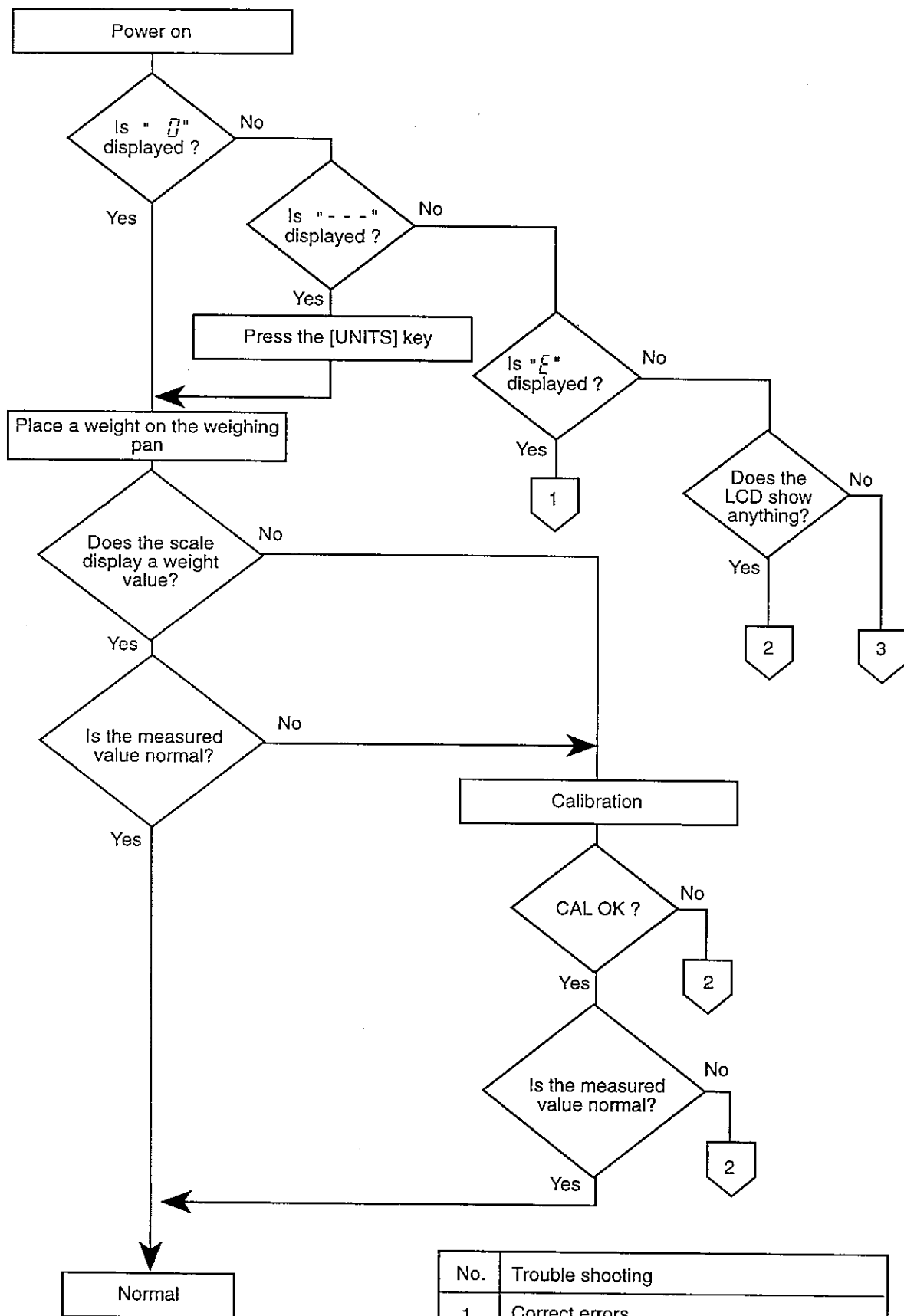
The SK series compact scale consists of functional units: case unit, weighing pan, main board unit, load cell and battery.

The load cell detects the force. The detected force is converted into a digital signal by the main board A/D converter, processed by a microprocessor (CPU) and displayed on an LCD.





5 Trouble shooting



No.	Trouble shooting
1	Correct errors
2	Malfunction of main board and /or load cell
3	Malfunction of main board and/or battery

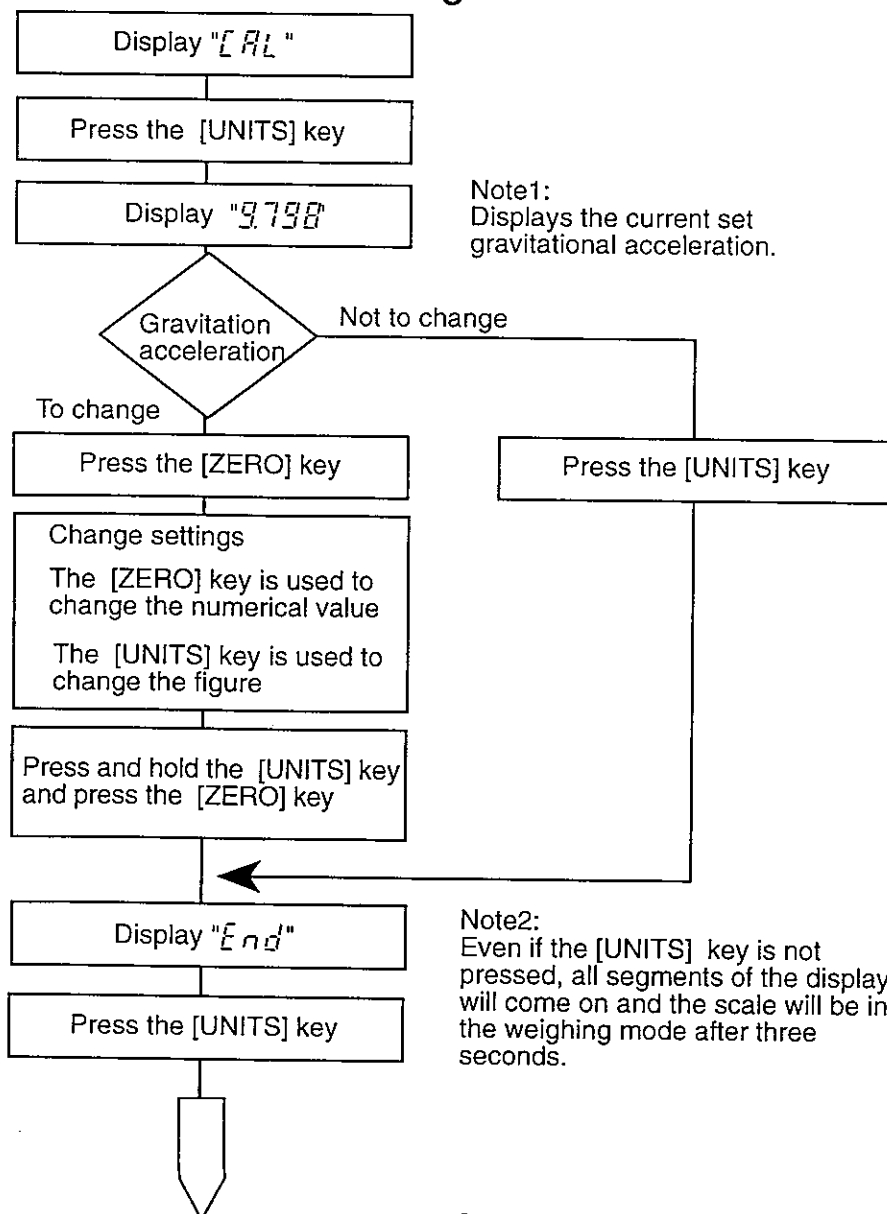


6 Calibration mode

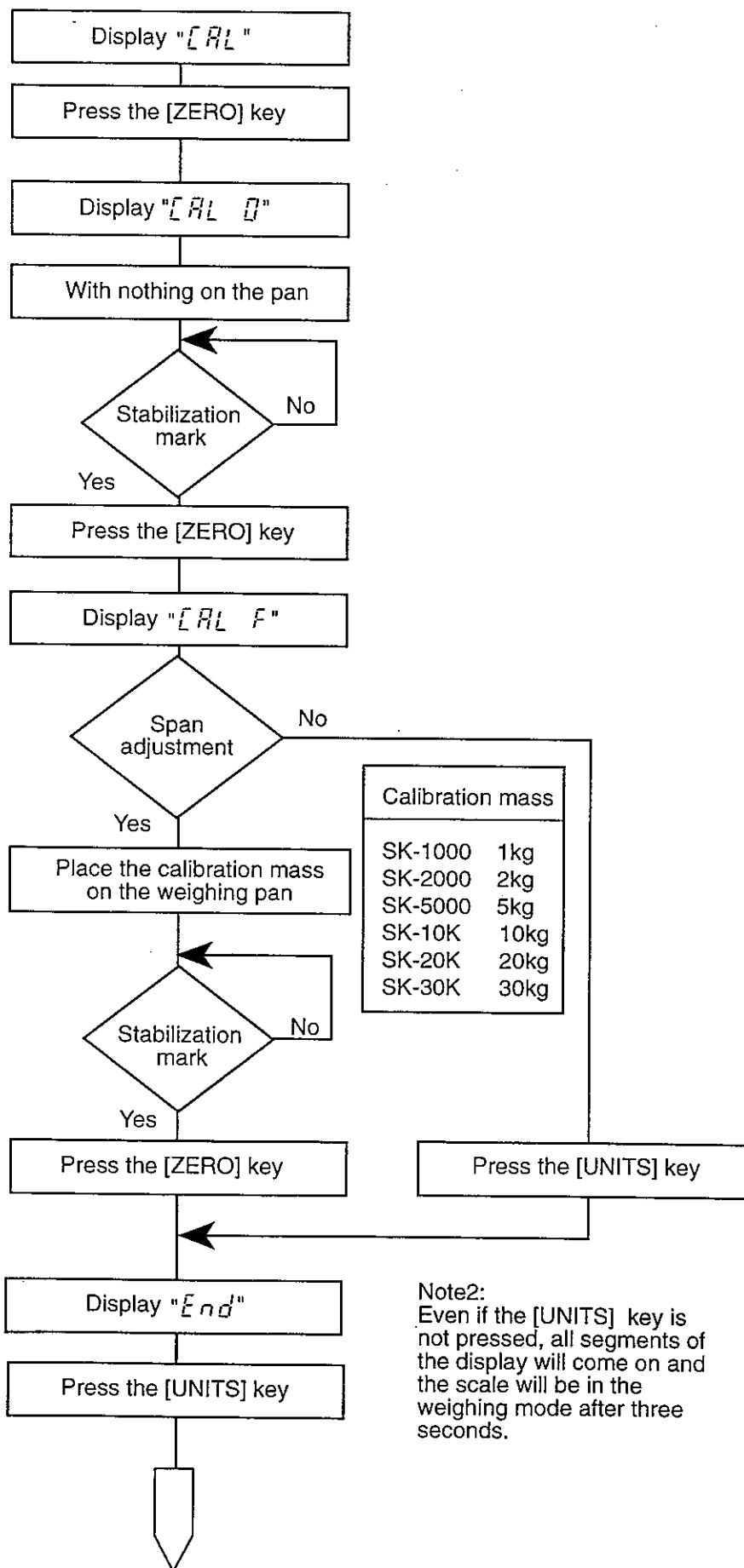
The SK series scales are equipped with a function to compensate for measuring errors caused by gravitational acceleration. If zero or span has shifted, for example, when the scales location of use is changed, check the gravitational acceleration. Change the setting or calibrate using a certified weight if necessary. When the load cell or the main board is replaced, check the gravitational acceleration and make the necessary changes. Then, perform temperature compensation as described on page 15.

1. While holding down the [UNITS] and [ZERO] key, press the [ON/OFF] key to turn the power ON.
2. Once the display indicates "CAL", release all the keys.
3. Press the [ZERO] key to go to the calibration mode by a weight; press the [UNITS] key to go to the gravitational acceleration setting mode.
4. Pressing the [UNITS] key, approximately three seconds after "END" is displayed, will return the scale to the weighing mode. All segments of the display will turn on, then zero will be displayed.

Gravitational acceleration setting



Calibration using a weight





7 Check mode

Check mode checks the display, specification settings, A/D count and temperature compensation coefficient.

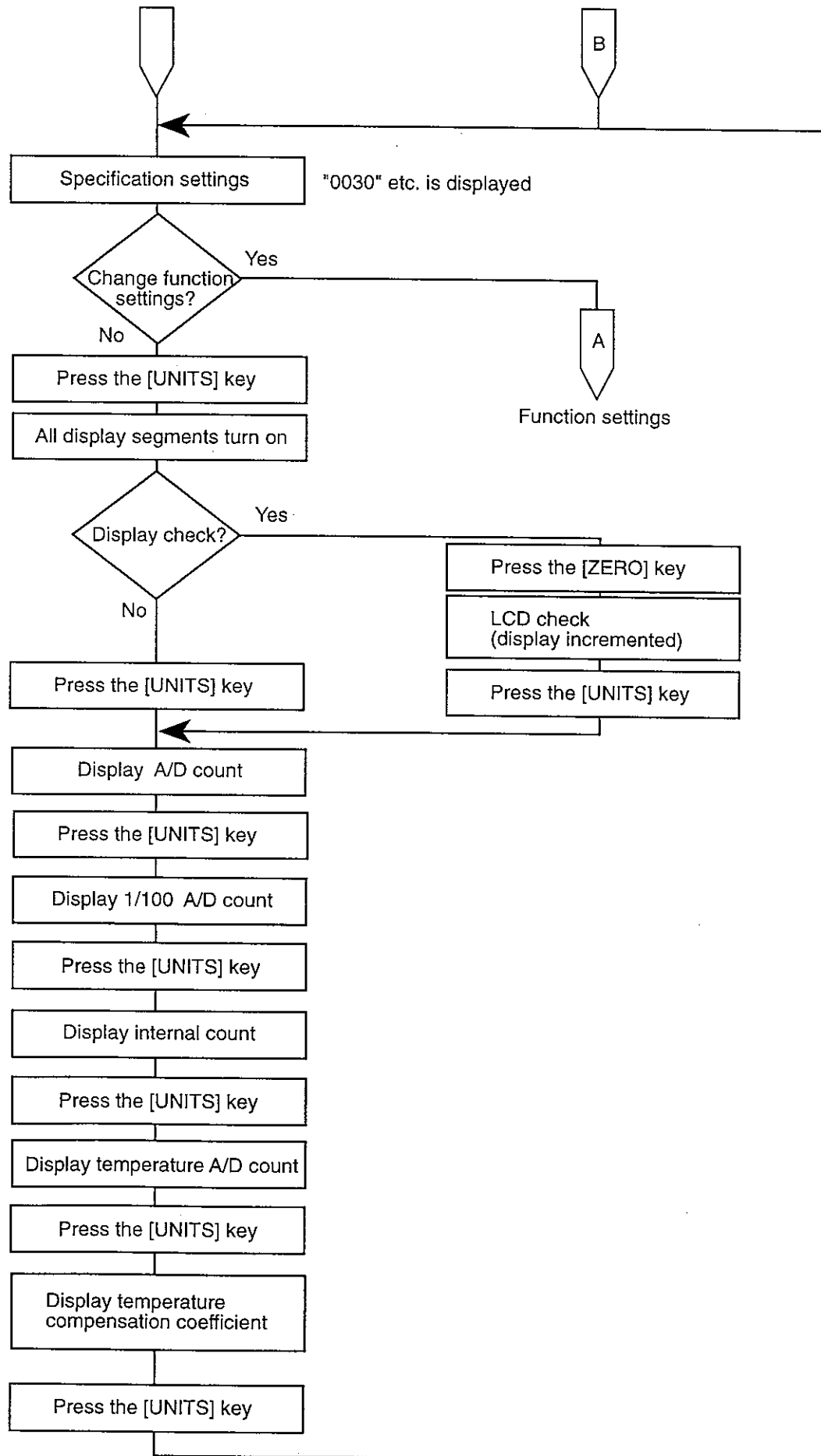
While holding down the [ZERO] key, pressing the [ON/OFF] key will turn the power ON and the CPU version will be displayed. With CPU version "P-1.2", check mode is as follows:

1. While holding down the [UNITS] and [ZERO] key, press the [ON/OFF] key to turn the power ON.
2. Keep the [UNITS] and [ZERO] keys pressed. The scale will be in the check mode after the following performance:
The display indicates "CAL". (5sec) → "CAL" disappears. (5sec) → The LCD segments are checked.
3. To exit the check mode, press the [ON/OFF] key to turn the power OFF.

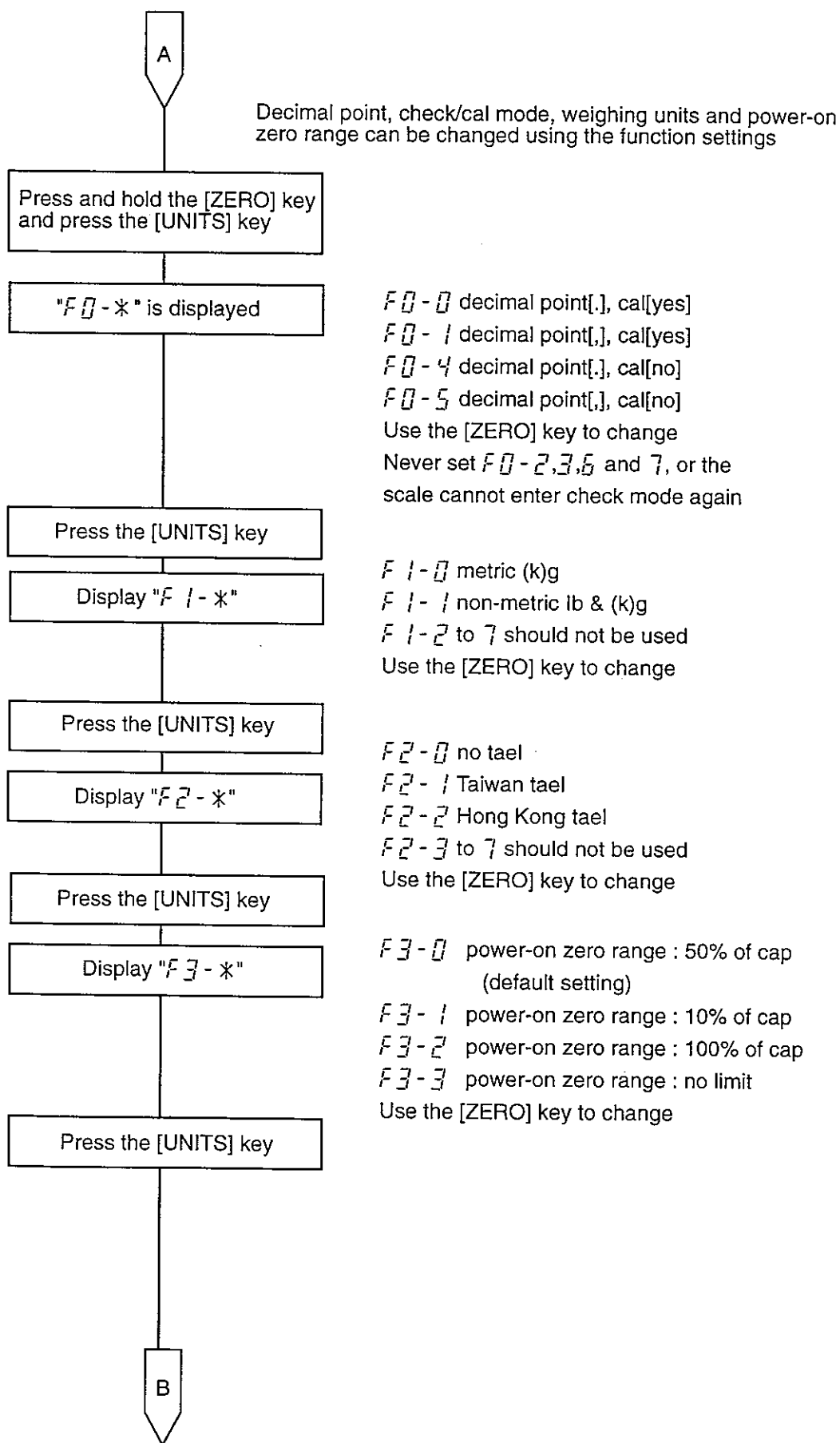
With CPU version P-2.0, check mode is as follows.

1. While holding down the [UNITS] and [ZERO] keys, press the [ON/OFF] key to turn the power ON. The display will show "CAL"(or all segments will turn on).
2. Press and hold the [ZERO] key and press the [UNITS] key twice. Then the display will show the CPU version "P-2.0".
3. Press the [ZERO] key to show the specification settings. This is the beginning of check mode.
4. To exit the check mode, press the [ON/OFF] key to turn the power OFF.

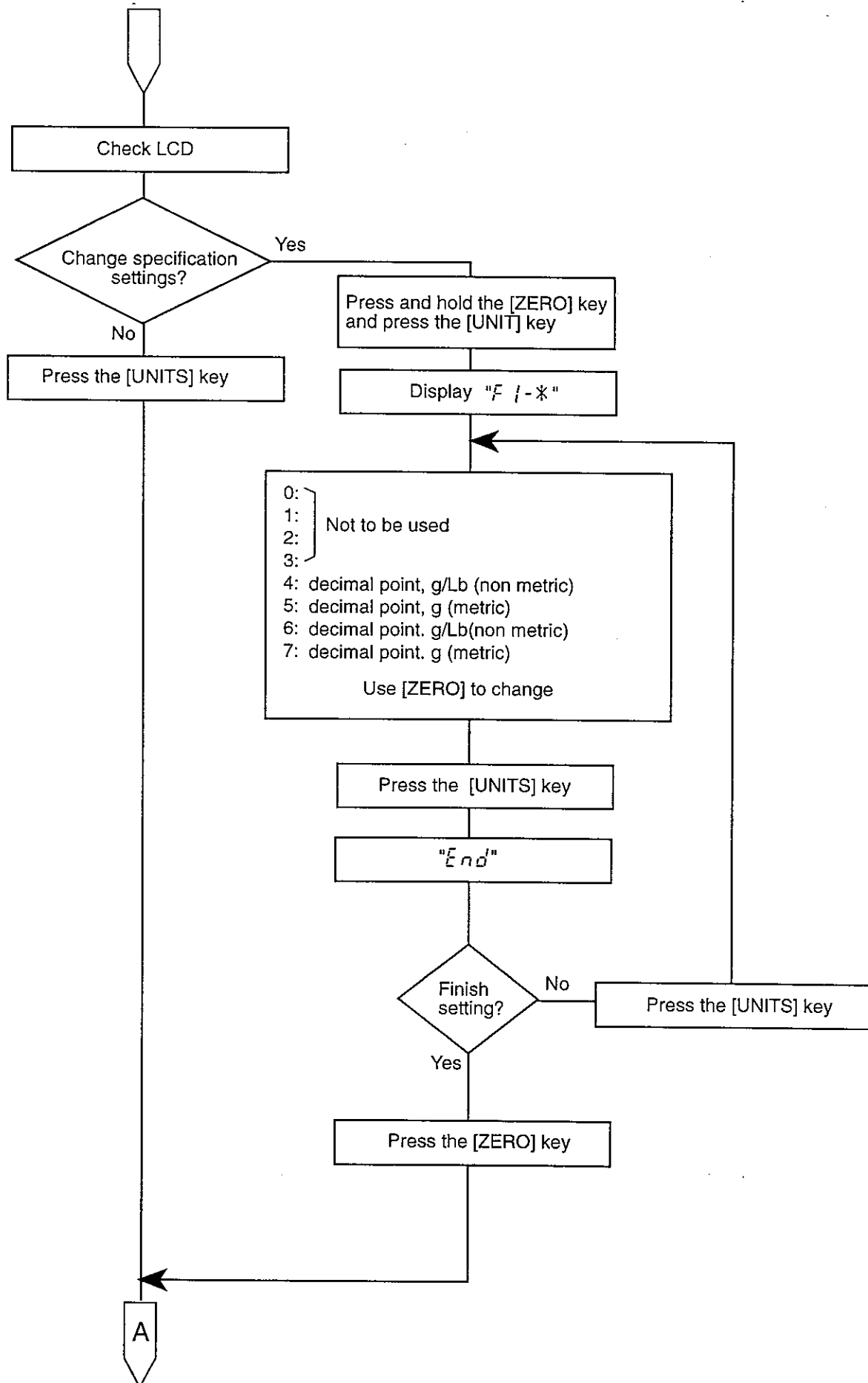
Check mode (CPU version P-2.0)



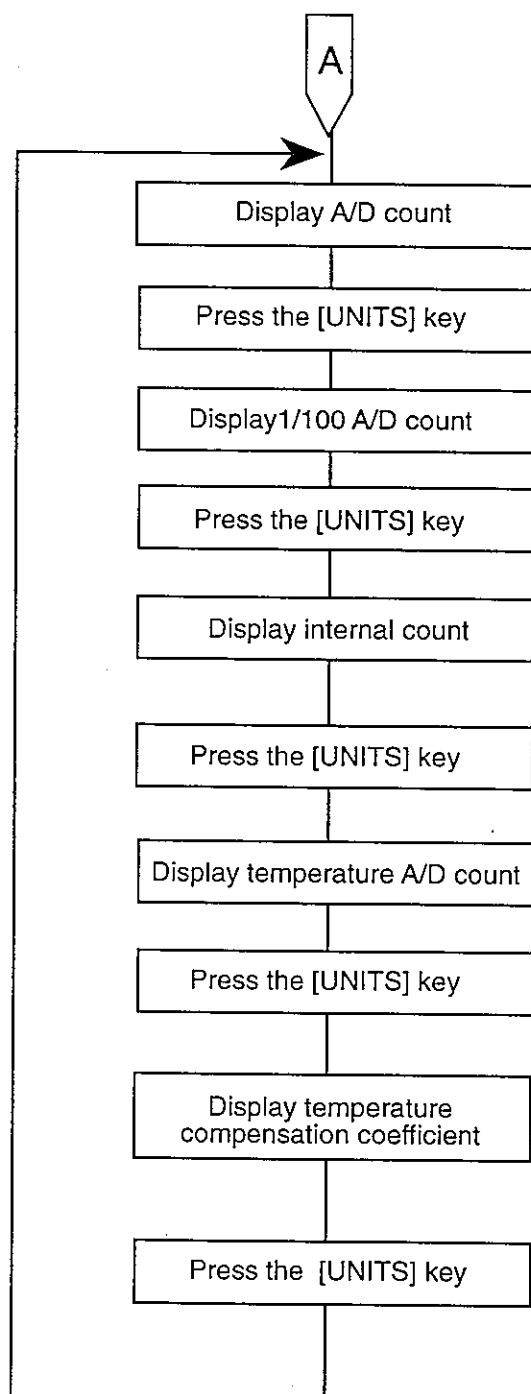
Function settings (CPU version P-2.0)



Check mode (CPU version P-1.2)



(CPU version P-1.2)





8 Setting mode

8-1-1 Setting mode (CPU version, P-1.2)

Set the scale model and perform temperature compensation as follows:
Temperature compensation is required whenever the main board or the load cell is replaced. Before temperature compensation, be sure to check the gravitational acceleration and make the necessary changes as described in chapter 6.

In the setting mode, the following is set:

Scale model, to initialize or not, temperature coefficient temperature at CAL.

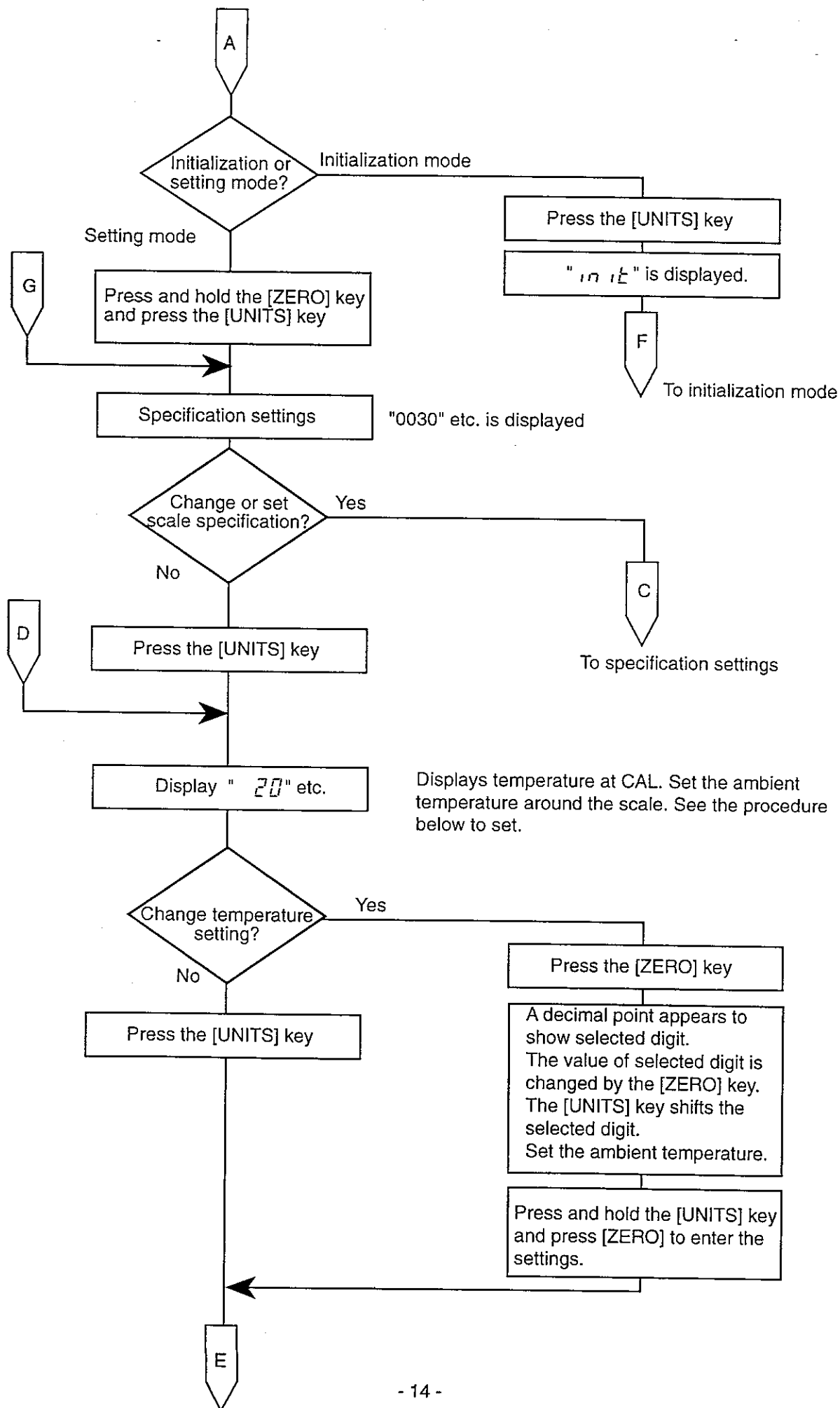
1. While holding down the [UNITS] and [ZERO] keys, press the [ON/OFF] key to turn the power ON. "CAL" appears from the display.
2. Keep the [UNITS] and [ZERO] keys pressed. After five seconds, "CAL" disappears from the display. Here, release the [UNIT] key. Keep the [ZERO] key pressed. After five seconds, the LCD indicates "F0- * " (*=the set value) and the scale will be in the setting mode.
3. To exit the setting mode, press [ON/OFF] to turn the power OFF. When the settings were changed, press the [ZERO] key after "END" being displayed to proceed to the temperature compensation mode.

8-1-2 Setting mode (CPU version, P-2.0)

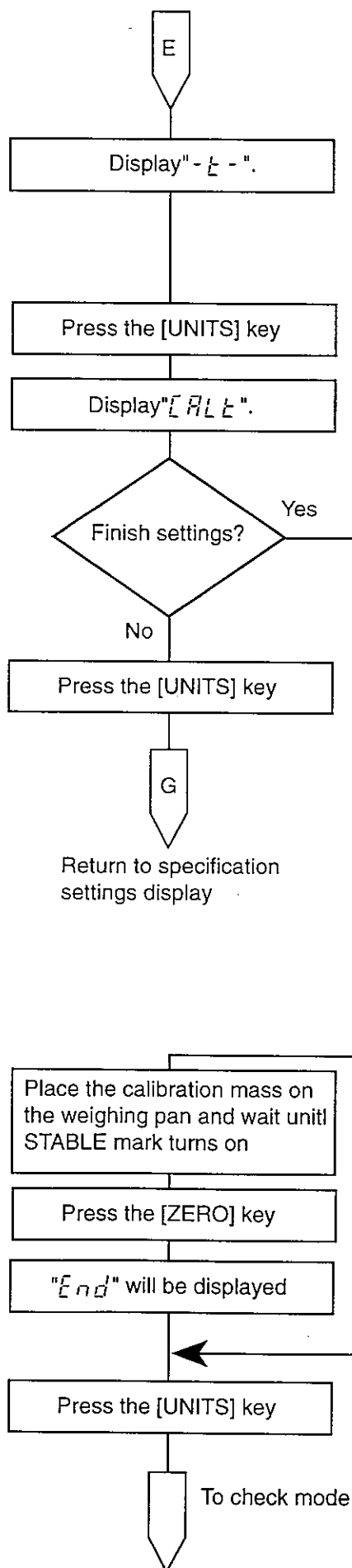
The capacity, weighing units, decimal point and temperature parameters are set in the setting mode.

1. While holding down the [UNITS] and [ZERO] keys, press the [ON/OFF] key to turn the power ON. The display will show CAL(or all segments will turn on).
2. Release the [UNITS] key but keep the [ZERO] key pressed, and press the [UNITS] key twice. Then the display will show the CPU version"P-2.0".
3. Press the [UNITS] key twice, then the display shows "CAL" first and "Adj" second.
4. If you go to the initialization mode, press the [UNITS] key.
5. To enter the setting mode, press and hold the [ZERO] key and press the [UNITS] key. Then the scale shows the setting mode.
In this mode, capacity, weighing units, temperature parameters can be set and temperature calibration will be done.
6. To exit the setting mode, press [ON/OFF] to turn the power OFF. Once settings were changed, the temperature calibration should be done to exit this mode.

Setting mode (CPU version, P-2.0)



(CPU version, P-2.0)

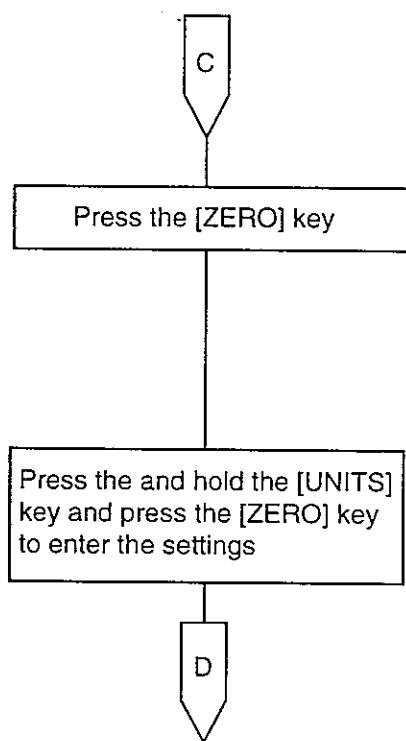


Setting mode to set temperature parameters. Usually these parameters should not be change and you do not have to enter this mode. If there seems to be something wrong these parameters are corrected by initializing the scale. See the initialization mode.

Temperature compensation

Even if the [UNITS] key is not pressed, the scale will be in the check mode about three seconds after.

Specification settings (CPU version, P-2.0)



A decimal point appears to show selected digit. The value of selected digit is changed by the [ZERO] key. The [UNITS] key shifts the selected digit.
Refer to the table of model settings.

To temperature settings

Model settings / SK series

	(k)g only	lb,(k)g	lb,(k)g T tael	lb,(k)g HK tael
SK-1000	*000	*100	0400	0500
SK-2000	*010	*110	0410	0510
SK-5000	*020	*120	0420	0520
SK-10K	*030	*130	0430	0530
SK-20K	*040	*140	0440	0540
SK-30K	*050	*150	0450	0550

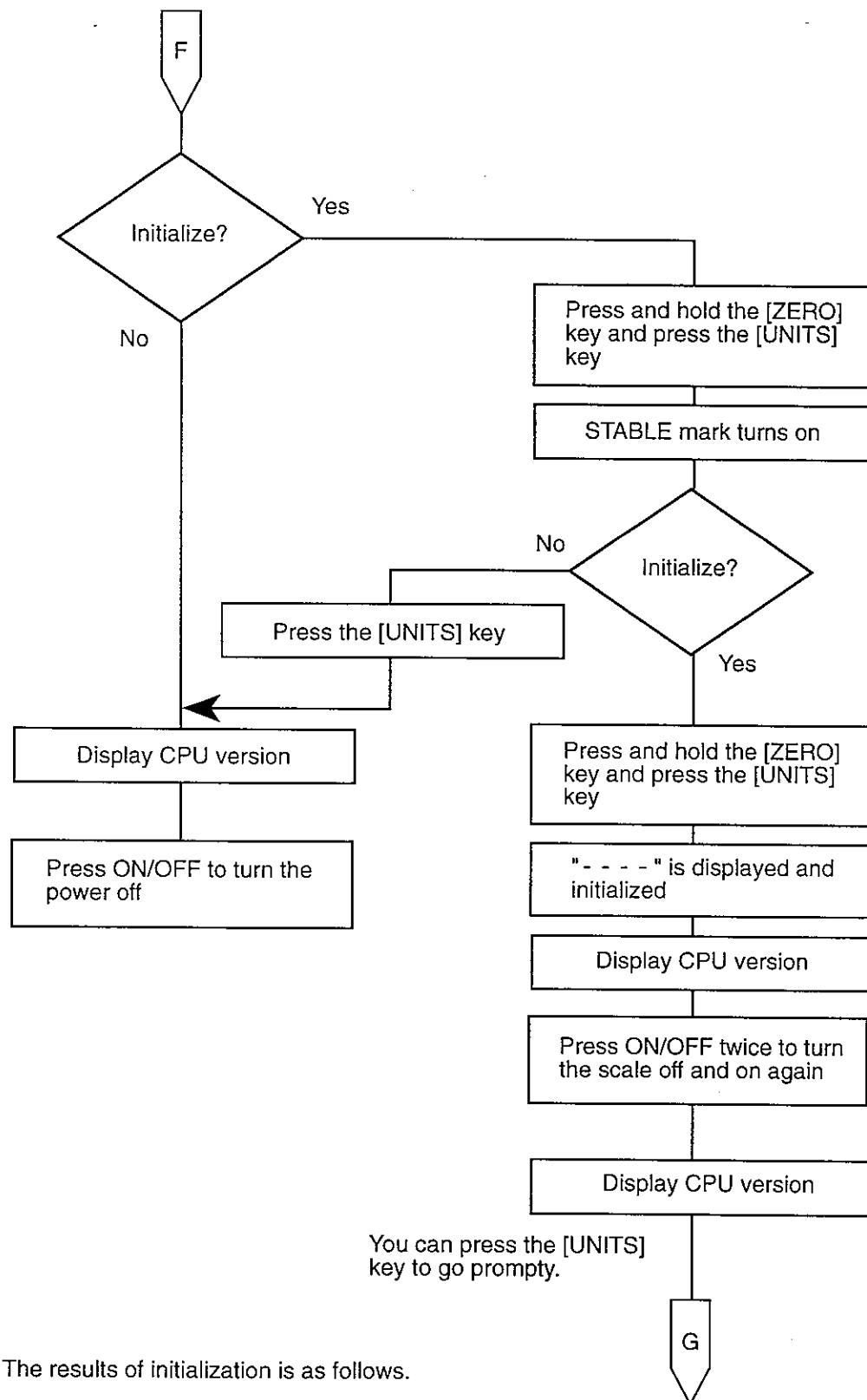
* = 0 : Decimal point [.]

1 : Decimal point [.]

T : Taiwan

HK : Hong Kong

Initialization mode (CPU version, P-2.0)

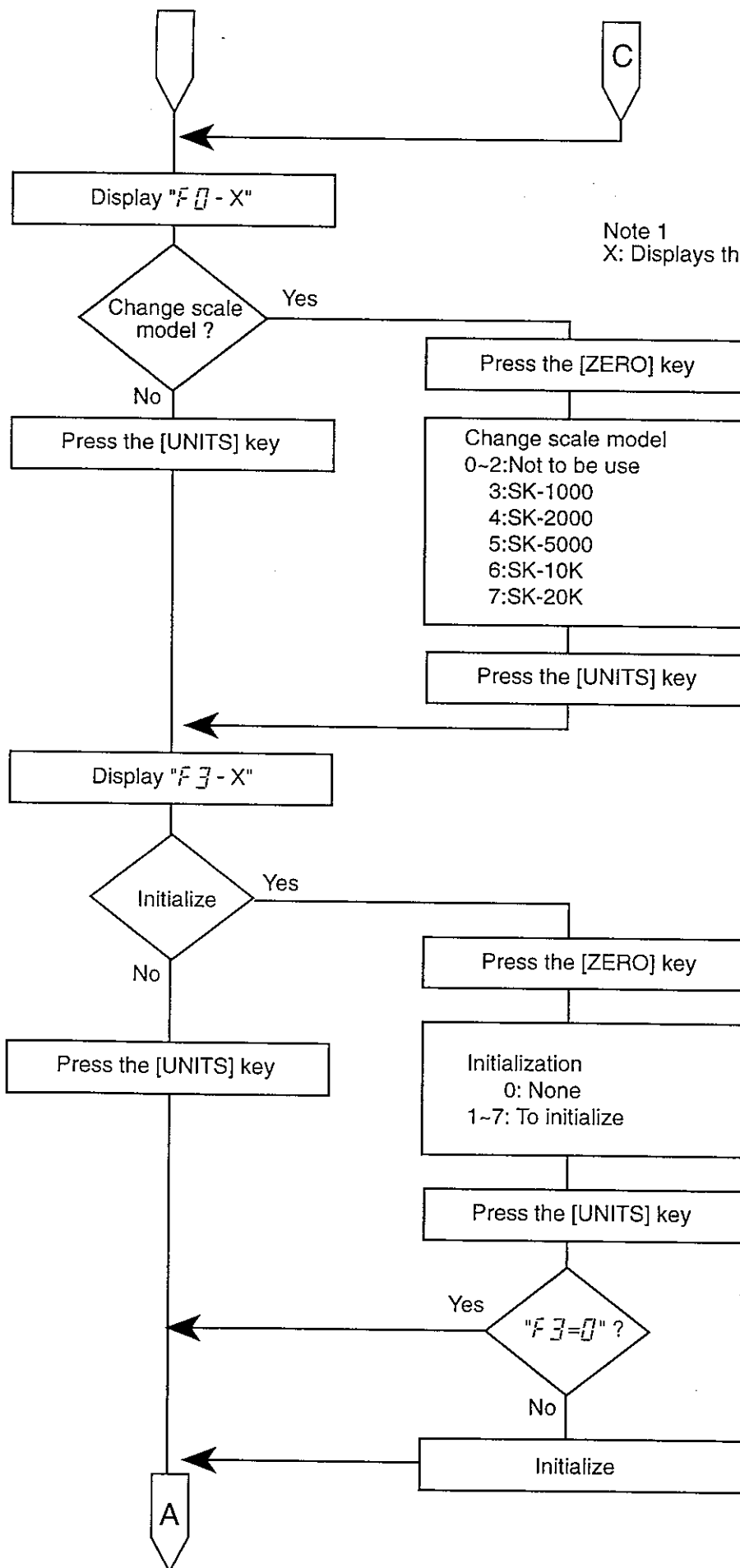


The results of initialization is as follows.

Specification settings : 0030
 Gravitation setting : 9.798
 Power-on zero range : 50% of capacity

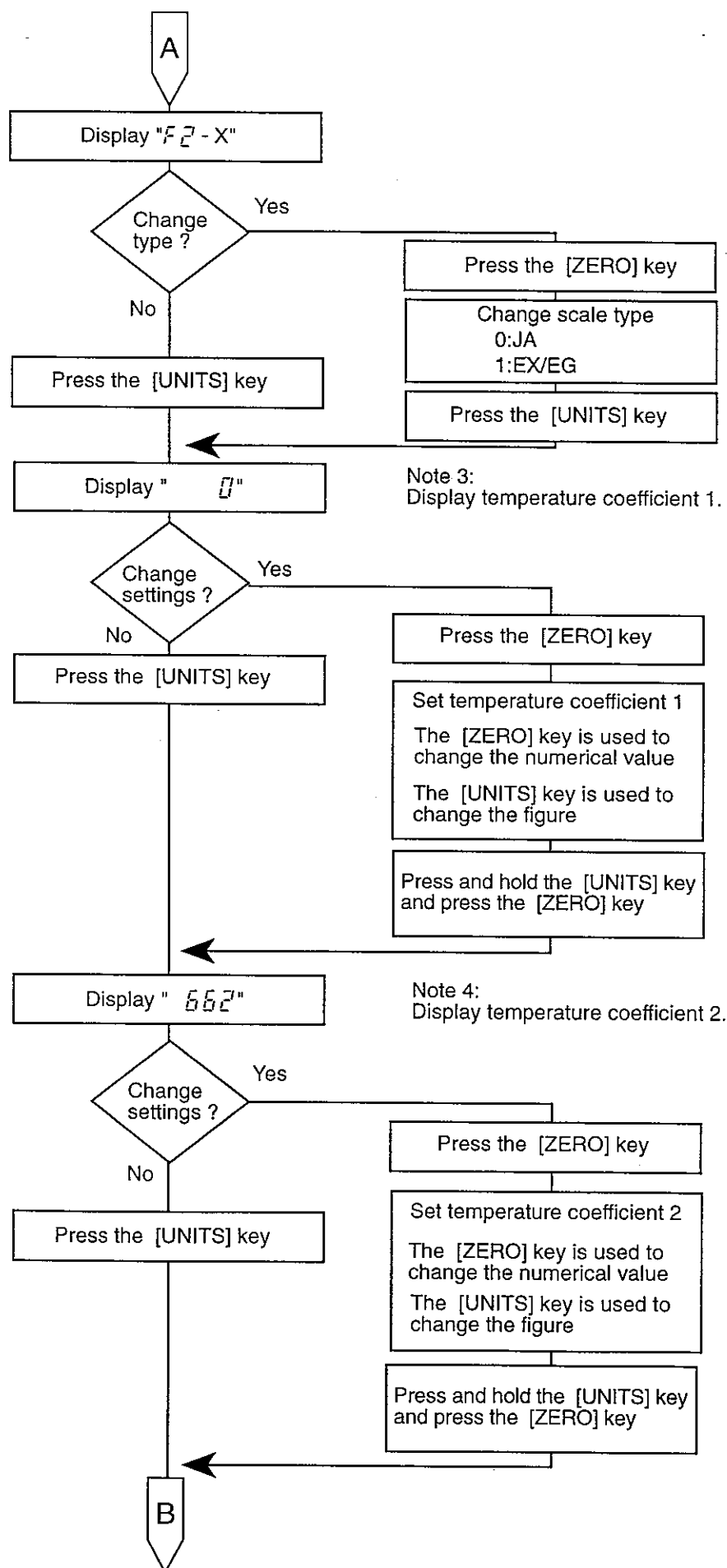
Set the capacity and so on

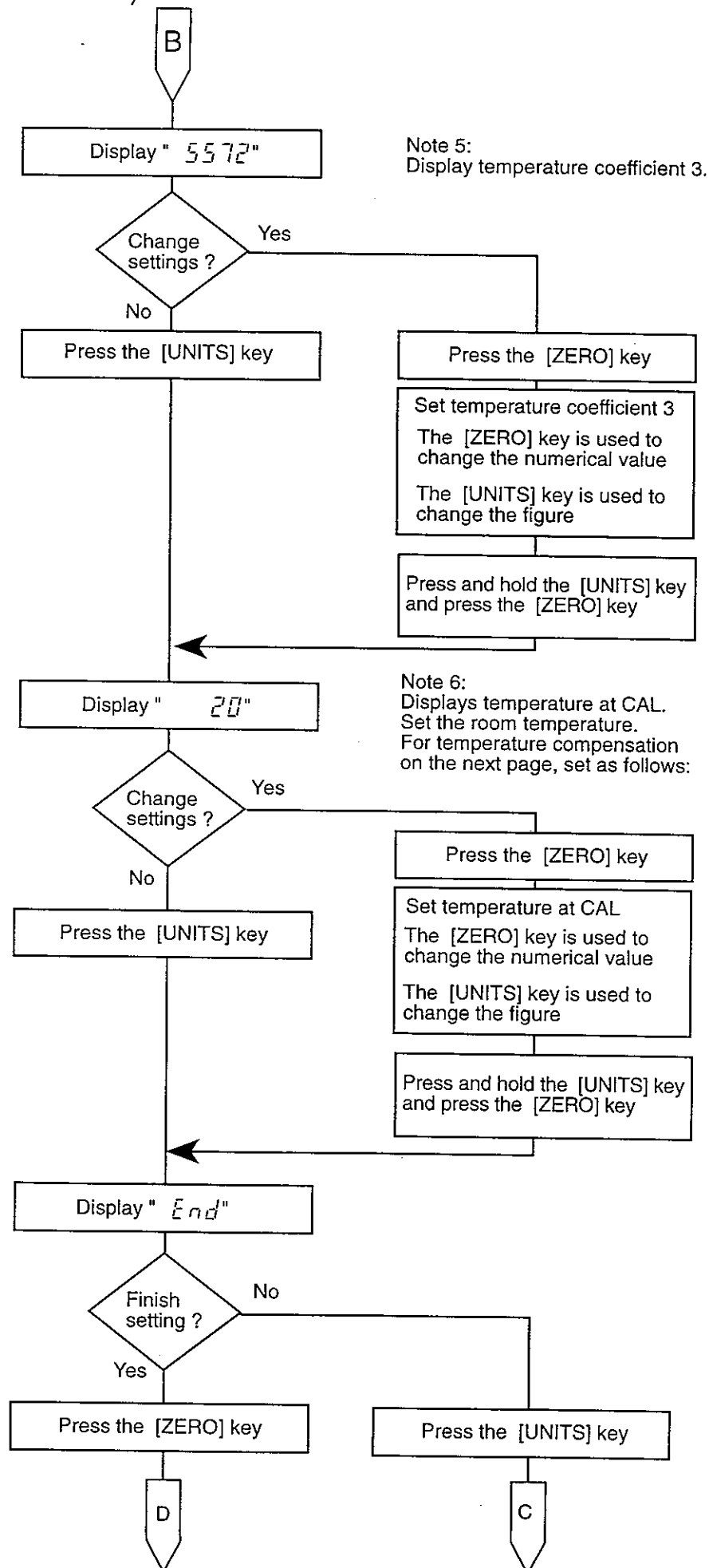
Setting mode(CPU version P-1.2)



Note 1
X: Displays the set scale model.

Note 2:
Maintenance board has been initialized. With "F3=0", press the [UNITS] key. Initialization will rewrite the gravitational acceleration and initialized temperature coefficients.





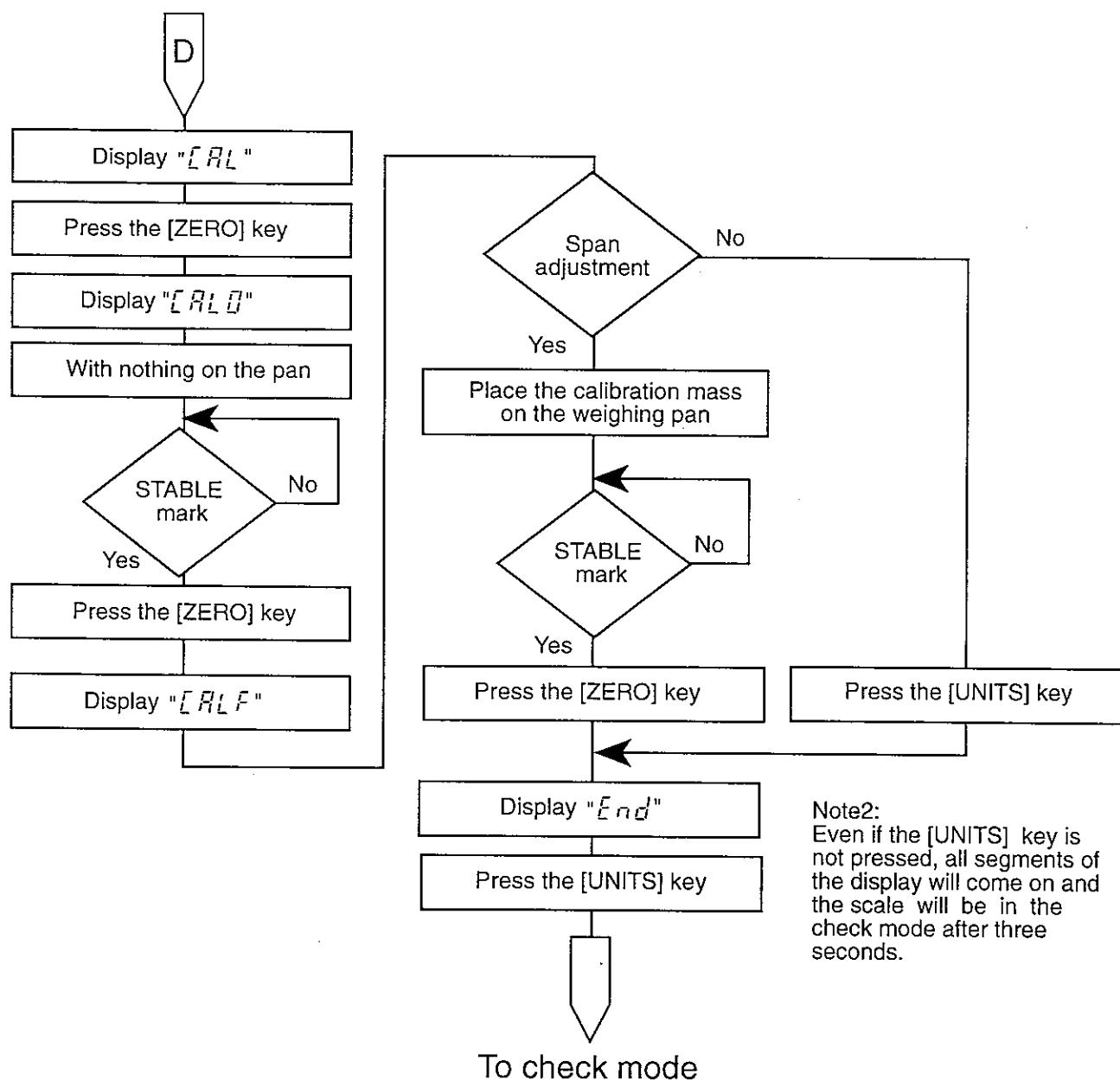
8-2 Temperature compensation

Perform temperature compensation and calibrate using a certified weight when the settings are changed in the setting mode, or when the load cell or the main board is replaced.

Before temperature compensation, be sure to warm up the scale more than thirty minutes and set the temperature at CAL.

For CPU version P-2.0, see the flow chart of setting mode.

Temperature compensation calibration(CPU version P-1.2)

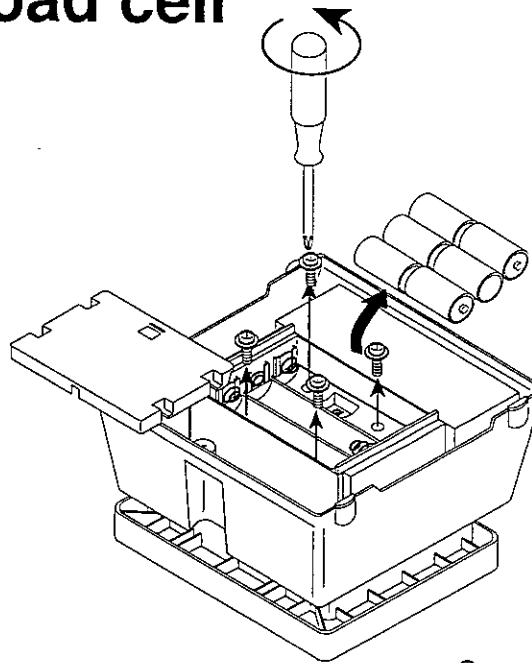




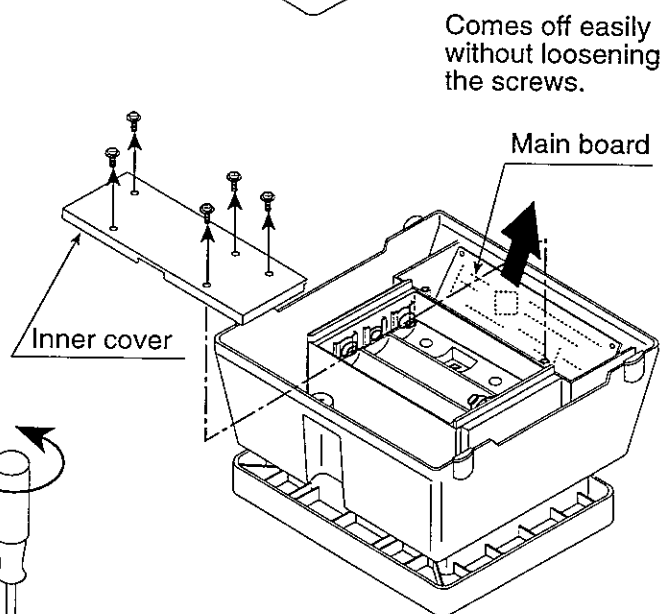
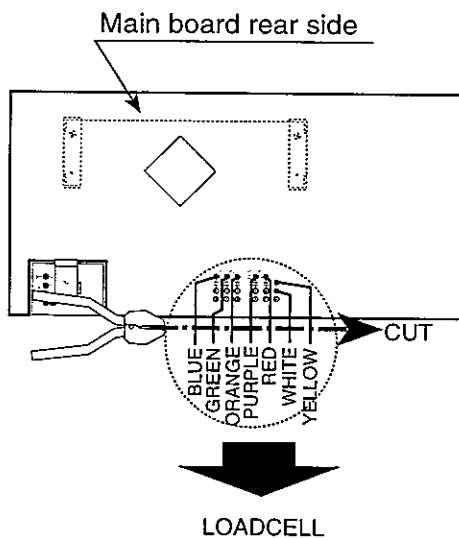
9 Replacing Subassemblies

9-1 Replacing the load cell

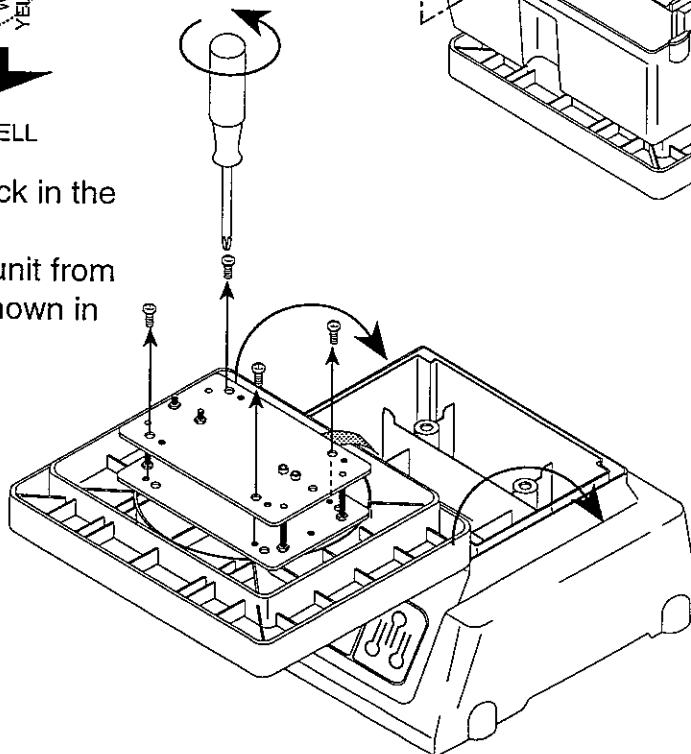
1 Place the main unit upside down. Open the battery cover. Take out the batteries (6pcs). Remove the four screws as shown in the figure at the right.



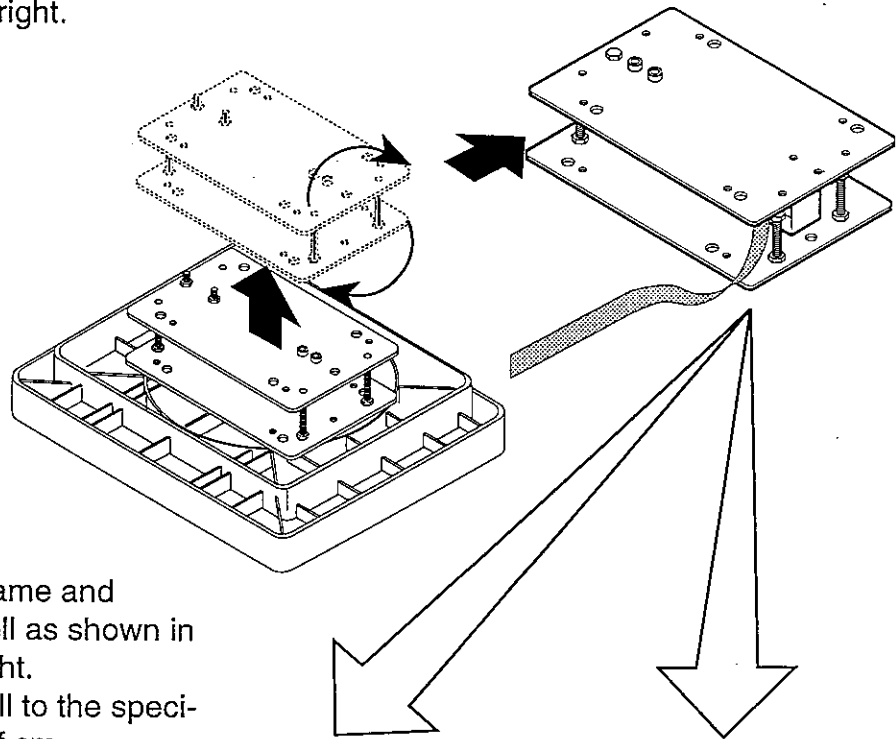
2 Remove the inner cover, and then the main board as shown in the figure at the right. Refer to the figure on the main board rear side to cut the load cell cables.



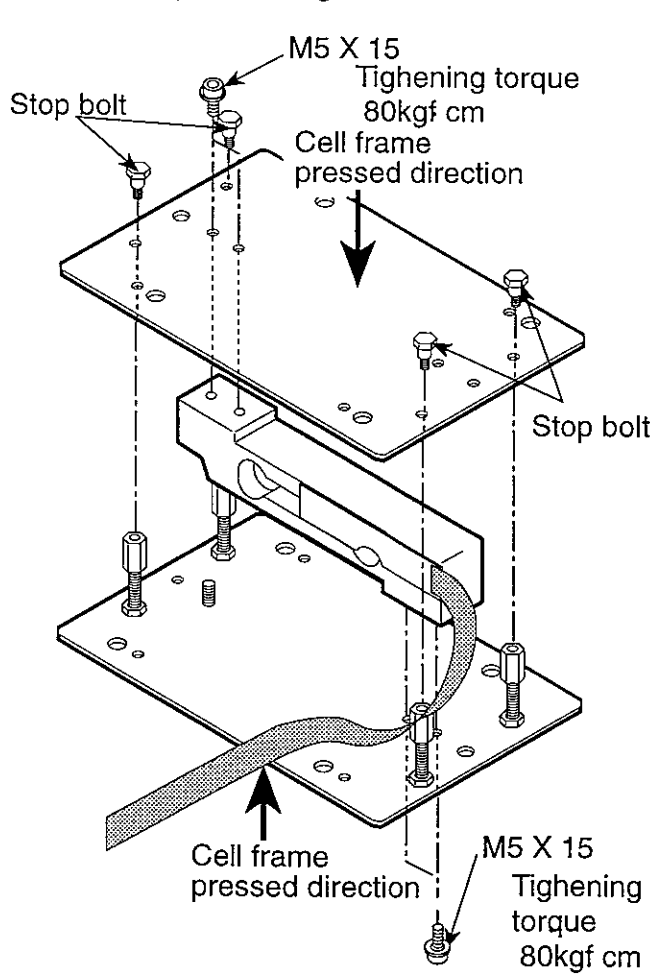
3 Place the main unit back in the normal position. Remove the load cell unit from the weighing pan as shown in the figure at the right.



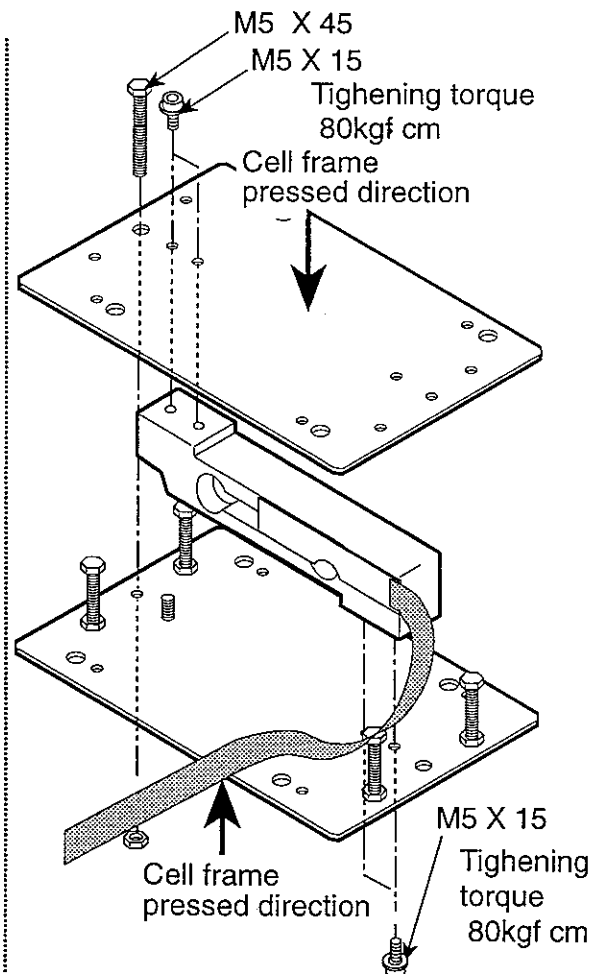
- 4 Turn the load cell unit as shown in the figure at the right.



- 5 Remove the cell frame and replace the load cell as shown in the figure at the right.
Fasten the load cell to the specified torque of 80kgf cm.

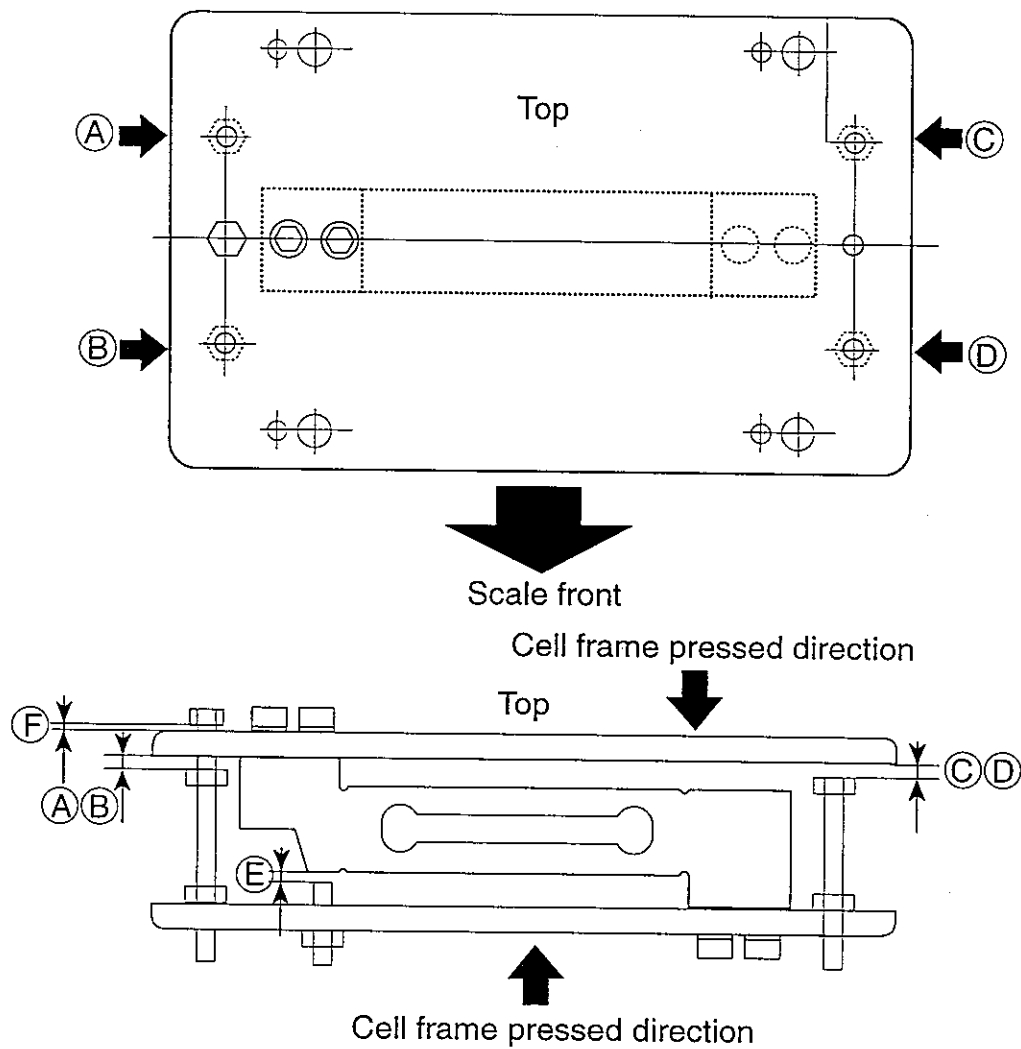


**SK-1000/SK-2000
SK-1000D/SK-2000D**



**SK-5000/SK-10K/SK-20K/SK-30K
SK-5000D/SK-10KD/SK-20KD/SK-30KD**

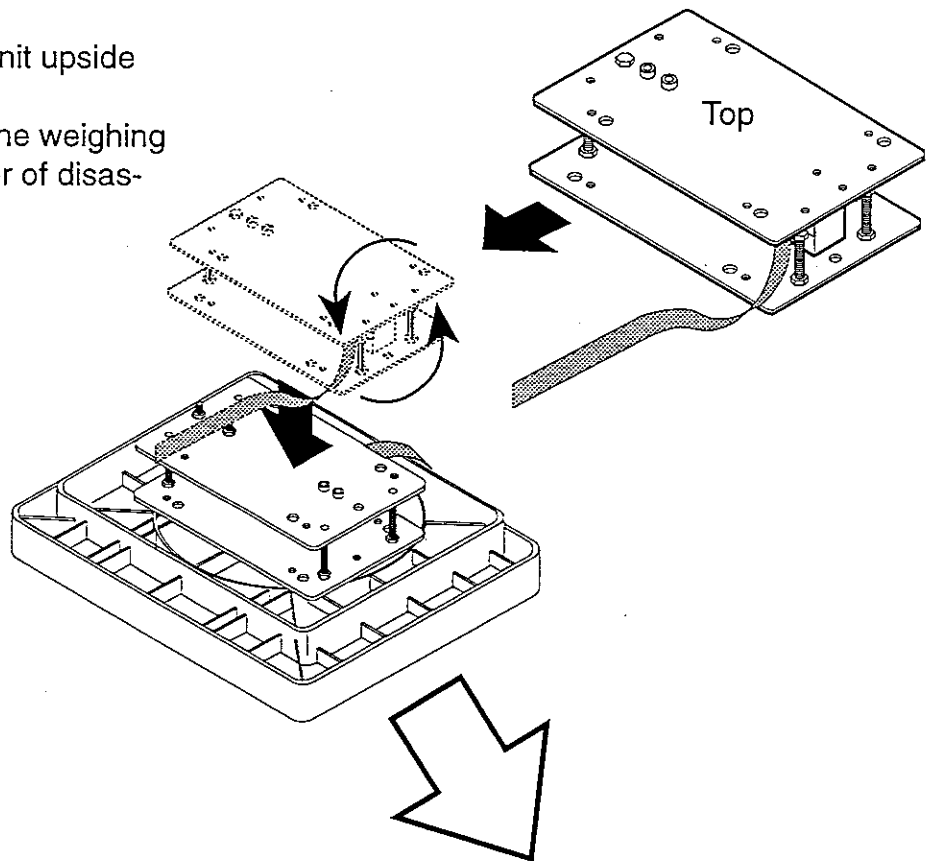
6 After attaching the load cell to the cell frames adjust the clearances between the bolts and the frames, referring to the below figures and table.



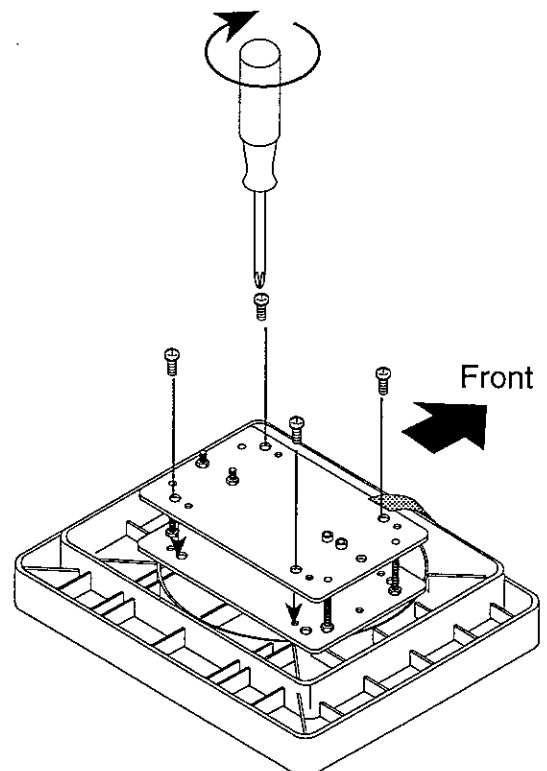
	A	B	C	D	E	F
SK-1000 SK-1000D	0.6	0.6	0.6	0.6	0.3	
SK-2000 SK-2000D	1.1	1.1	1.1	1.1	0.5	
SK-5000 SK-5000D	0.8	0.8	0.8	0.8	0.4	0.5
SK-10K SK-10KD	1.2	1.2	1.5	1.5	0.5	0.5
SK-20K SK-20KD	0.9	0.9	1.2	1.2	0.5	0.5
SK-30K SK-30KD	1.1	1.1	1.4	1.4	0.6	0.5

(mm)

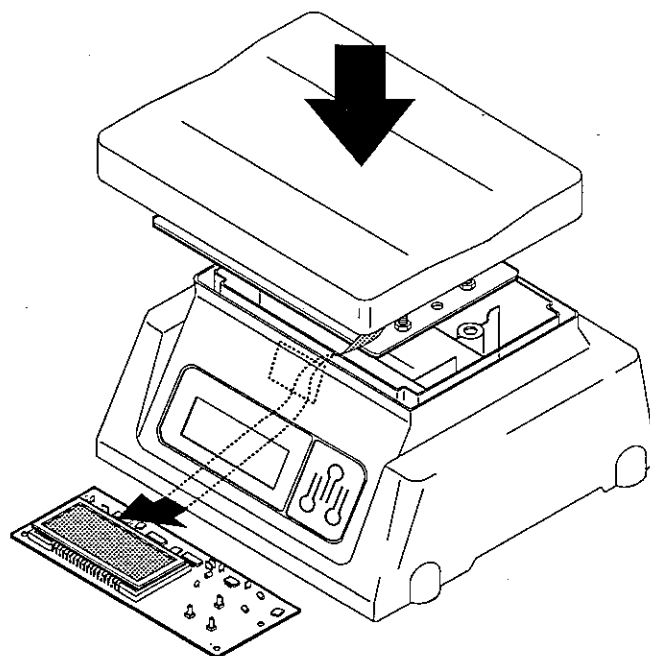
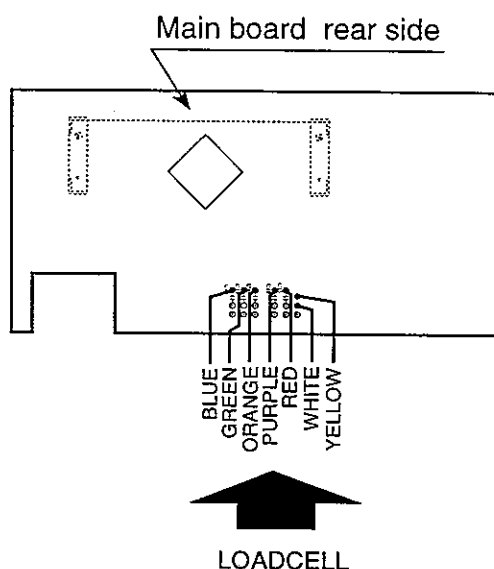
- 7 Turn the load cell unit upside down.
Mount the unit on the weighing pan in reverse order of disassembling.



- 8 Fasten the four screws as shown in the figure at the right.



- 9 Reconnect the load cell cables as shown in the figure.



Cable connection varies depending on the main board.

Connect the cables according to the printed characters.

B : BLUE

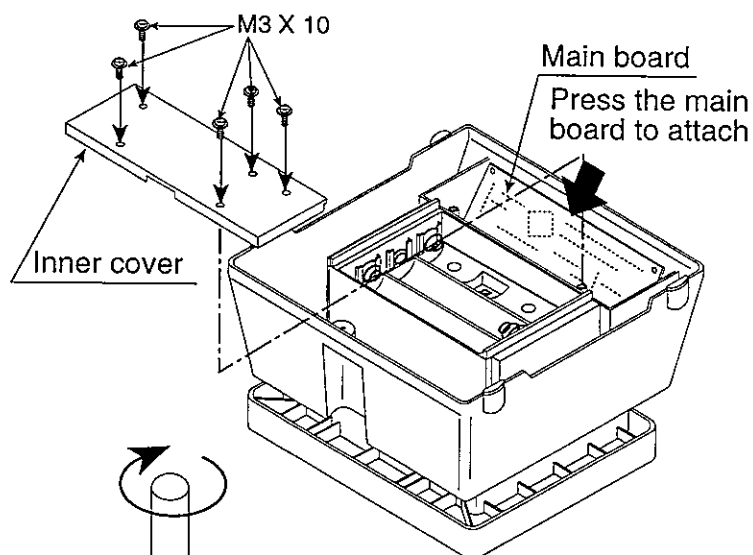
G : GREEN

O : ORANGE

P : PURPLE

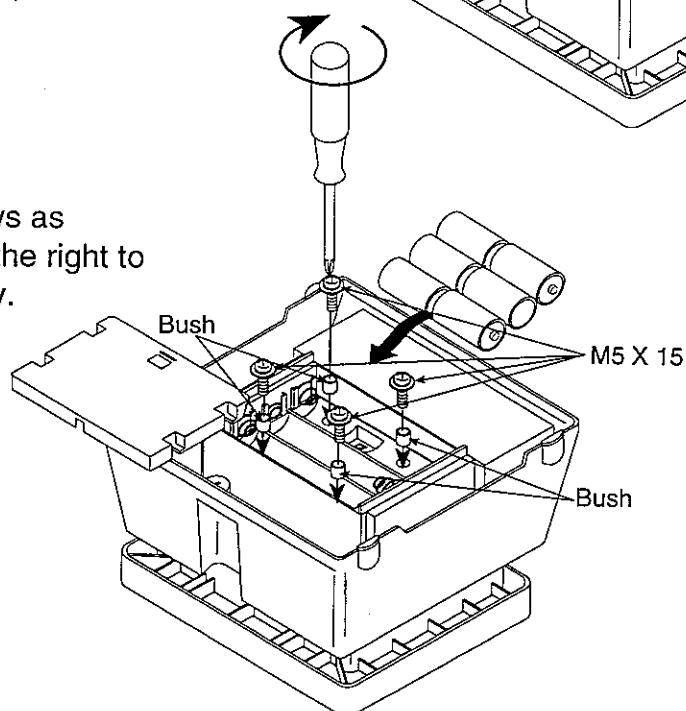
R : RED

W/Y : WHITE/YELLOW



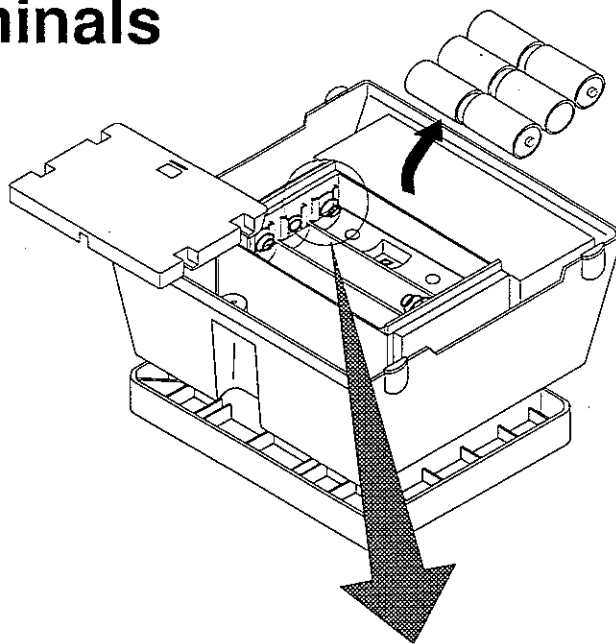
- 10 Attach the main board, and then the inner cover.

- 11 Fasten the four screws as shown in the figure at the right to complete the assembly.

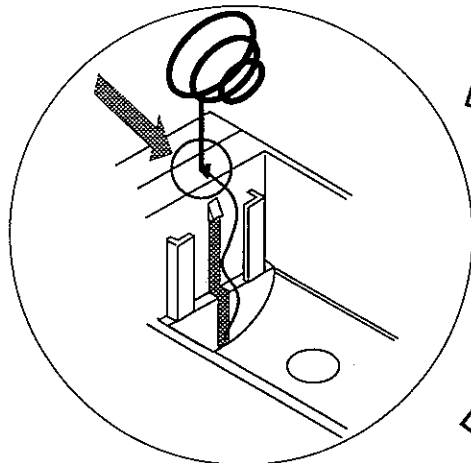
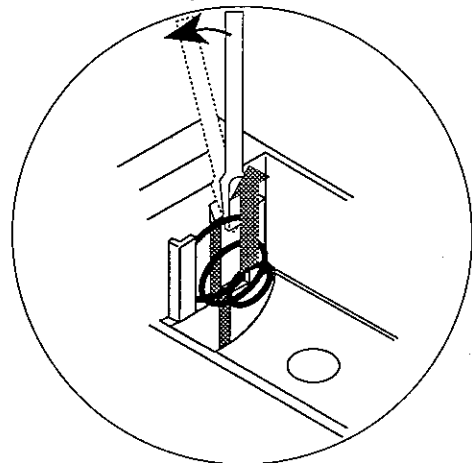


9-2 Replacing terminals

- 1 Place the main unit upside down. Open the battery compartment cover. Take out the batteries (6pcs).

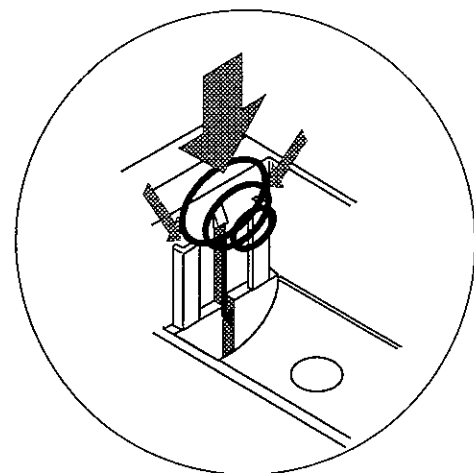


- 2 Use a screwdriver to pull up and out the terminal.



- 3 Replace the terminal and reconnect.

- 4 Put back the terminal in place.



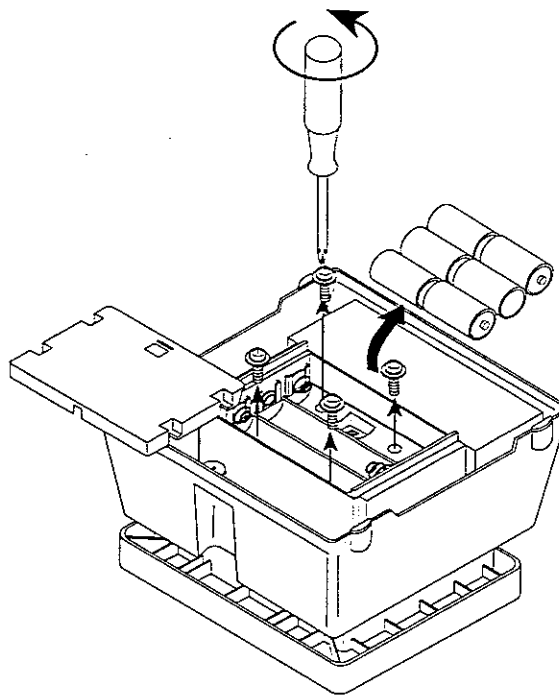
- 5 Replace the other terminals using the same procedure.

9-3 Replacing the main board

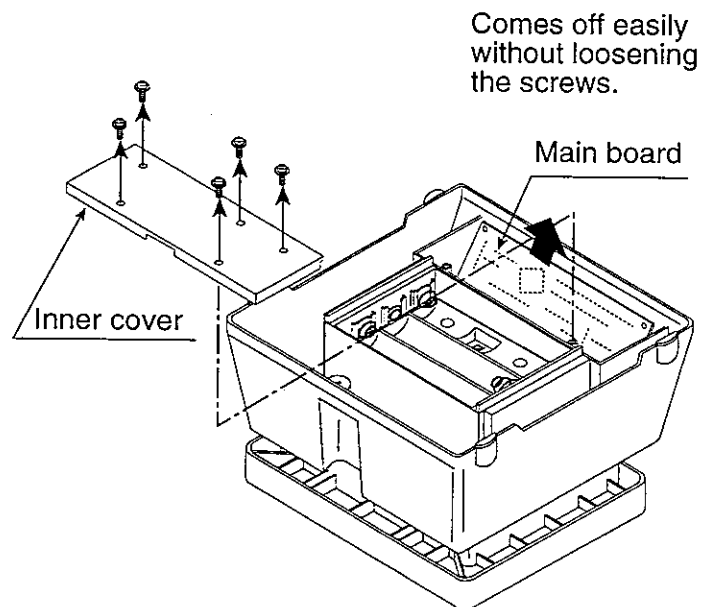
- 1 Place the main unit upside down. Open the battery cover. Remove the batteries (6pcs). Remove the four screws as shown in the figure at the right.

Note:

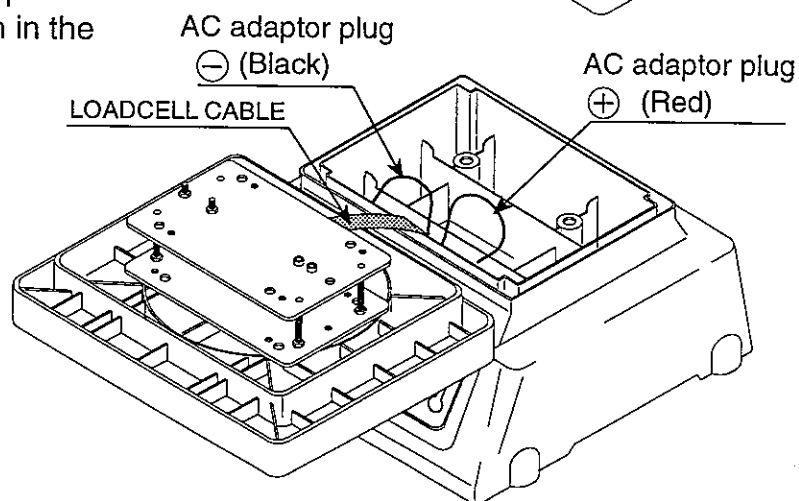
If AC adaptor plug is not to be replaced, perform the steps 2, 4 and 5.



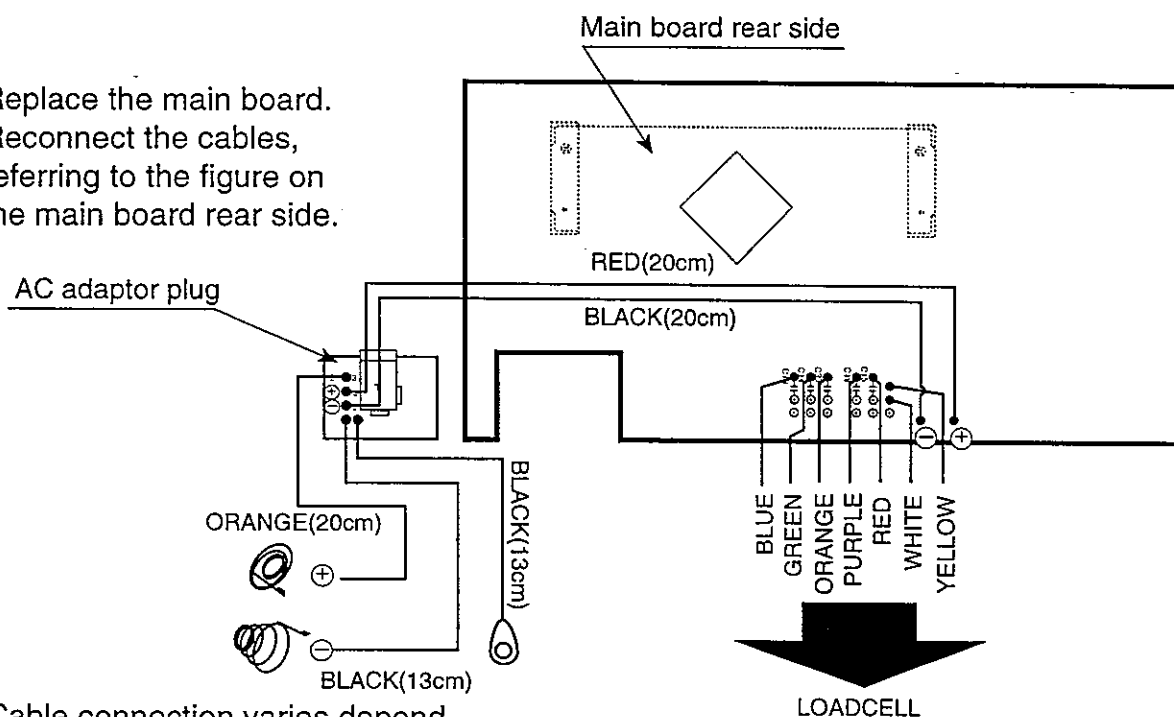
- 2 Remove the inner cover, and then the main board as shown in the figure at the right.



- 3 The load cell and AC adaptor plug cables are as shown in the figure at the right.



- 4 Replace the main board.
Reconnect the cables,
referring to the figure on
the main board rear side.

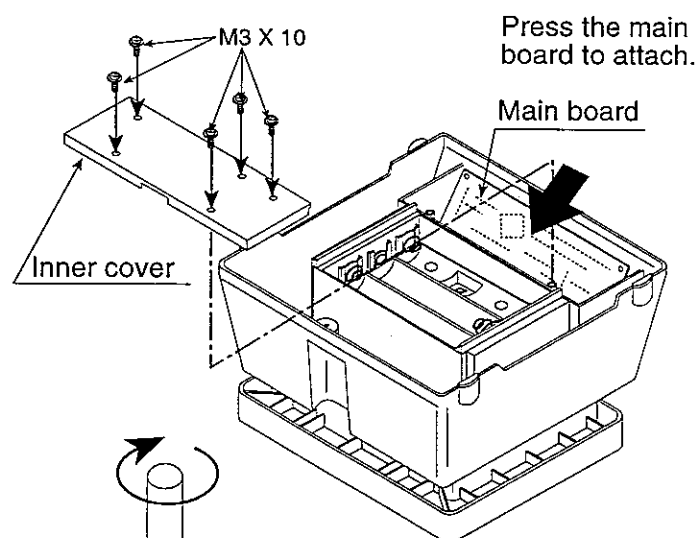


Cable connection varies depend-
ing on the main board.

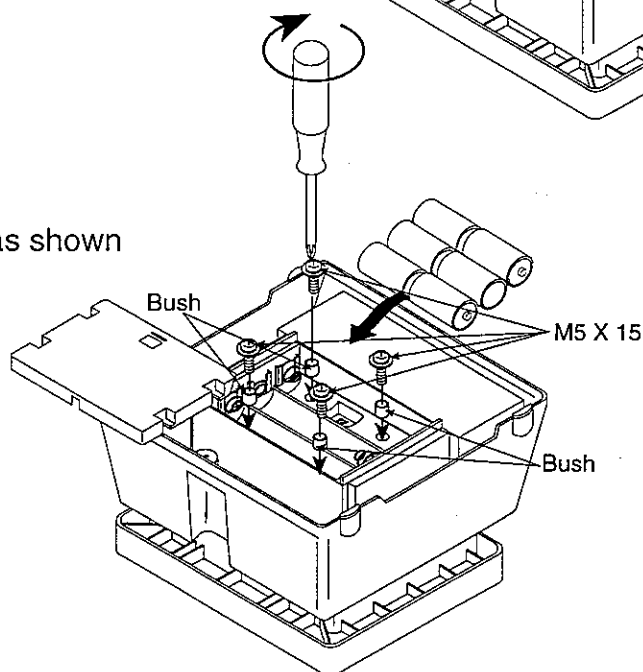
Connect the cables according to
the printed characters.

B : BLUE
G : GREEN
O : ORANGE
P : PURPLE
R : RED
W/Y : WHITE/YELLOW

- 5 Attach the main board, and then
the inner cover.



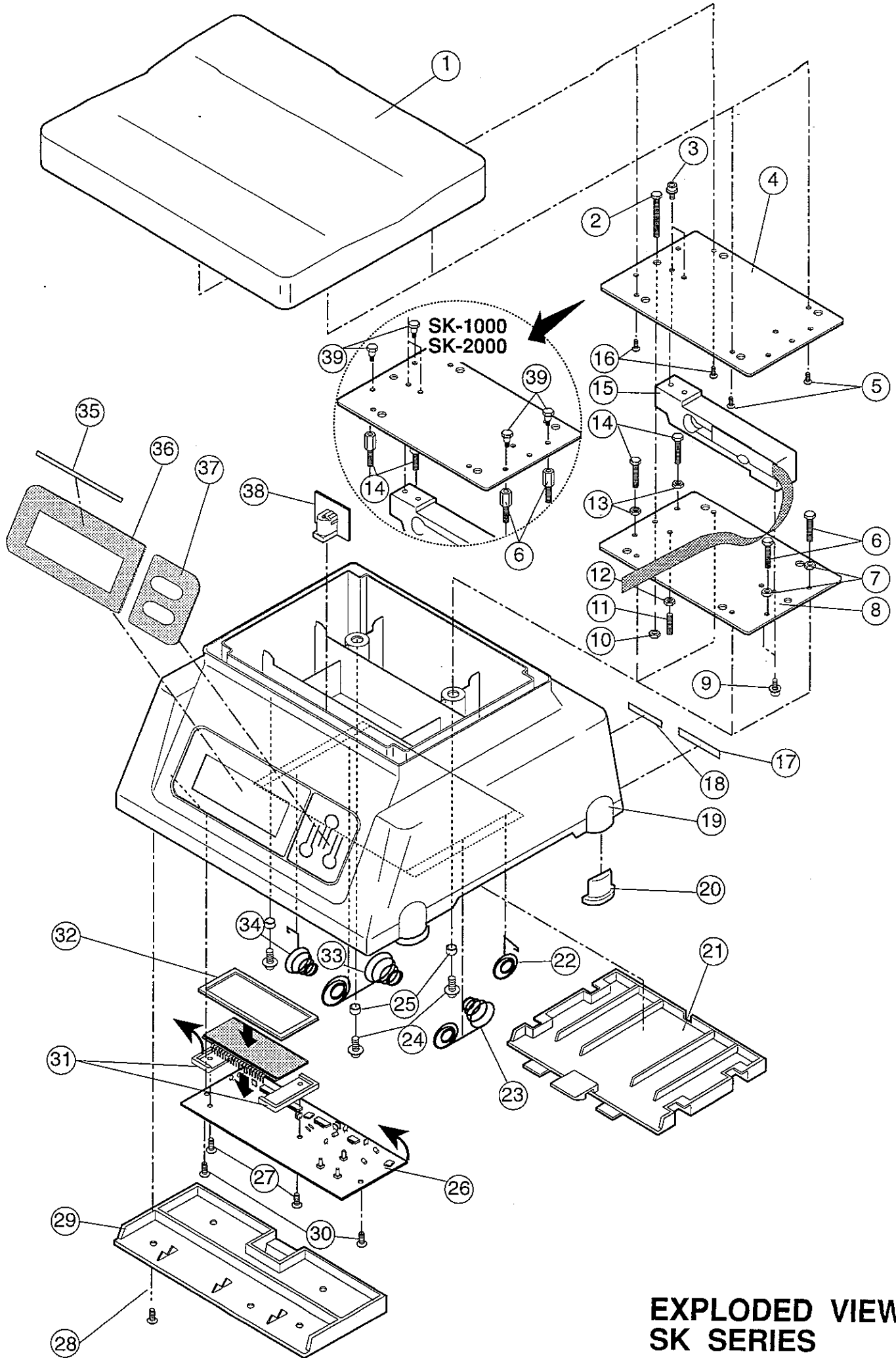
- 6 Fasten the four screws as shown
in the right figure.





10 SPECIFICATION

MODEL	SK-1000 SK-1000D	SK-2000 SK-2000D	SK-5000 SK-5000D	SK-10K SK-10KD	SK-20K SK-20KD	SK-30K SK-30KD
Capacity	1000g 2.2lb	2000g 4.4lb	5000g 11lb	10kg 22lb	20kg 44lb	30kg 66lb
Calibration weight	1000g ±0.1g	2000g ±0.2g	5000g ±0.5g	10kg ±1g	20kg ±2g	30kg ±2g
Resolution	0.5g 0.001lb	1g 0.002lb	2g 0.005lb	0.005kg 0.01lb	0.01kg 0.002lb	0.02kg 0.005lb
Non-linearity	±1g	±2g	±4g	±0.01kg	±0.02kg	±0.02kg
Repeatability	±0.5g	±1g	±2g	±0.005kg	±0.01kg	±0.02kg
Span drift	±0.015%/°C TYP (5°C~35°C /41°F~86°F)					
Display	25mm/0.98inch, 7segment liquid crystal display ,Dual display(SK-D)					
Platform size	230mm(W) X 190mm(D) / 9.05in(W) X 7.48in (D)					
Dimensions	244(W) X 232(D) X 137(H) mm 9.61(W) X 9.13(D) X 5.93(H) mm					
Weight (approximately)	1.6kg/3.53lb				1.9kg/4.19lb	
Power	6 X R20P/LR20/ "D" size batteries or AC adaptor					
Battery life	Approximately 600 hours with manganese type cells 1200 hours with alkaline cells at 20°C/68°F					
Operating temp.	-10°C~40°C /14°F~104°F, Less than 85%RH (Non-condensing)					
Accessories	Instruction Manual					
Options	AC Adaptor					

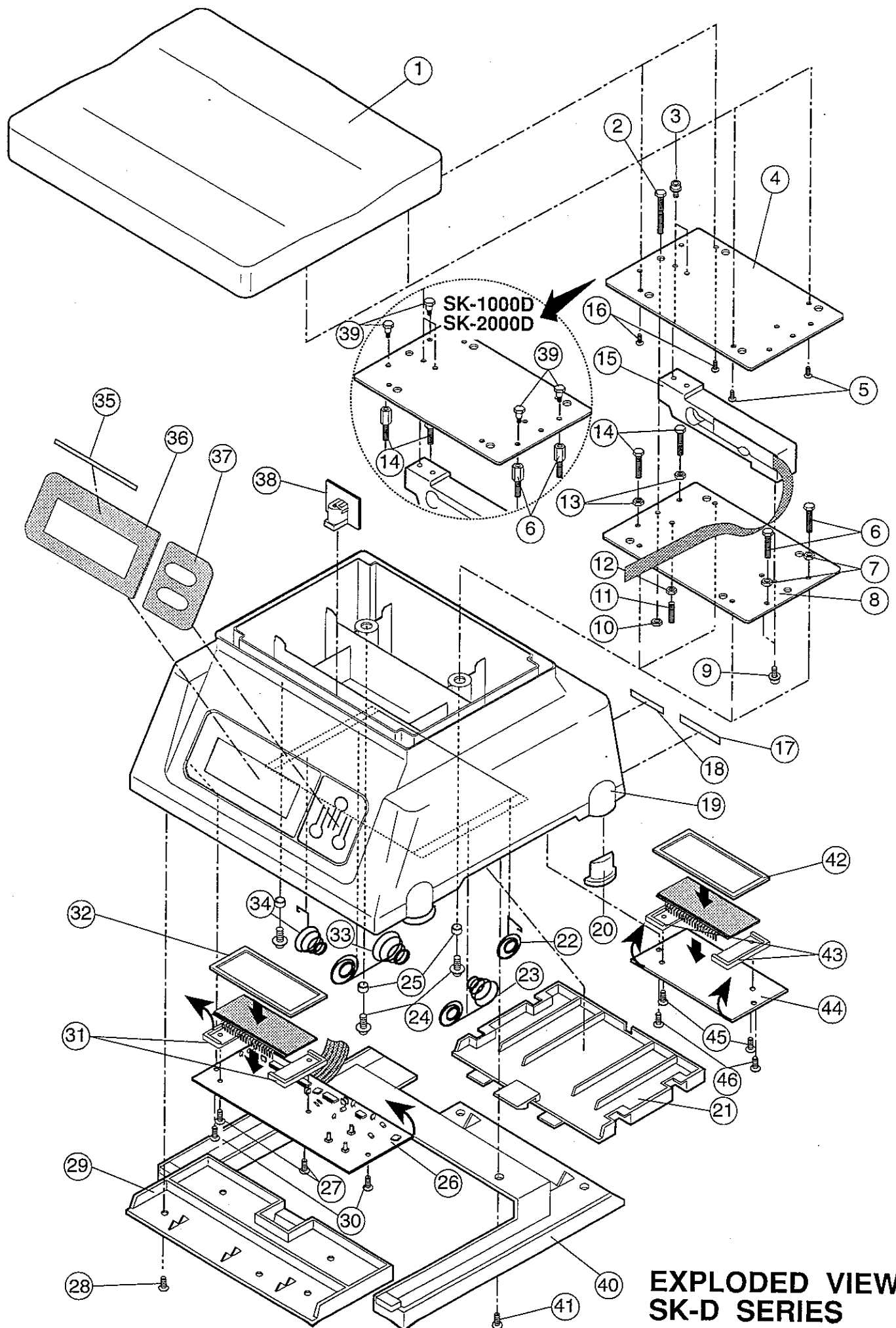


**EXPLODED VIEW
SK SERIES**

PARTS LIST SK SERIES

No.	PARTS NAME	DESCRIPTION	QTY
1	07:1000025A	WEIGHING PAN	1
2	M5 X 45	BOLT FOR SK-5000/10K/20K/30K	1
3	M5 X 15	HEXAGON BOLT WITH WASHER	1
4	04:4005206	CELL FLAME F'(t=3)SK-1000/2000	1
	04:4003488	CELL FLAME D'(t=3)SK-5000/10K	1
	04:4003490	CELL FLAME A'(t=4.5)SK-20K	1
	04:4004911	CELL FLAME E'(t=4.5)SK-30K	1
5	M4 X 12	PAN HEAD TAPPING SCREW	2
6	17:08SX-5 X 35	BOLT FOR SK-5000/10K/20K/30K	2
	05:4005207	STOP BOLT(A)SK-1000/2000	2
7	M5	NUT	2
8	04:4003487	CELL FLAME D (t=3) SK-1000/2000/5000/10K	1
	04:4003489	CELL FLAME A (t=4.5) SK-20K	1
	04:4004910	CELL FLAME E (t=4.5) SK-30K	1
9	M5 X 15	HEXAGON BOLT WITH WASHER	1
10	M5	NUT FOR SK-5000/10K/20K/30K	1
11	M5 X 15	HEXAGONAL SCREW	1
12	M5	NUT	1
13	M5	NUT	2
14	17:08SX-5 X 35	BOLT FOR SK-5000/10K/20K/30K	2
	05:4005207	STOP BOLT(A) FOR SK-1000/2000	2
15	LC:121-2000	LOADCELL FOR SK-1000/2000	1
	LC:121-10K	LOADCELL FOR SK-5000/10K	1
	LC:121-20K	LOADCELL FOR SK-20K	1
	LC:121-30K	LOADCELL FOR SK-30K	1
16	M4 X 12	PAN HEAD TAPPING SCREW	2
17	08:4004098	STICKER(A&D)	1
18	08:4003502	STICKER(MADE IN KOREA)	1
19	07:1000024	CASE	1
20	07:4003338	FOOT	4
21	07:2000178	BATTERY COVER	1
22	15:4003492	TERMINAL(+)	1
23	15:4003494	TERMINAL(L)	1
24	M5 X 15	PAN HEAD WITH WASHER AND SPRING WASHER	4
25	10:138230950030	BUSH (M5 X 3)	4
26	PZ:3006	MAIN BOARD	1
27	M2.6 X 6	PAN HEAD TAPPING SCREW	2
28	M3 X 10	PAN HEAD TAPPING SCREW	5
29	07:3001273	INNER COVER	1

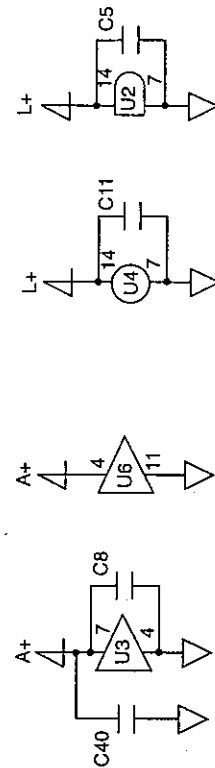
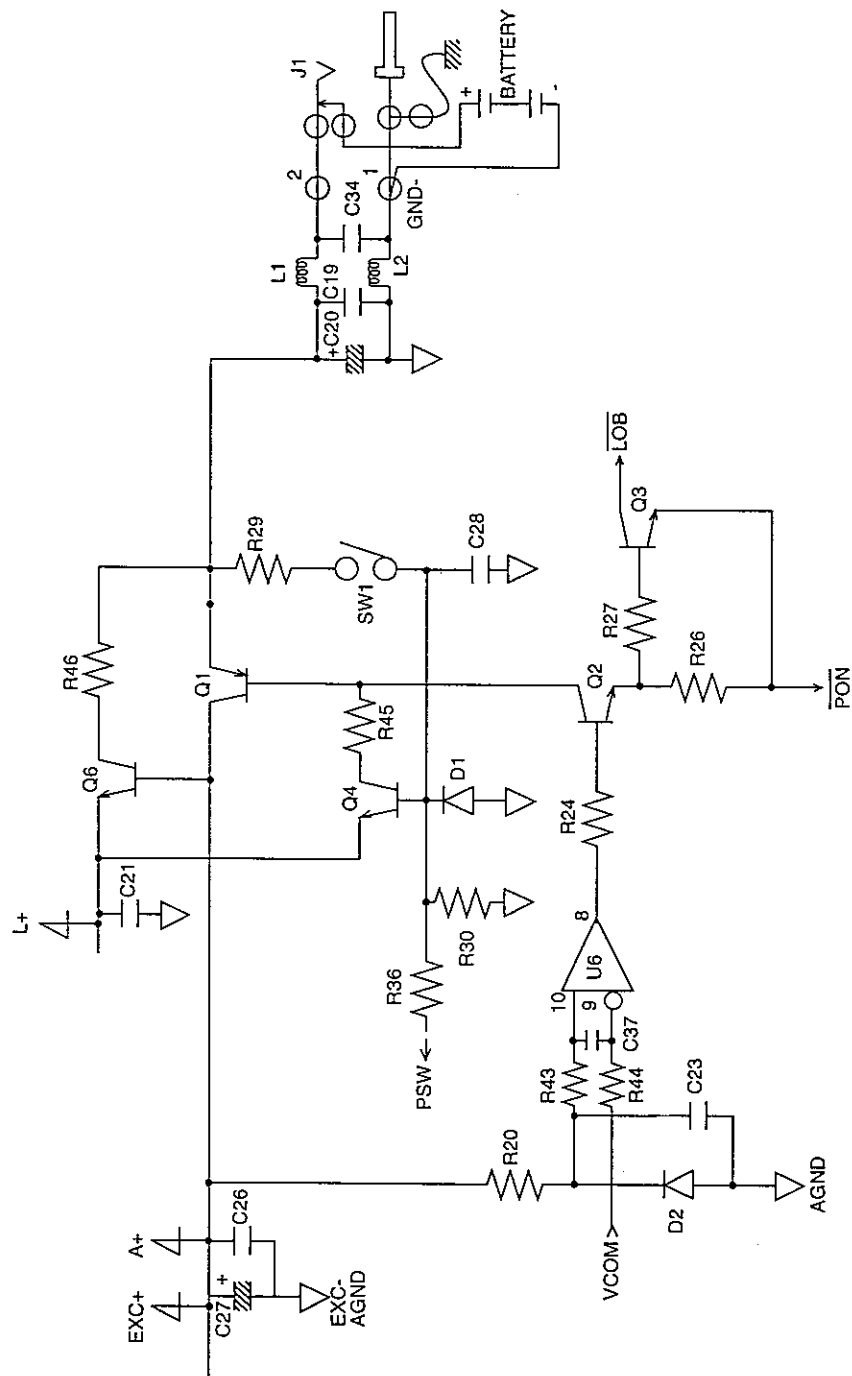
No.	PARTS NAME	DESCRIPTION	QTY
30	M2.6 X 6	PAN HEAD TAPPING SCREW	2
31	07:4003838	LCD HOLDER	2
32	08:4003833	MASKING SEAL	1
33	15:4003495	TERMINAL(R)	1
34	15:4003493	TERMINAL(-)	1
35	08:4003782	MODEL SHEET FOR SK-1000(EX)	1
	08:4003783	MODEL SHEET FOR SK-2000(EX)	1
	08:4003784	MODEL SHEET FOR SK-5000(EX)	1
	08:4003785	MODEL SHEET FOR SK-10K(EX)	1
	08:4003786	MODEL SHEET FOR SK-20K(EX)	1
	08:4004856	MODEL SHEET FOR SK-30K(EX)	1
	08:4003787	MODEL SHEET FOR SK-1000(EG)	1
	08:4003788	MODEL SHEET FOR SK-2000(EG)	1
	08:4003789	MODEL SHEET FOR SK-5000(EG)	1
	08:4003790	MODEL SHEET FOR SK-10K(EG)	1
	08:4003791	MODEL SHEET FOR SK-20K(EG)	1
	08:4004857	MODEL SHEET FOR SK-30K(EG)	1
36	07:4003562	FILTER	1
37	08:4003561	KEY SHEET FOR (EX)	1
	08:4003781	KEY SHEET FOR (EG)	1
38	PZ:3006	AC ADAPTOR PLUG	1
39	05:4005208	STOP BOLT(B) SK-1000	4
	05:4005304	STOP BOLT(C) SK-2000	4



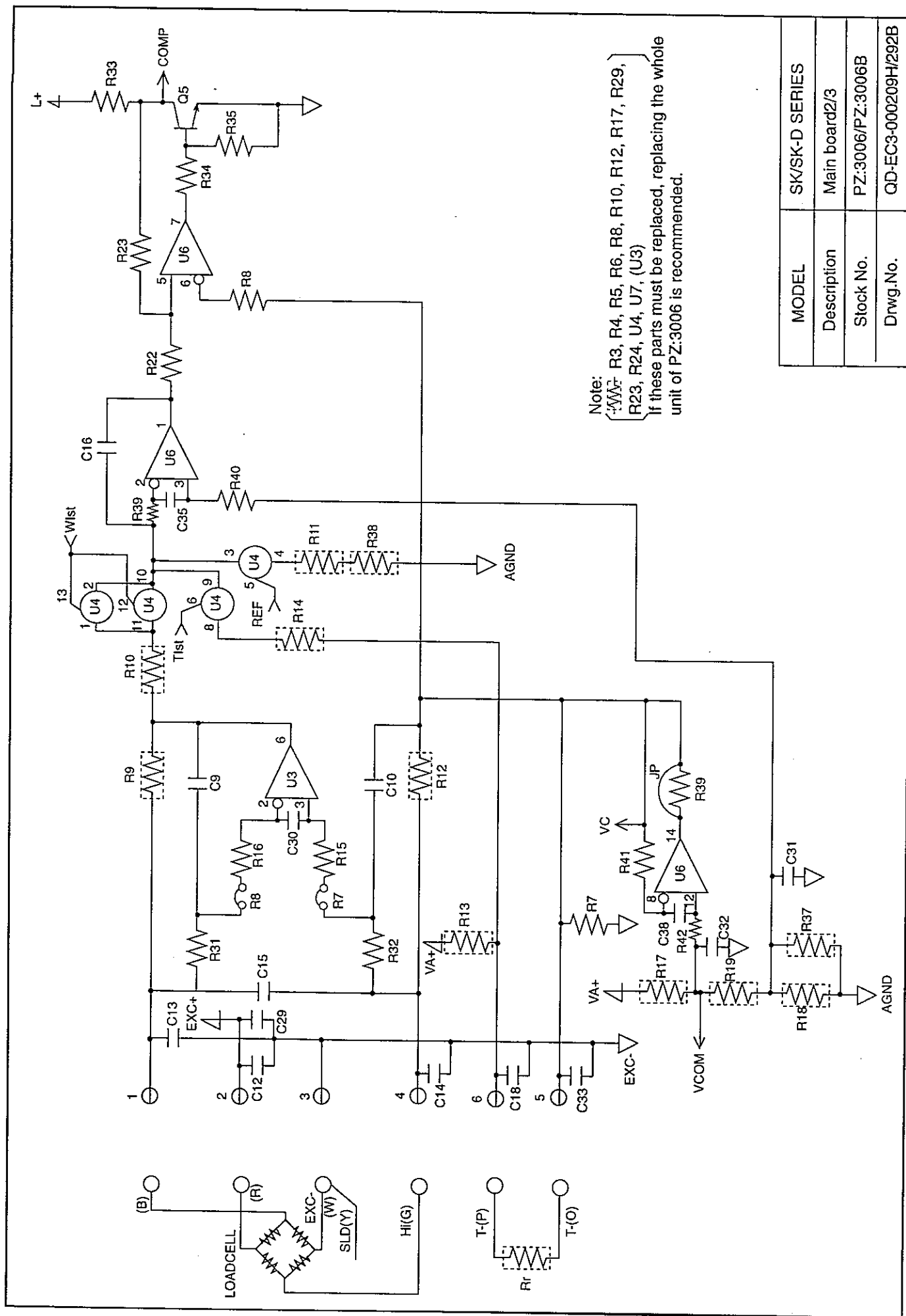
PARTS LIST SK-D SERIES

No.	PARTS NAME	DESCRIPTION	QTY
1	07:1000025A	WEIGHING PAN	1
2	M5 X 45	BOLT FOR SK-5000/10K/20K/30K	1
3	M5 X 15	HEXAGON BOLT WITH WASHER	1
4	04:4005206	CELL FLAME F'(t=3)SK-1000/2000	1
	04:4003488	CELL FLAME D'(t=3)SK-5000/10K	1
	04:4003490	CELL FLAME A'(t=4.5)SK-20K	1
	04:4004911	CELL FLAME E'(t=4.5)SK-30K	1
5	M4 X 12	PAN HEAD TAPPING SCREW	2
6	17:08SX-5 X 35	BOLT FOR SK-5000/10K/20K/30K	2
	05:4005207	STOP BOLT(A)SK-1000/2000	2
7	M5	NUT	2
8	04:4003487	CELL FLAME D (t=3) SK-1000/2000/5000/10K	1
	04:4003489	CELL FLAME A (t=4.5) SK-20K	1
	04:4004910	CELL FLAME E (t=4.5) SK-30K	1
9	M5 X 15	HEXAGON BOLT WITH WASHER	1
10	M5	NUT FOR SK-5000/10K/20K/30K	1
11	M5 X 15	HEXAGONAL SCREW	1
12	M5	NUT	1
13	M5	NUT	2
14	17:08SX-5 X 35	BOLT FOR SK-5000/10K/20K/30K	2
	05:4005207	STOP BOLT(A) FOR SK-1000/2000	2
15	LC:121-2000	LOADCELL FOR SK-1000/2000	1
	LC:121-10K	LOADCELL FOR SK-5000/10K	1
	LC:121-20K	LOADCELL FOR SK-20K	1
	LC:121-30K	LOADCELL FOR SK-30K	1
16	M4 X 12	PAN HEAD TAPPING SCREW	2
17	08:4004098	STICKER(A&D)	1
18	08:4003502	STICKER(MADE IN KOREA)	1
19	07:1000024	CASE	1
20	07:4003338	FOOT	4
21	07:2000178	BATTERY COVER	1
22	15:4003492	TERMINAL(+)	1
23	15:4003494	TERMINAL(L)	1
24	M5 X 15	PAN HEAD WITH WASHER AND SPRING WASHER	4
25	10:138230950030	BUSH (M5 X 3)	4
26	PZ:3006	MAIN BOARD	1
27	M2.6 X 6	PAN HEAD TAPPING SCREW	2
28	M3 X 10	PAN HEAD TAPPING SCREW	5
29	07:3001273	INNER COVER	1

No.	PARTS NAME	DESCRIPTION	QTY
30	M2.6 X 6	PAN HEAD TAPPING SCREW	2
31	07:4003838	LCD HOLDER	2
32	08:4003833	MASKING SEAL	1
33	15:4003495	TERMINAL(R)	1
34	15:4003493	TERMINAL(-)	1
35	08:4003782	MODEL SHEET FOR SK-1000(EX)	1
	08:4003783	MODEL SHEET FOR SK-2000(EX)	1
	08:4003784	MODEL SHEET FOR SK-5000(EX)	1
	08:4003785	MODEL SHEET FOR SK-10K(EX)	1
	08:4003786	MODEL SHEET FOR SK-20K(EX)	1
	08:4004856	MODEL SHEET FOR SK-30K(EX)	1
	08:4003787	MODEL SHEET FOR SK-1000(EG)	1
	08:4003788	MODEL SHEET FOR SK-2000(EG)	1
	08:4003789	MODEL SHEET FOR SK-5000(EG)	1
	08:4003790	MODEL SHEET FOR SK-10K(EG)	1
	08:4003791	MODEL SHEET FOR SK-20K(EG)	1
	08:4004857	MODEL SHEET FOR SK-30K(EG)	1
36	07:4003562	FILTER	1
37	08:4003561	KEY SHEET FOR (EX)	1
	08:4003781	KEY SHEET FOR (EG)	1
38	PZ:3006	AC ADAPTOR PLUG	1
39	05:4005208	STOP BOLT(B) SK-1000	4
	05:4005304	STOP BOLT(C) SK-2000	4
40	07:2000231	INNER COVER(REAR)	1
41	M3 X 10	PAN HEAD TAPPING SCREW	4
42	08:4003833	MASKING SEAL	1
43	07:4003838	LCD HOLDER	2
44	PZ:3171	REAR DISPLAY BOARD	1
45	M2.6 X 6	PAN HEAD TAPPING SCREW	2
46	M2.3 X 6	PAN HEAD TAPPING SCREW	2



MODEL	SK/SK-D SERIES
Description	Main board1/3
Stock No.	PZ:3006/PZ:3006B
Drwg.No.	QD-EC3-000209H/292B

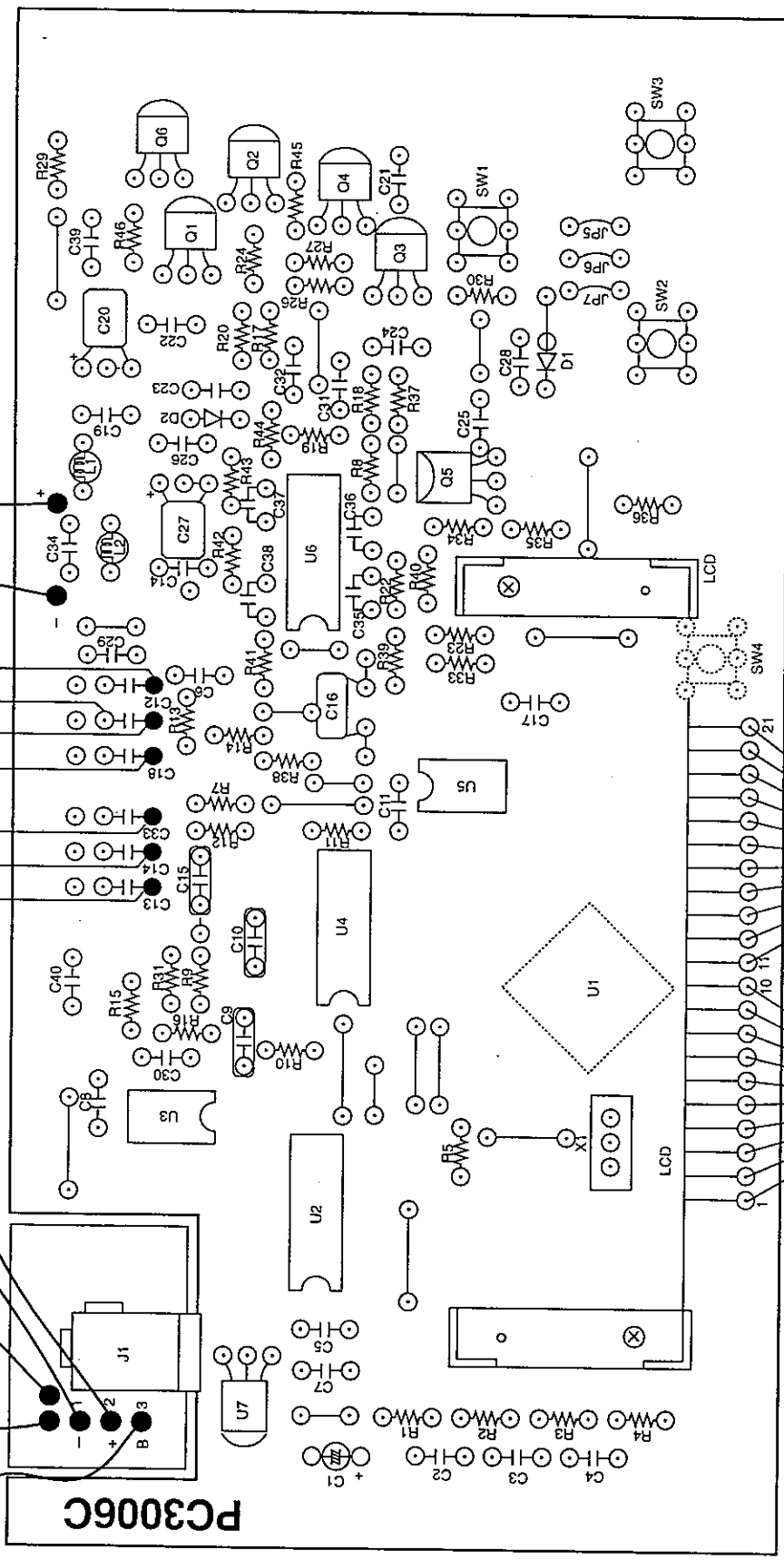


Note:
 R3, R4, R5, R6, R8, R10, R12, R17, R29, R23, R24, U4, U7, (U3)
 If these parts must be replaced, replacing the whole unit of PZ:3006 is recommended.

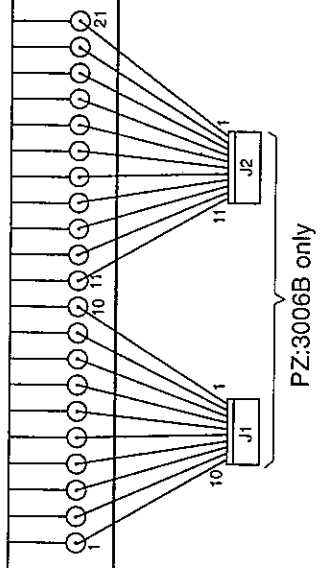
MODEL	SK/SK-D SERIES
Description	Main board2/3
Stock No.	PZ:3006/PZ:3006B
Drwg.No.	QD-EC3-000209H/292B

(+) BLACK(13cm)
 (-) ORANGE(20cm)
 (+) RED(20cm)
 (-) BLACK(20cm)

BLUE
 GREEN
 ORANGE
 PURPL
 WHITE
 YELLO
 RED



MODEL	SK /SK-D SERIES
Description	Main board
Stock No.	PZ:3006/PZ:3006B
Drwg.No	QD-KZ3-000185L/269D



PZ:3006/PZ:3006B

PARTS LIST

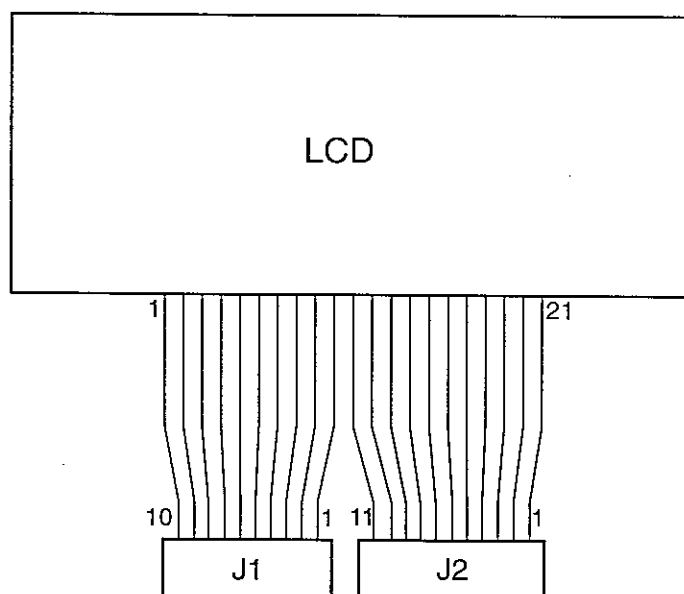
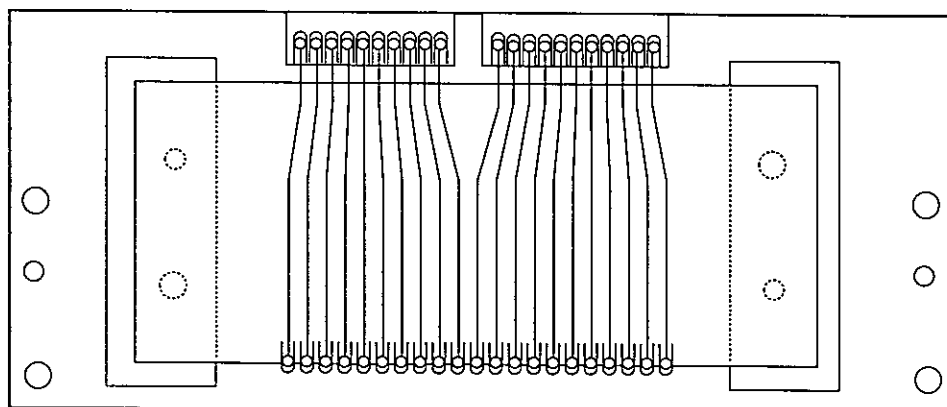
No.	PARTS NAME		DESCRIPTION	LOT
U1	CPU	UC	MN150413-XTK	1
U5	E2PROM	UC	RP93C46	1
U4	ANALOG SW	UC	HC4066	1
U2	AND	UC	HC08	1
U3	OP-AMP	UA	OP07DP-TI	1
U6	OP-AMP	UA	C324C	1
U7	RESET	UA	S-8053ALB-Z	1
Q1	TRANSISTOR	QT	A1015YT	1
Q2~Q6	TRANSISTOR	QT	C1815YT	5
D2	ZENER DIODE	DZ	HZS2CLL-TD	1
D1	ZENER DIODE	DZ	RD 5.1ES-T1	1
R10	METAL-FILM-RESISTOR 25P	RM	RN16TB68KFE	1
R19	METAL-FILM-RESISTOR 50P	RM	RN16TB1.2KFC	1
R13	METAL-FILM-RESISTOR 50P	RM	RN16TB4.7KFC	1
R37	METAL-FILM-RESISTOR 50P	RM	RN16TB120KFC	1
R9,12,17,18	METAL-FILM-RESISTOR 25P	RM	RN16TB30KFE	4
R11,14,38	METAL-FILM-RESISTOR 25P	RM	RN16TB47KFE	3
R8,15,16,39-46	CARBON-FILM-RESISTOR	RC	NAT100RJT	11
R22,26,27	CARBON-FILM-RESISTOR	RC	NAT1KJT	3
R29,31,32	CARBON-FILM-RESISTOR	RC	NAT3.3KJT	3
R7,20	CARBON-FILM-RESISTOR	RC	NAT5.6KJT	2
R1,2,3,35	CARBON-FILM-RESISTOR	RC	NAT10KJT	4
R4	CARBON-FILM-RESISTOR	RC	NAT15KJT	1
R24,34	CARBON-FILM-RESISTOR	RC	NAT27KJT	2
R5,33	CARBON-FILM-RESISTOR	RC	NAT56KJT	2
R30,36	CARBON-FILM-RESISTOR	RC	NAT100KJT	2
R23	CARBON-FILM-RESISTOR	RC	NAT1MKJT	1
R7,8,39			JUMPER	

PARTS LIST

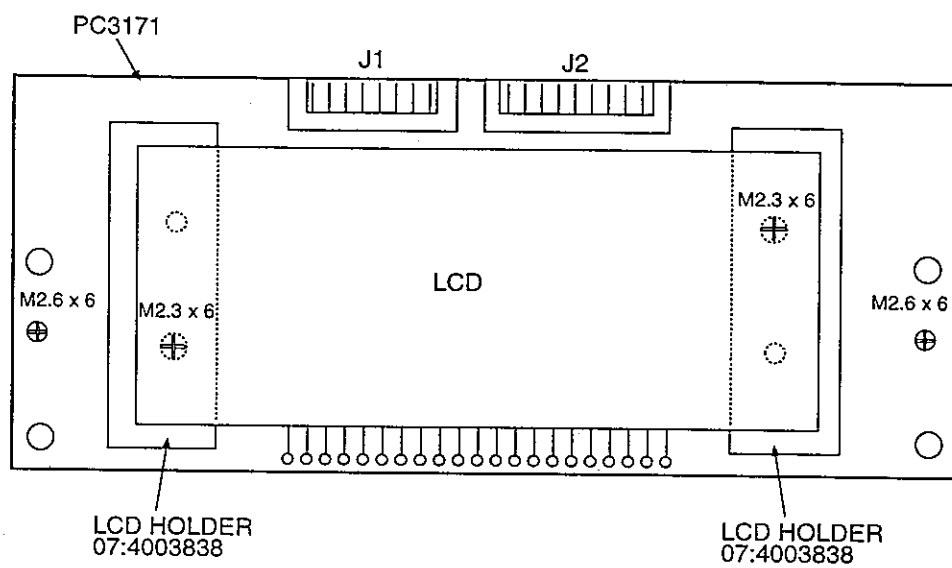
No.	PARTS NAME		15DESCRIPTION	LOT
C9,10	POLYSTER-FILM-CAPACITOR	CM	V1H224JL2-T	2
C15	POLYSTER-FILM-CAPACITOR	CM	V1H474JL2-T	1
C16	POLYPROPYLENE-CAPACITOR	CP	P1H473JZ3-T	1
C20,27	ALUMINIUM-CAPACITOR	CK	SME50VB22-T	2
C1	TANTALUM-CAPACITOR	CT	1V010T	1
C4,7	CERAMIC-CAPACITOR	CC	0.1U25VT	2
C2,3,5,8,11, 12,13,14,18, 19,21,26,28, 29,33,34,40	CERAMIC-CAPACITOR	CC	0.01UT	17
C23,30,31, 32	CERAMIC-CAPACITOR	CC	100PT	4
C35,37,38	CERAMIC-CAPACITOR	CC	100P	3
L1,2	COIL	LL	LHL06TB470K	2
X1	CERAMIC-RESONATOR	XT	EFOEC4004T3	1
SW1,2,3	TACT-JW	SK	SKHHAN	3
J1	DC-JACK	EJ	0470-01-230	1
LCD	LCD	ED	DLC4990P	1
LCD	LCD HOLDER SK	07	4003838	2
LCD	MASKING SEAL	08	4003833	1

PZ:3006B only

No.	PARTS NAME		15DESCRIPTION	LOT
J1	CONNECTOR CABLE	KO	964-10S040	1
J2	CONNECTOR CABLE	KO	964-11S040	1



MODEL	SK-D SERIES
Description	Rear Display Board
Stock No.	PZ:3171
Drwg.No.	QD-EC4-000110



MODEL	SK-D SERIES
Description	Rear Display Board
Stock No.	PZ:3171
Drwg.No.	QD-KZ4-000091A

PZ:3171 PARTS LIST

No.	PARTS NAME	DESCRIPTION	LOT
LCD	ED:DLC4990P	LCD	1
J1	JI:10P-S2L2-EF	10P CONNECTOR	1
J2	JI:11P-S2L2-EF	11P CONNECTOR	1
	07:4003838	LCD HOLDER	2



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