CL5000J Series

Service Manual

(English)

Rev. 2008. 07. 22

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1. Proper Operation

1.1 Introduction

Thank you for purchasing the CAS CL5000J price computing printer scale. We have designed this equipment with advanced features, high quality construction, and user-friendly menu driven programming. We are confident that you will find the CAS CL5000J scale will meet all of your most demanding needs.

Sales data is easily acquired through many of the available. Also available: High speed printer, 53 preset keys (106 using the SHIFT key or double click) per department, and several operation modes that enable you to control & access to the scale.

For larger operations, CL5000J has in-store network that can link-up to 32 scales. RS-232 port, ethernet port enable to export and import program data for time-save mangement. On-time operation possible because of PLU and all other data files are kept locally in each scale's memory bank; the scale's speed is the same as a stand-alone unit in a network.

The CL5000J can use with label. Also cartridge loading mechanism helps to refill the label roll easyly. Also you can print logos, templates, ingredient messages, advertisement lines, and more to promots your store.

Remember, for proper installation and maintenance please read the CL5000J Manual before use. A wide variety of supplies, accessories, and expansion options are available through CAS Corporation for whatever your new and increasing demands may require

The CL5000J also comes with the SP-2 software package. This software runs on any PC using the 95/98/2000/XP Windows OS. You can design your own label formats on your computer screen and save them to your hard drive. With this percise interface, the labels you see on-screen appear exactly on the printer. You can also manage all of the CL5000J's programs and options like pricing, PLU programming, etc. You can upload data from a CL5000J or download data. This is ideal solution for an emergency scale backup system. All this and many more features are packed into the SP-2 software package. SP-2 software package enhances your business next level.

1.2 Model and Specificationl

Model	CL5000J Series			
Capacity	6Kg	15Kg	30Kg	
Interval	1g/2g	2g/5g	5g/10g	
Max Tare	-2.999Kg	-5.998Kg	-9.995Kg	
Display	7-segment VFD			
	Tare: 4 digit Weight: 5 digit Unit Price: 6 digit Total Price : 6 digit			
Zero Pass Range	1~50% (default 10%)			
Re-Zero Range	1~50% (default 2%)			
Overload Range	Max Capa. ~ Max Capa. + 255d (default Max+9d)			
A/D Conversion Rate	Approx. 8/sec			
Measurement type	Load cell			
Platter type	SUS			
Key	B-Type	PLU Key : 48, Function Key: 36	P,R-Type	PLU Key : 72, Function Key: 36
Speed Key		PLU Key : 96		PLU Key : 144
Data Table	PLU	1~999999	6000	
	Ingredient 400 Char	1~100	100	
	user defined Barcode Format	1~20	20	
	Department	1~99	99	
	Origin	1~500	500	
	Group	1~99	99	
	Label Format	Default :30, User:10	40	
	Bitmap	1~5	5	
	Quantity Symbol	1~8	8	
	Tare Table	1~99	99	
Report	Scale, PLU, Misc. PLU, Group, Department, Hourly			
Printing Resolution	202 dpi			
Label Size	Width: 40mm ~ 60mm, Length: 30mm ~ 80mm			
Barcode Type	EAN13, I2OF5, CODE128C ,			
Font	Offer varoius sizes of label format, e.g Small, Middle, Large Size, and on the label format, also offers varioous types of fonts, such as Italic,Bold,Underline,Throgh Line, Double through line, Reverse,shadow, outline etc.			
Printer Type	Direct Thermal Print			
Dimensions	B-Type	408 x 432 x 173 mm	Tray : 380 x 244 mm	
	P-Type	408 x 493 x 542 mm		
	R-Type	408 x 493 x 607 mm		

1.3 Environmental Conditions & Safety

1) Please avoid the following hostile conditions

- Temperatures below or exceeding: -10° C ~ 40° C (14° F ~ 104° F)
- Excessive vibration
- Wind or fans functioning in direct contact with weighing platform.
- Direct sunlight
- High humidity
- Ungrounded electrical outlet
- Unstable or flimsy surface
- Shared electrical outlet
- Dust or dirt
- Poor ventilation

2) Environmental Protection

The scale should be installed in a dry and liquid free environment. When the scale is installed in a high humidity or wet-type environment, be sure to avoid spilling or spraying directly on any surface of the scale.

3) Personal Safety

It is very important to be aware of personal safety whenever maintaining or operating this equipment. We have tried to place warning labels and other indicators at the actual location on the equipment where the danger is most likely to occur. Warnings and cautions that are necessary for the safe operation of the scale are contained in this manual. Please, make sure to read carefully ALL warnings and cautions before operating the scale.

4) Observe the following safety precautions

- Shut the scale OFF and unplug the scale whenever you are changing the label roll or whenever working in the printer bay.
- The outlet that the scale is plugged into, should be properly grounded.
- Whenever connecting or disconnecting ANY cables from the scale, be sure to hold the cables by the end connector. Failure to do so may cause a short circuit.
- Maintain a static-free work area.
- The outlet used must have the proper voltage ratings.

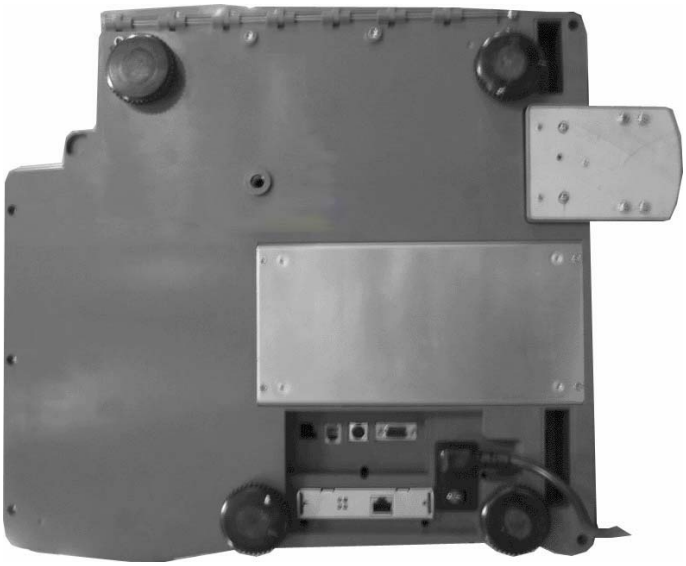
1.4 Leveling and Footer Location

1) Location

This scale must be placed on a flat and stable surface. Please keep the scale away from the direct path of oscillating fans, ventilation systems, or strong drafts as these air disturbances can be picked-up by the scale’ s very sensitive weighing platform and may cause incorrect weight readings.

1.1) General Footer

Factory setting (Footer location is following picture)

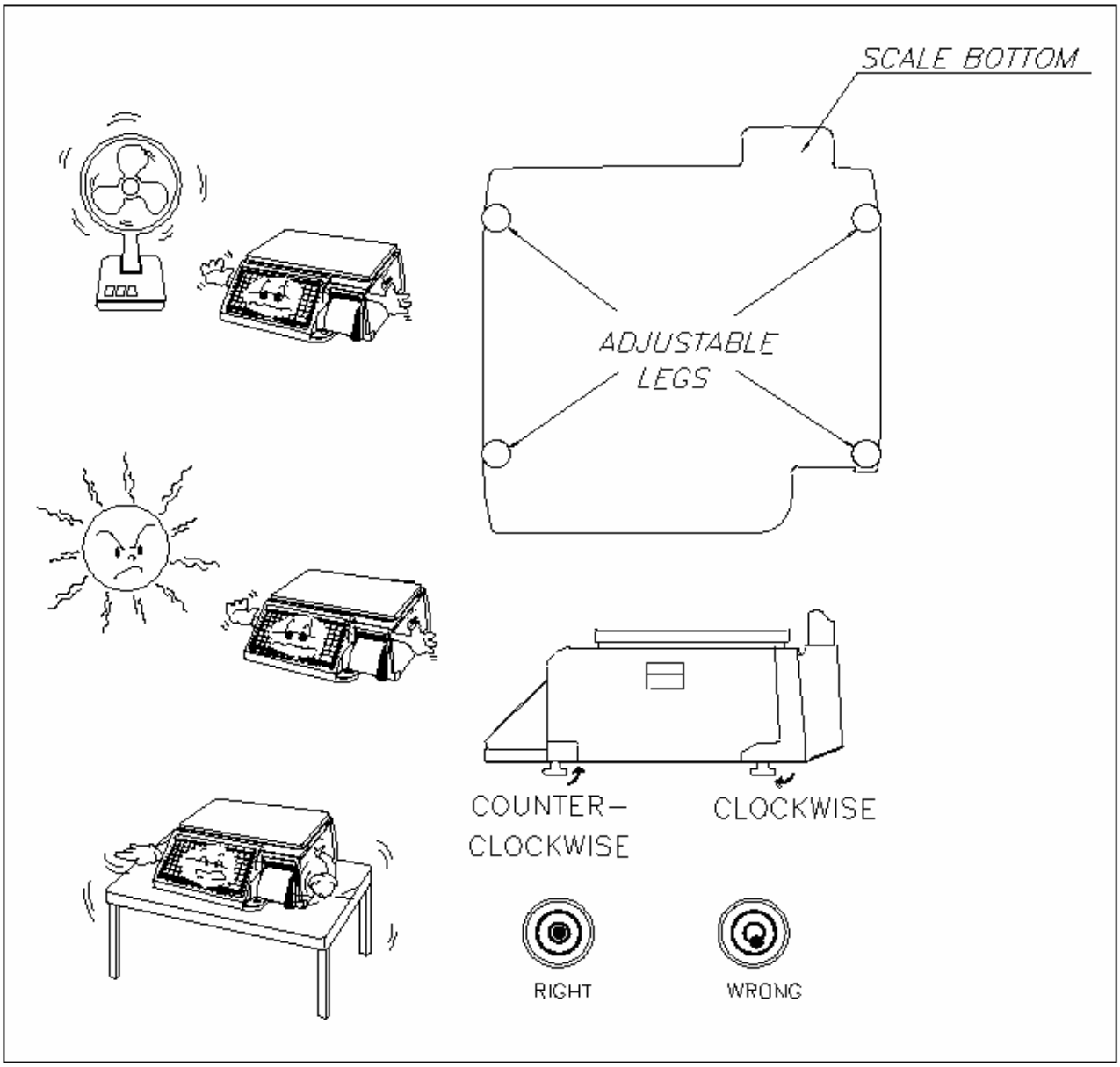


1.2) Short Case Footer

Unscrow the footer and place in center hole for narrow place.

2) Leveling

If the scale is not properly leveled, please adjust the 4 adjustable legs at the bottom of the scale. Turn the legs clockwise or counterclockwise so as to center the bubble of the leveling gauge inside the indicated circle. Turning the adjustable legs counter-clockwise (viewed from top of scale) will lower that part of the scale. Turning the adjustable legs clockwise (viewed from top of scale) will raise that part of the scale. (See Fig.)

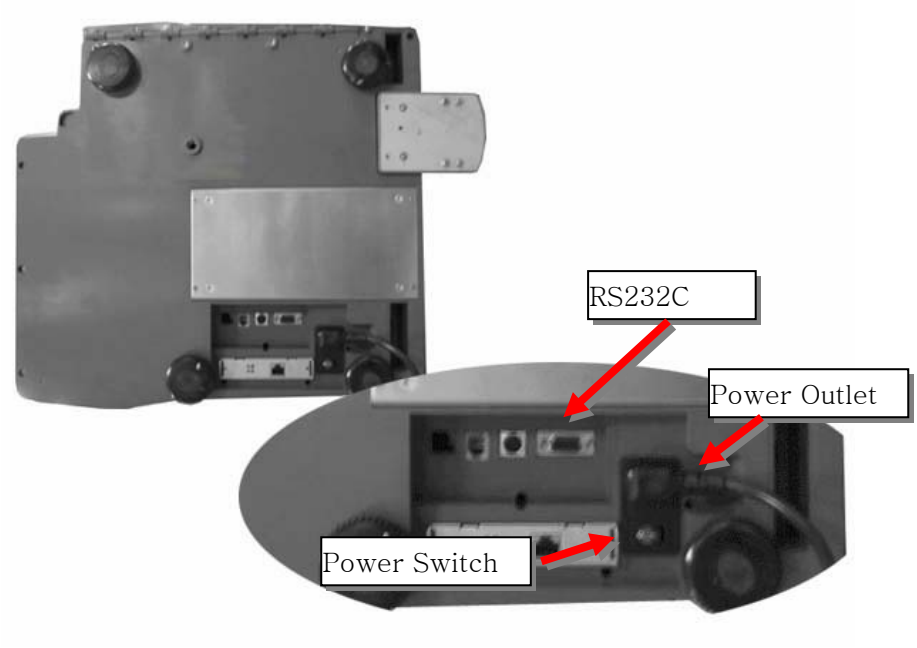


1.5 Power Outlet and Requirements

Power Source : AC 100~240V, 50/60Hz, 1.5A

Power consumption : Max 90W

CL5000J's outlet is on bottom of scale.



1) The CL5000J is designed to be used almost anywhere in the world! Like the many appliances of today, the CL5000J is designed with an automatically switching power supply. This allows operation when connected to an AC source from 100V to 240V at 50/60Hz with 5% tolerance.

NOTE: Please make sure that the power lines used for the CL5000J are dedicated lines with
No high-noise devices (such as compressors, motors, etc) running on it.
Also, make sure that the wiring to the electrical socket is correct.
If you are uncertain as to the state of your work' electrical lines,
please contact a certified electrician.

2) Once you are sure as to the safety of the electrical line, make sure to ONLY plug the scale into a 3- prong outlet. The third prong is a safety ground and an electrician should properly wire this if it is not correct or if you are unsure. Failure to this CAN result in electrical shock from use of this or any electronic scale.

3) Do not use any 3-prong to 2-prong adapters or break-off the third prong from the CLP power cord. The third prong is necessary and must be properly connected.

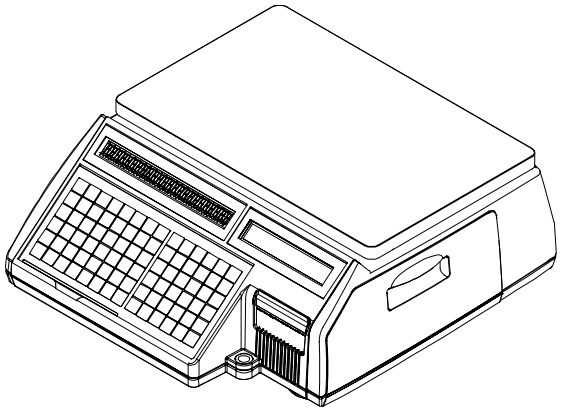
4) If you have any problems or questions regarding this matter, make sure to contact the CAS Service Department.

2. Classification

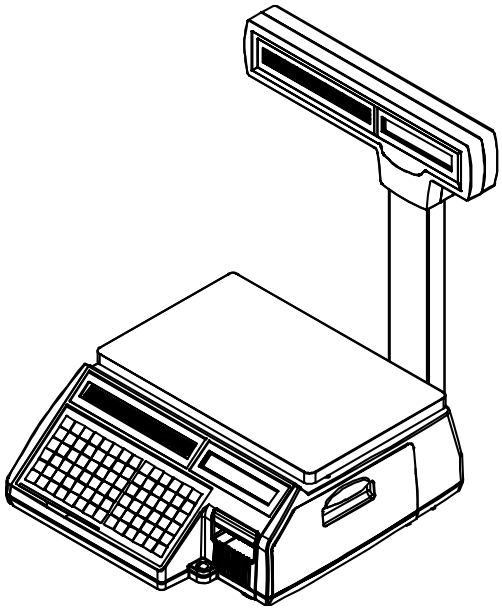
2.1 Scale Overview

CL5000J has 2 differrnt type Standard Type, Pole Type(R,P).

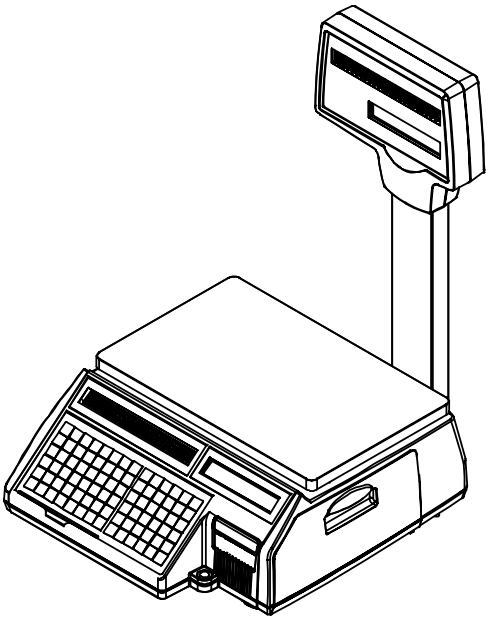
■ Standard Type



■ Pole Type P



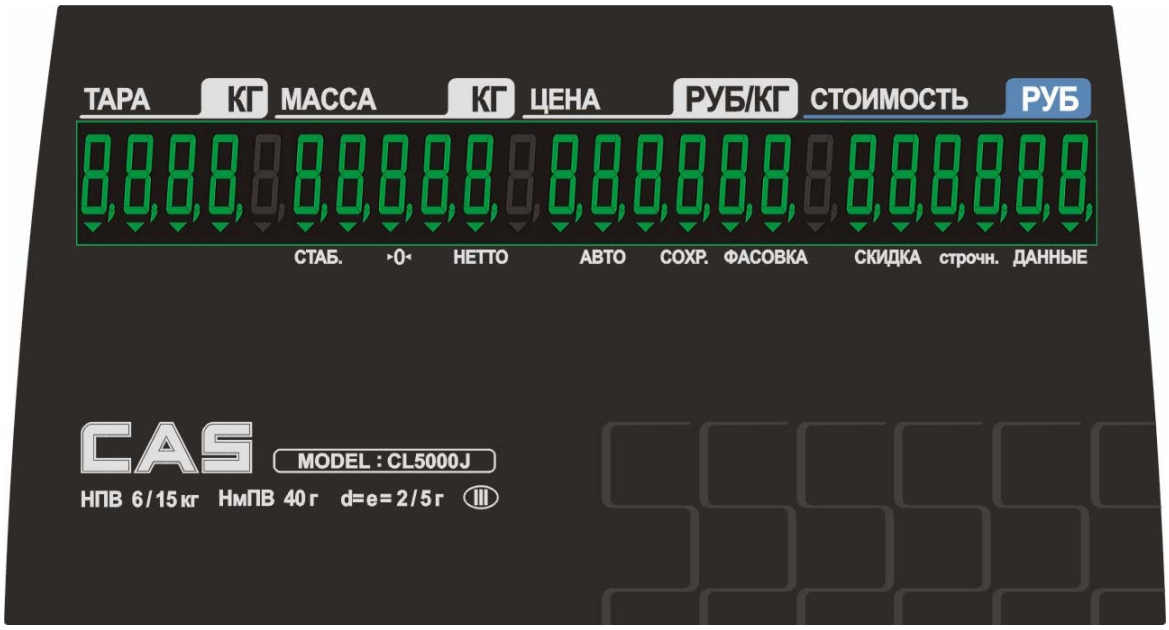
■ Pole Type R



2.2 Display and Indicators

There is VFD display on CL5000J. VFD display indicates program tare, weight, unit price, total price. Underbar inicates stable, net, zero, auto, save, prepack, D/C, shift, data transfer.

■ **Display: 4 / 5 / 6 / 6**



■ **Indicators**

SYMBOLS	DESCRIPTION
ST (▼)	Stable weight indicator
NET (▼)	Net weight indicator
▶0◀	Zero weight indicator
AUTO	Print Mode indicator
SAVE	Auto clearing status indicator
PREPACK	Auto clearing status indicator
DC (▼)	Discount status indicator

SHIFT (▼)	Speed key shift status indicator
TR	Data transmission status indicator

2.3 Printer

•Cartridge type print mechanism

•High quality ROHM printer head (50km/5x10^7pulses)
•Improved a rotating force by using 2 independent motors
•Large compartment for 120mm paper roll
•High speed at 75 mm/sec.
•5 intensity ranges for paper roll quality adjustment

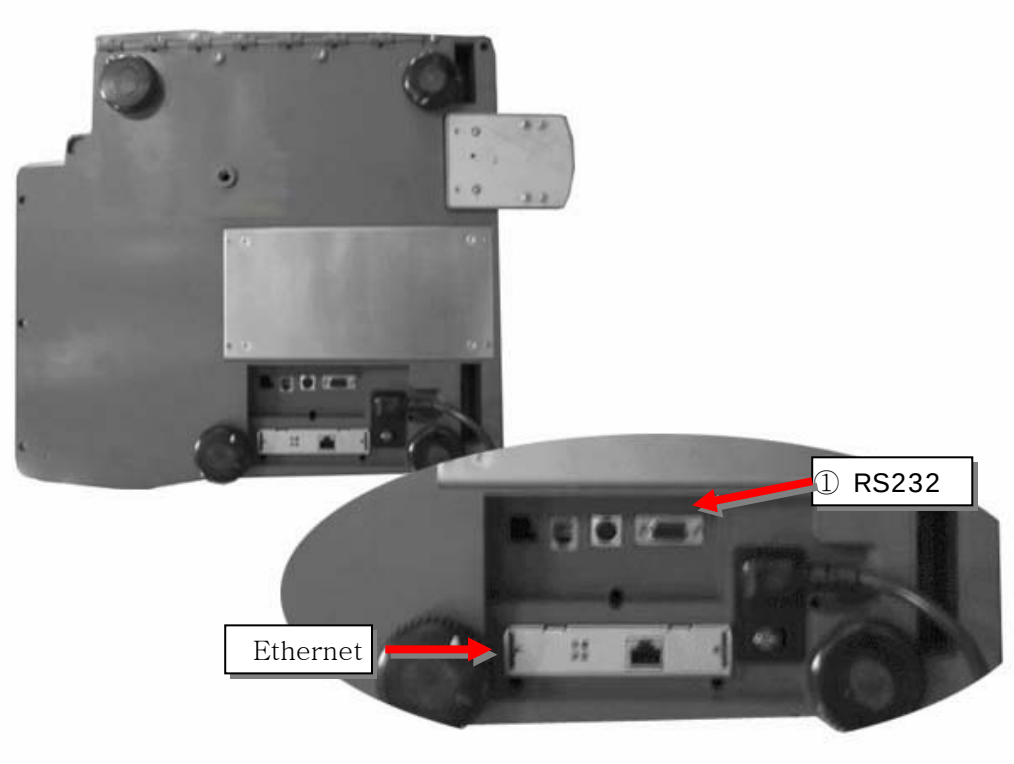
•Supports Paper
  •Labels,
  •Continuous strip labels,
  •Lineless paper

2.4 Commuication

■ Standard

① RS232

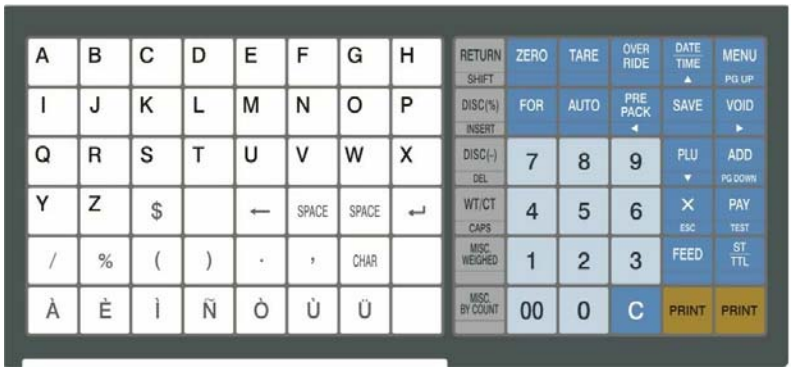
② Ethernet



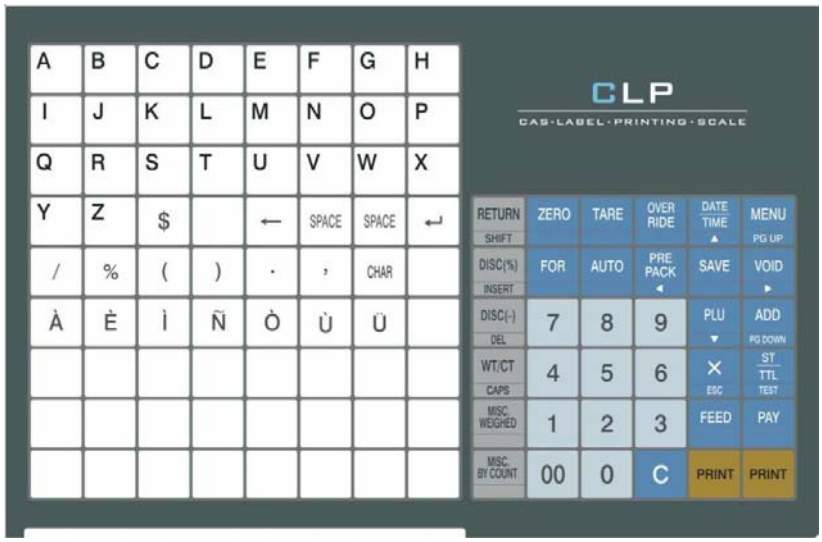
2.5 Key Pad

Key pad is like following picture (This may change depands on contury)

■ Standard Type Keypad

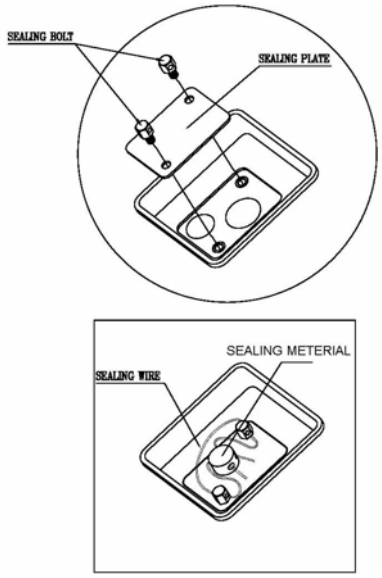


■ Pole Type Keypad



3. Getting Started

3.1 Sealing Method



3.2 Installation of the Label Roll

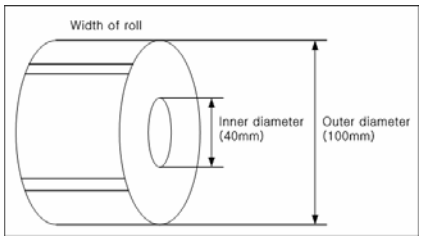
■ **Label Specifications**

Outer diameter of roll : 100mm

Inner diameter of roll : 40mm

Width of receipt roll : 40, 50, 60mm

Width of label roll : 60mm(MAX)



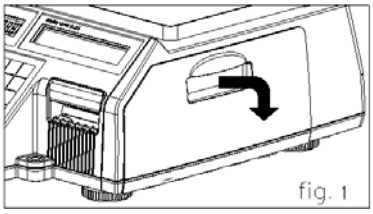
■ **Print Area**

Width of label : 60mm(MAX)

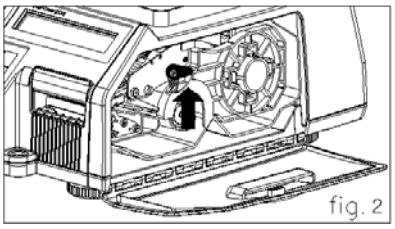
Length of label : 80mm(MAX)

To install the label roll at ANY time you must follow the directions in this section:

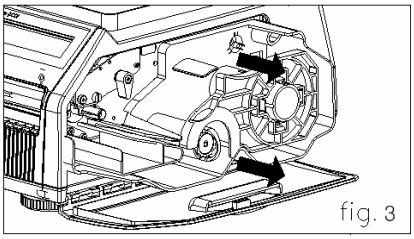
1) Press the ON/OFF key and make sure that the display is completely off. Open the printer's side-access panel. (See fig.1)



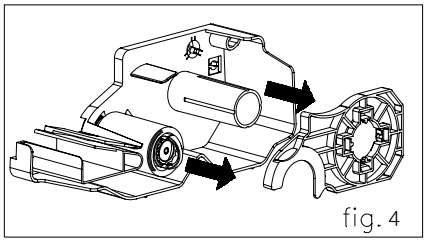
2) Lift up TPH lever as fig 2.



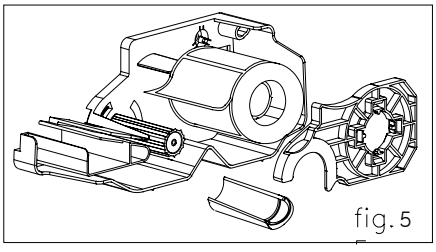
3) Remove cartridge as fig. 3.



4) Remove Pick-Up Spool assembley and paper guide from the cartridge as fig. 4.



5) Place the label in the scale as fig. 5



6) Press the FEED key.

NOTE: For auto label calibration press FEED key two or three times

* If label position is not correct, you have to check the followings:

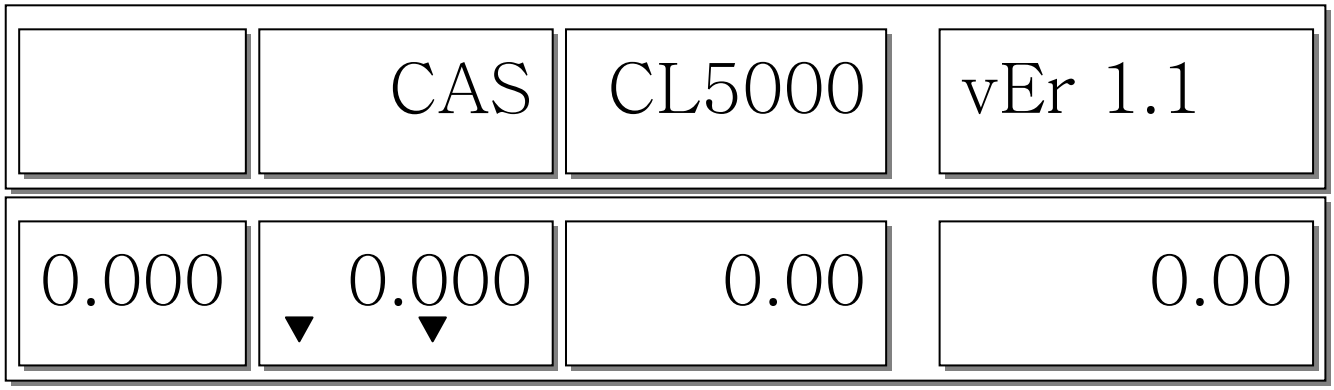
a. Label size (Label setting menu)

b. Feed Adjustment (Feed adjustment menu)

c. Senseor calibration (Sensor Calibration menu)

3.3 Turning Power On

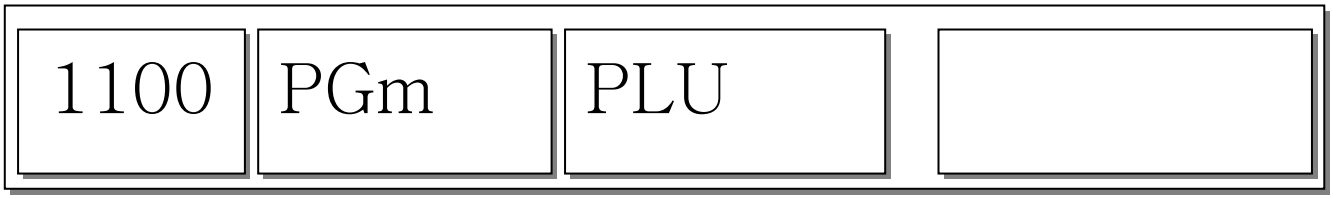
When you turn on scale, display will show below scren.



3.4 Program Menu and Tree

3.4.1 How to access PROGRAM MODE

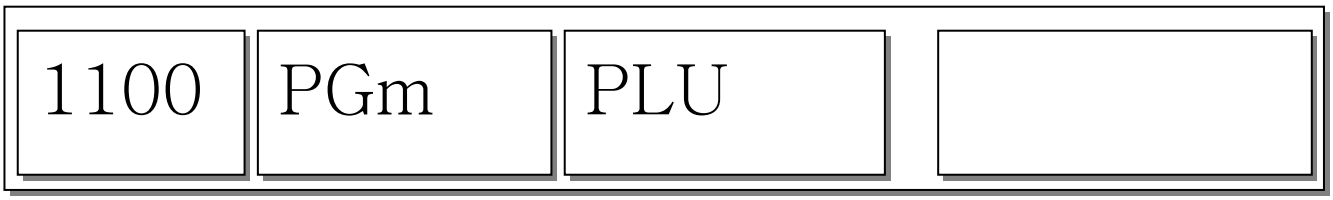
You can see the Program Menu screen by pressing the MENU key.



You can use both keys, DATE-TIME/▲ and PLU/▼ to move other menu. Once you choose a suitable menu, press PRINT key to execute program.

NOTE: Refer to the function keys avaiable program and calibration menu.

Program and Calibration Menu, Function Key	Description
DATE-TIME/▲, PLU/▼	Selects a different menu
PRINT	Executes command or selects the submenu
X/ESC	Exits the Menu



Digit 1100 indicates Menu code. You should press PRINT key at prior menu to see sub menu screen as below.

Whole Program and Calibration Menu Tree is described from next pages.

Refer to each code of Program and Calibration Menu Tree in following pages.

3.4.2 Program Menu Tree

CODE	Menu	CODE	Sub Menu	CODE	Sub Menu
1100	PLU	1120	New/Edit		
		1144	Expand Item		
		1150	LIST		
		1160	Speed Key		
1200	PLU Table1	1240	Sales Message		
		1250	Origin		
		1260	Barcode		
		1270	Tare		
		1280	Unit Symbol		
1300	PLU Table2	1310	Message		
1400	Store Data Table	1410	Store		
1500	Global Setting	1510	Label Format		
		1520	Barcode		
1600	Report	1610	Report Print	1611	Scale
				1612	PLU
				1613	Misc. PLU
				1614	Group
				1615	Department
				1616	Hourly
		1650	Clear All		
1700	Printing	1710	Print Label Item		
		1730	H/W Setting	1732	Label Size
				1733	Sensor Calibration
				1734	Peel Sensor
				1735	Print Intensity
				1736	Adjust Feed Length
				1737	Label Preprint
				1738	Initialize Printer
1800	Scale Config	1830	Department/Store/speed key number		
		1840	Date/Time		
		1852	Change Password		
		1860	Test	1861	Display
				1862	A/D
				1863	Keypad
				1864	Chess Printer
				1865	Printer Sensor
		1870	Scale Parameter		
		1890	Clear Memory	1861	PLU
				1862	Table1
				1863	Table2
				1864	All

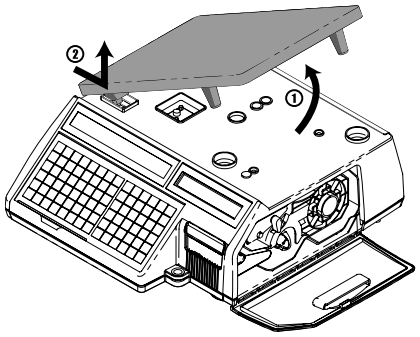
1900	Communication	1910	Network Setting	1912	DHCP
				1913	IP
				1915	RS232C Baudrate

3.4.3 Calibration Menu Tree

CODE	Menu	CODE	Sub Menu	CODE	Sub Menu
8100	Calibration	8110	Span Calibration		
		8120	Span/Zero Fine Adjust		
		8130	Capacity & Units		
		8140	Gravity Setting		
		8160	Hysteresis Calibration		
		8180	A/D Set	8183	A/D Initialize
				8187	A/D F/W Update
8200	System Options	8210	System Clear	8211	Clear PLU
				8212	Clear Table1
				8213	Clear Table2
				8214	Clear All
		8220	Set Scale Type		
8300	Printer Hardware	8320	Label Size (Height)		
		8330	Sensor Calibration		
		8340	Peel Sensor		
		8350	Printer Intensity		
		8360	Adjust Feed Length		
		8370	Label Pre-print		
		8380	Initialize Printer		
8500	Self Test	8510	Display Test		
		8520	A/D Test		
		8530	Keyboard Test		
		8540	Printer Test(Chess)		
		8550	Printer Sensor		
8600	Parameter Setting	8600	[Parameter Setting Mode]		

4. Calibration Mode

4.1 Calibration



Execute Weight Calibration and A/D related settings

(Access Authorized CAS Tester only)

Open the tray and remove the calibration sealing.

(CAUATION: Lift the tray Right side first and unlock the left side)

Order to access calibration mode:

Insert a stick into the CAL switch. Switch power on, while pushing the CAL button.

NOTE: For Hanging type: Pull forward the bottom handle to open

Refer to each code of Program and Calibration Menu Tree.

First page of Calibration mode

8100	CAL	CALibr	

4.1.1 Span Calibration (Menu Code 8110)

(Calibration MENU -> Calibration -> Span Calibration)

*Requires set of certified weights. (For best result prepare 15kg/6kg (max) weights)

① Select “Span Calibration”

8110	CALib	SPAn	

Press “PRINT”

8110	SPAn	UnLoAd	

② Empty tray and press “PRINT”

8110	SPAn	Wait4	10329

While calibrating zero display shows “Wait4” ~ “Wait0” and follow next message for Span Calibration.

8110	SPAn	LoAd	

③ Put on the Weight for Max. Capacities then press “PRINT”

*Menu 8130 sets the max capacity for calibration.

8110	SPAn	Wait4	78048

Display shows “Wait4” ~ “Wait0” then following message

8110	SPAn	SPAn	

4.1.2 Span/Zero Fine Adjust (Menu Code 8120)

(Calibration MENU –> Calibration –> Span/Zero Fine Adjust)

This mode is for fine tuning of scale after span Cal. Please put Max weight on the tray and adjust A/D results at 60000, using the cursor key " ◀ ▶ ." and Number key.

① Select menu "Span/Zero Fine Adjust", no weight is on the tray

If internal value is not set to zero, press " ZERO" key..

② Put Max. Capacity weight on the tray

And this screen is a just sample data for testing. This sample data are perhaps not the same as the data that you will have with your scale.

- Internal value 60012 needs to change 60000
  Press ▶ X 12 Times to decrease internal value.

4.1.3 Capacity & Units (Menu Code 8130)

(Calibration MENU –> Calibration –> Capacity & Units)

Set scale's Weighing unit, capacity, Interval, Cal Unit.

Caution: **Span calibration** must take place after "**Capacity & Units**" setting.

Do not change setting after **Span calibration**.

No	Capacity	Middle weight in Hysteresis Cal.
0	6 kg, dual	2 kg
1(default)	15 kg, dual	5 kg
2	30 kg, dual	10 kg
3	60 kg, dual	20 kg
4	150 kg, dual	50 kg
5	300 kg, dual	100 kg
6	600 kg, dual	200 kg
7	1,500 kg, dual	500 kg
8	3,000 kg, dual	1,000 kg
9	6,000 kg, dual	2,000 kg

4.1.4 Gravity Constant (Menu Code 8140)

(Calibration MENU -> 1. Calibration -> 4. Gravity Constant)

CL-5000Jr scale enables to calibrate in any country. You can set according to country standard gravity constant data. For case of full recalibration set the factory gravity first and then local area gravity code.

(For span calibration Local gravity value is automatically matches with Factory gravity value)

First, Enter the gravity value in calibration area (Factory)

Second, Enter the gravity value in using area (local)

Use the following table to determine the proper G-Constant for your area.

Country	City	G-Constant	Country	City	G-Constant
Argentina	Buenos Aires	9.7979	Mexico	Mexico City	9.7799
Australia	Sydney	9.7979	Morocco	Rabat	9.7964
Austria	Vienna	9.8099	Netherlands	Amsterdam	9.8129
Belgium	Brussels	9.8114	New Zealand	Wellington	9.8039
Belize	Manamah	9.7904	Norway	Oslo	9.8189
Bolivia	La Paz	9.7844	Panama	Panama City	9.7814
Brazil	Brasilia	9.7889	Peru	Lima	9.7829
Canada	Montreal	9.8069	Philippines	Manila	9.7844
	Ottawa	9.8069	Poland	Swider	9.8159
	Toronto	9.8054	Portugal	Lisbon	9.8009
	Vancouver	9.8099	Rumania	Bucharest	9.8054
Check Republic	Prague	9.8114	Saudi Arabia	Riyad	9.7904
Chile	Santiago	9.7979	Scotland	Stockholm	9.8189
China	Hong Kong	9.8099	Singapore	Singapore	9.7814
Colombia	Bogota	9.7799	South Africa	Johannesburg	9.7919
Costa Rica	San Jose	9.7829	Spain	Madrid	9.8024
Cypress	Nicosia	9.7979	Switzerland	Bern	9.8084
Denmark	Copenhagen	9.8159	Taiwan	Taipei	9.7904

Ecuador	Quito	9.7724	Tunisia	Tunis	9.7799
Finland	Helsinki	9.8189	Turley	Ankara	9.8024
Germany	Dusseldorf	9.8129	Uruguay	Montevideo	9.7964
Great Britain	London	9.8144	USA	Anchorage	9.8189
Greece	Athens	9.8009		Atlanta	9.7964
Guatemala	Guatemala	9.7844		Boston	9.8039
Hungary	Budapest	9.8069		Chicago	9.8024
Indonesia	Djakarta	9.7814		Dallas	9.7949
Iraq	Baghdad	9.7964		Detroit	9.8039
Japan	Mishima	9.7979		Los Angeles	9.7979
Korea	Seoul	9.7994		New York	9.8024
Kuwait	Kuwait	9.7919		Philadelphia	9.8024
Lebanon	Beirut	9.7964		San Francisco	9.7994
Mauritius	Port Louis	9.7859	Venezuela	Caracas	9.7829

NOTE: The G-Constant is the acceleration of gravity in meters per second per second.

4.1.5 Hysteresis Calibration (Menu Code 8160)

(Calibration MENU -> Calibration -> Hysteresis Calibration *)*

You can re-adjust the med-range weight level for precise calibration.

8160	CALib	HySt	

Hysteresis Calibration for example 15 kg, middle value is 5 kg

① Press “print”.

8160	HySt	UnLoAd	10329

② Clear the tray and press “PRINT”, then “Wait4” ~ “Wait0” will display.

8160	HySt	middLE	40329

③ Put middle weight (5kg) on the tray and press “PRINT”, then “Wait4” ~ “Wait0” will display.

8160	HySt	LoAd	70329

④ Put 15kg on the tray and press “PRINT”, then “Wait4” ~ “Wait0” will display.

8160	HySt	middLE	40329

⑤ Put Clear middle weight (5kg) on the tray and press “PRINT”, then “Wait4” ~ “Wait0” will display.

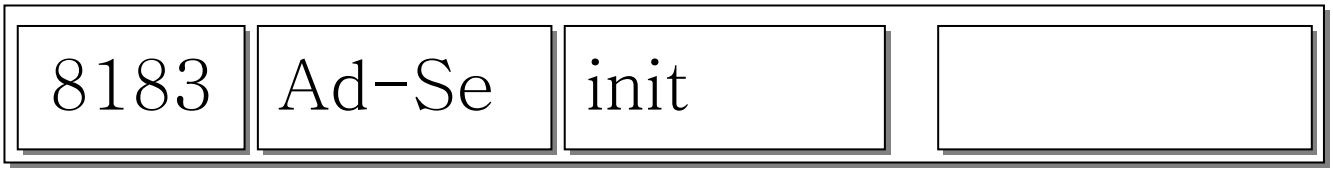
8160	CALib	HySt	

4.1.6 A/D Set (Menu Code 8180)

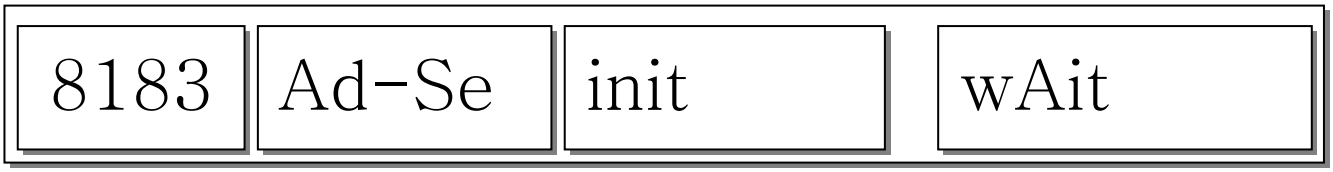
(Calibration MENU -> Calibration -> A/D Set)

4.1.6.1 A/D Initialize (Menu Code 8183)

(Calibration MENU -> Calibration -> A/D Set -> A/D Init)



Wait for a moment after pressing “PRINT” ,and while display shows following message



CAUTION: Must record setting values before Executing menu . This will set the scale first default setting

4.1.6.2 A/D FirmWare Update (Menu Code 8187)

(Calibration MENU -> Calibration -> A/D Set -> Update)

You can change the A/D firmware with your PC in this mode.

4.2 System Options

(Calibration MENU -> System Options)

4.2.1 System Clear

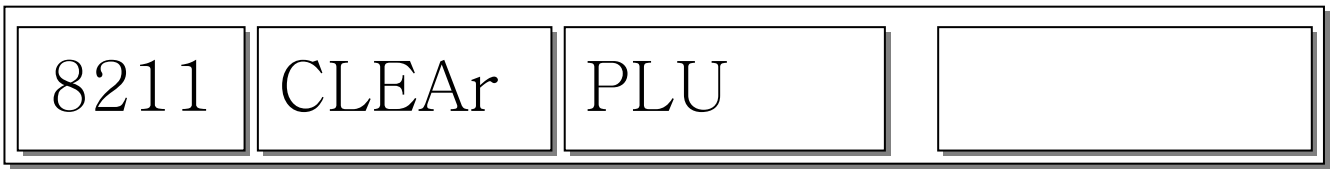
(Calibration MENU -> System Options -> System Clear)

You can clear memory depends on options below.

4.2.1.1 Clear PLU (Menu Code 8211)

(Calibration MENU -> System Options -> System Clear -> Clear PLU)

Clear all PLU data.



4.2.1.2 Clear Table (Menu Code 8212)

(Calibration MENU -> System Options -> System Clear -> Clear Table1)

Clear all Table1 data.

4.2.1.2 Clear Table (Menu Code 8213)

(Calibration MENU -> System Options -> System Clear -> Clear Table2)

Clear all Table2 data.

4.2.1.3 Clear All (Menu Code 8214)

(Calibration MENU -> System Options -> System Clear -> Clear All)

8214	CLEAr	ALL	

Clear PLU, Table1, Table2 and Shop data

Symbols and Speed key is initialized

4.2.2 Set Scale Type

(Calibration MENU -> System Options -> Set Scale Type)

8220	SyStE	StyPE	1

This mode was setted by manufacturer. See the following table, and set value in order.

1 – Bench type, 2 – Pole type, 3 – Hanging, 4 – Self service

4.3 Printer Hardware

No.	Sub-menus	Description
1	Label Size	Lable mode **“Height(40)** * ( ) are default value.
2	Sensor Calibration	You can mearsure “Gap” & “Peel” . And print out them. Also you can test Sensor & Motor.
3	Sensor	Setting Peel-off sensor.
4	Print Intensity	Set the extent of intensity of label printed.
5	Adjust Feed Length	Set adjusting values of feed length. This value can be from “0” to “400”
6	Label Pre-print	You can set preprint length.
7	Printer Initialize	You can reset printer.

4.3.1 Label Size (Menu Code 8320)

(Calibration MENU –> Printer Hardware –> Height)

You can input “Height” of label manually. (30 ~ 80mm)

4.3.2 Sensor Calibration (Menu Code 8330)

(Calibration MENU –> Printer Hardware –> Sensor Calibration)

This mode will automatically feed the label several times to calculate the measurement.
The average data of “Gap” & “Peel” are pronted out, and displayed on screen.

4.3.3 Sensor & Motor <<Peel >> (Menu Code 8340)

(Calibration MENU –> Printer Hardware –> Peel)

You can select [Y], [N] for “ACTIVE PEEL-OFF”

4.3.4 Print Intensity (Menu Code 8350)

(Calibration MENU –> Printer Hardware –> Print Intensity*)*

You can enter any value from “0” to “4” set the tension of label.
The 2 is default value.

4.3.5 Adjust Feed Length (Menu Code 8360)

(Calibration MENU -> Printer Hardware -> Adjust Feed Length)

User may enter any value of the feed alignment from “0” to “400”.

You can adjust the printing position detail with this menu.

* 1pixel = 0.125mm , 8pixel = 1mm Ex) Value “+80” will feed 10mm more

Value “-40” will feed 5mm less

4.3.6 Label Pre-print (Menu Code 8370)

(Calibration MENU -> Printer Hardware -> Label Pre-print)

User may select Preprint mode and any value of the preprint length from “0” to “10”.

It controls the length that label is pushed out.

4.3.7 Printer Initialize (Menu Code 8380)

(Calibration MENU -> Printer Hardware -> Printer Initialize)

Initialize printer setting.

4.7 Self Test

4.7.1 Display Test (Menu Code 8510)

(Calibration MENU -> Self Test -> Display Test)

Selecting 1 will start Display test, press any key to stop and exit.

4.7.2 A/D Test (Menu Code 8520)

(Calibration MENU -> Self Test -> A/D Test)

4.7.3 Keyboard Test (Menu Code 8530)

(Calibration MENU -> Self Test -> Keyboard Test)

You can test keyboard by pressing.

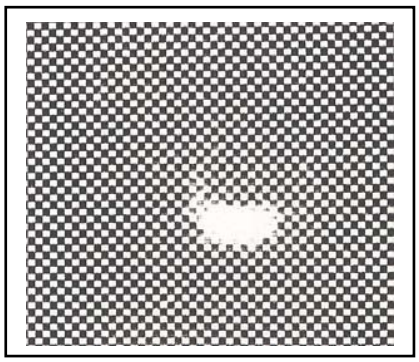
Press any keys to test Row Code.

* Raw Code is location of key. (Upper left Connor is 1)
* Press ESC will exit the test or display Row Code.
  - ESC + ESC : End of test

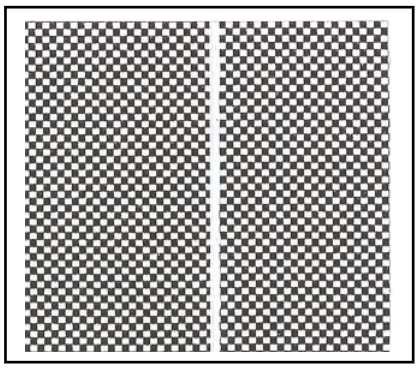
4.7.4 Chess Print (Menu Code 8540)

(Calibration MENU -> 5. Self Test -> 4. Chess Print)

Select Printer Test (Chess). The scale will then print a TPH (Thermal Print Head) test label. This label print checker pattern helps to find problems with the TPH. You should clean the TPH before you try this procedure. Follow the maintenance procedure for cleaning the TPH. The following examples shows that some of problems that can occur.



1



2

There are several things that this printout sample can reveal:

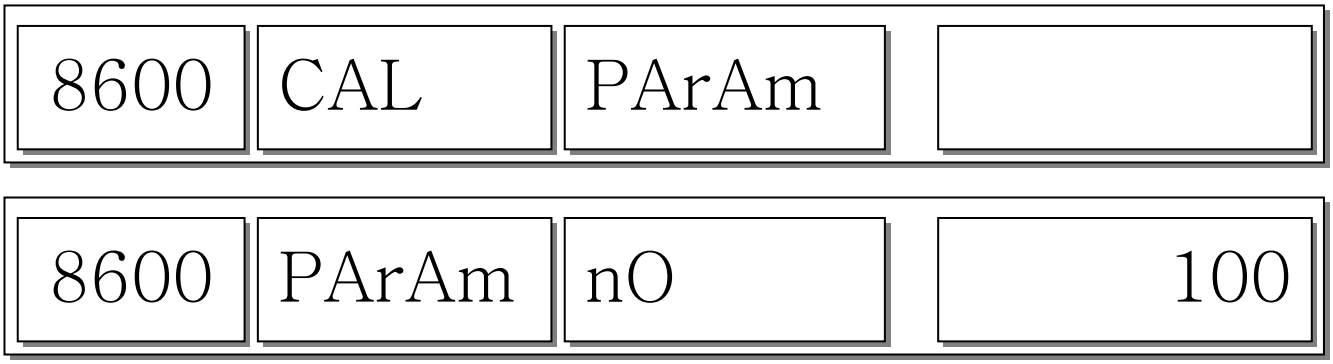
1. The rubber roller may be dirty or have something stuck to it. Also, the roller may be perforated.
2. This is a clear indication that the TPH has been damaged or burned out.
   If you need to replace the TPH, please contact the CAS Service Department.

4.7.5 Print Sensor (Menu Code 8550)

(Calibration MENU -> 5. Self Test ->5. Printer Sensor)

8550	SEnSo	G128	P128H0

5. Parameter



You can input Parameter number (“ Fuction Code: [ ]”) for predefine settings.

If You need to Initial Parameter settings, Enter the number “ 999”

If You need to Initial Parameter settings and clear all data (include report), Enter the number “ 998”

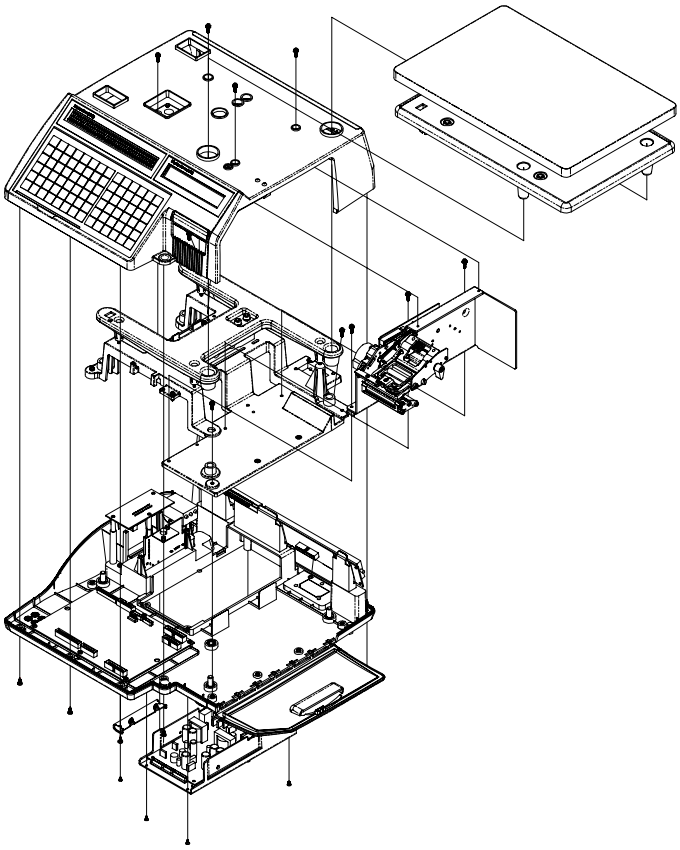
No	MODE	VALUE	DESCRIPTION	REMARK
201	CAL	0~3 (3)	Weight Decimal Position	
202	CAL	0~3 (2)	Price Decimal Position	
204		0~1 (1)	Display scale version at the initial time (0-No, 1-Yes)	
205		0~1 (0)	Test display at the initial time (0-No, 1-Yes)	
301		0~10 (3)	Key count threshold for confirming key value (unit : 23.8 ms)	
302		0~10 (5)	Key time-out value for confirming continuous input If this time is over, unit price will be cleared when next key is entered. (unit : 1.7 sec)	
304		1~4	Key type : 1-bench, 2-pole, 3-hanging, 4-self service	no default
305		1~5 (1)	Speed key table number	
401		1~99 (1)	Scale current department number	
402		0~1 (1)	Allow fixed price sale (0-No, 1-Yes)	
403		0~2 (0)	Change Unit Price : 0-No, 1-Temporary, 2-permanently	
414		0~1 (0)	Always Use global label number	
417		0~1 (1)	Allow printing multi label (using X key)	
418		0~1000 (50)	Threshold weight for auto printing (unit : weight) ex) 50 -> 0.050g	
419		0~1 (1)	Automatically clear PLU after printing (0-No, 1-Yes)	
420	CAL	0~20 (20)	Minimun weight digit for printing (unit : division) Ex) 20d -> 40g (15kg)	

421	CAL	0~1 (0)	Allow printing when weight is under min. weight	
422		1~1000 (1000)	Unit weight for unit price	
423		0~100 (0)	Unit for price round (unit price) Ex) 10 -> 0.10 $	
424		------	password	
425		1~100 (30)	Time for waiting stable when printing (unit : 90 ms)	
426		0~1 (0)	Automatically clear sale information after printing without tare and weight (0-No, 1-Yes)	
427		0~1 (0)	Use double speed key	
430		0~1 (1)	Automatically clear sale information after printing with no weight (0-No, 1-Yes)	
431		0~1 (1)	Allow printing without checking previous sale (0-No, 1-Yes)	
432		0~1 (0)	Change sale type from weight to fixed price When print key is pressed without weight (0-No, 1-Yes)	
434		0~1 (0)	Allow warning account over (0-No, 1-Yes)	
435		0~1 (0)	Allow printing only weight (0-No, 1-Yes)	
436		1~10 (1)	Current shop number	
437		0~1 (0)	Automatically misc. PLU sale when no PLU is called	
501		1~255 (1)	Current scale address	
502		0~4 (3)	3 - 57,600 bps	
503		0~999 (300)	Time threshold for checking communication is running (unit : 10 ms)	
505		0~99 (20)	Continuously interpreting time in sale mode when communication is running (unit : 10 ms)	
509		0~1 (0)	Use DHCP (0-No, 1-Yes)	
510		0~0xFF	MAC address 0	HEX mode
511		0~0xFF	MAC address 1	HEX mode
512		0~0xFF	MAC address 2	HEX mode
513		0~0xFF	MAC address 3	HEX mode
514		0~0xFF	MAC address 4	HEX mode
515		0~0xFF	MAC address 5	HEX mode
516		----	IP address (Do not modify in parameter menu, use program menu)	
517		----	Subnet mask (Do not modify in parameter menu, use program menu)	

518		----	Gateway address (Do not modify in parameter menu, use program menu)	
519		0~99999(20304)	TCP server port	
601		240~640 (320)	Label length (unit : dot / 8 dot = 1 mm)	
602		448	Label width (unit : dot / 8 dot = 1 mm)	
603		0	Label adjust value (Do not modify in parameter menu, use program menu)	
604		0~40 (16)	Gap length (unit : dot / 8 dot = 1 mm)	
605		0~12 (6)	Printer intensity (Do not modify in parameter menu, use program menu)	
606		0~1 (1)	Use Peel off sensor (0-No, 1-Yes)	
607		80 (64)	Pre-print length (unit : dot / 8 dot = 1 mm)	
608		0~255 (128)	Gap sensor threshold	
609		0~255 (128)	Peel off sensor threshold	
701		0~1 (0)	Year digit length (0-2 digit , 1-4 digit) Ex) 0-07, 1-2007	
702		0~9999 (2000)	Year text for 4 digit year (last 2 digit must be 00) Ex) if this year is 2017, year text is 2000	
703		0~1 (0)	Use month text (0-number, 1-text)	
704		0~1 (0)	Use 12 hour(AM/PM) (0-24, 1-12)	
705		0~3 (1)	Date type (0:YY MM DD, 1:DD MM YY, 2:MM DD YY 3:MM YY)	
706		0~1 (1)	Time type (0:HH MM SS, 1:HH MM)	
707		0~255(.)	Date division symbol (see ASC-II table)	
708		0~255(:)	Time division symbol (see ASC-II table)	
709		0~1 (1)	Enable printing serial number (0-No, 1-Yes)	
710		0~1 (1)	Enable printing packed date (0-No, 1-Yes)	
711		0~1 (1)	Enable printing packed time (0-No, 1-Yes)	
712		0~1 (1)	Enable printing sell-by date (0-No, 1-Yes)	
713		0~1 (0)	Enable printing sell-by time (0-No, 1-Yes)	
714		0~1 (1)	Enable printing shop data (0-No, 1-Yes)	
715		0~1 (1)	Enable printing PLU number (0-No, 1-Yes)	
716		0~1 (0)	Enable printing week (0-No, 1-Yes)	
717		0~100 (0)	Weight Cut-off in barcode data Ex) value = 10, 1,000 ->100	
718		0~100 (0)	Price Cut-off in barcode data	

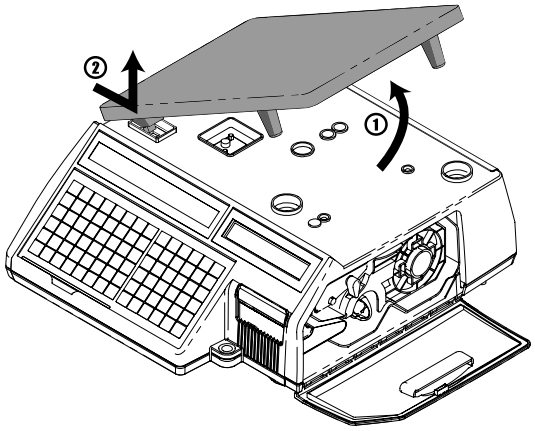
			Ex) value = 10, 1,000 ->100	
719		0~1 (0)	Print Weight in by-count sale mode	
720		0~1 (0)	Print Group number instead of department number in barcode data	
721		0~3 (2)	Print Origin in name field instead of Origin field (0-origin, 1-name1, 2-name2, 3-name3)	
722		0~1 (1)	Print All date/time enable (0-No, 1-Yes)	
724		0~1 (0)	Print Weight in fixed price sale mode	
725		0~1 (0)	Enable Korea E-Mart week (only korea version)	
726		1~99 (1)	Global label number	
727		1~99 (1)	Total label number	
728		1~20 (1)	Global barcode number	
801		-	(Caption) Weight	
802		-	(Caption) Price	
803		-	(Caption) Packed On Date	
804		-	(Caption) Sell By Date	
805		-	(Caption) Produced Date	
901		0~1 (0)	Expand PLU item (0-No, 1-Yes)	
998		---	Init parameter, clear all data and report	
999		---	Init parameter	

6. Servicing & Parts Replacement

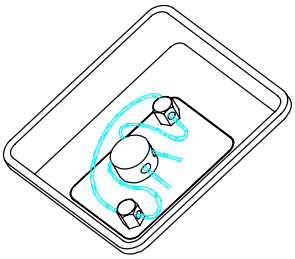


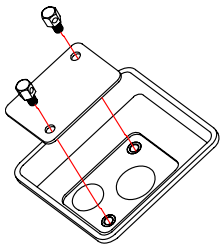
6.1 Platform Safety Overload Adjustment

1) Turn power off and remove power cord
2) Remove tray from scale (make sure lift right side first and unlock the left hook)

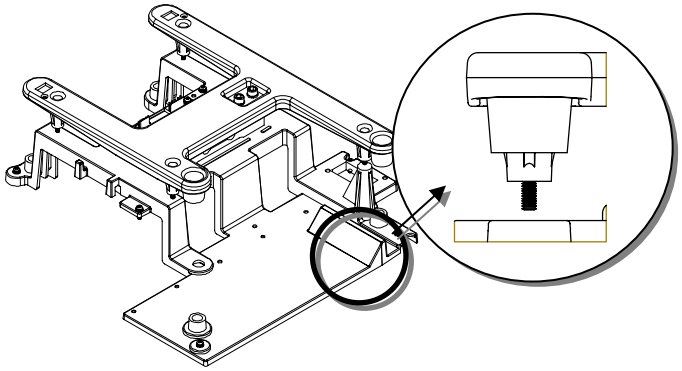


3) Remove calibration cealing





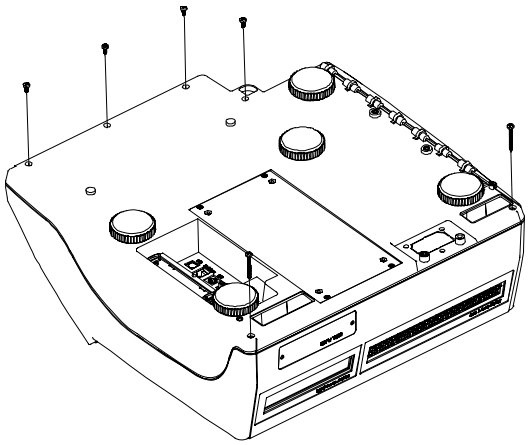
4) Remove the upper case
5) Put 150% of max weight on platform rear right. This point Allen-bolt should not be touched
6) Adjust Allen-bolt just about to touch the bottom frame
7) Contiune the procedure on each corner



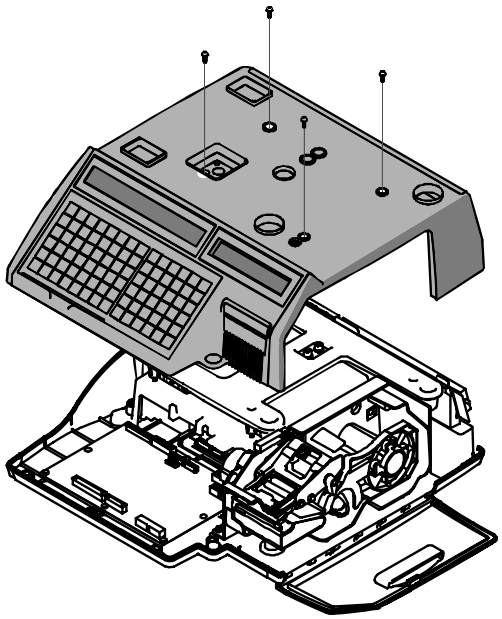
B,P-type

6.2 Removing the Upper Case

1) Turn power off and remove power cord
2) Remove tray from scale (make sure lift right side first and unlock the left hook)
3) Remove printer cartridge
4) Remove 6 bolt from bottom case(for pole type: remove pole mount bolt first)

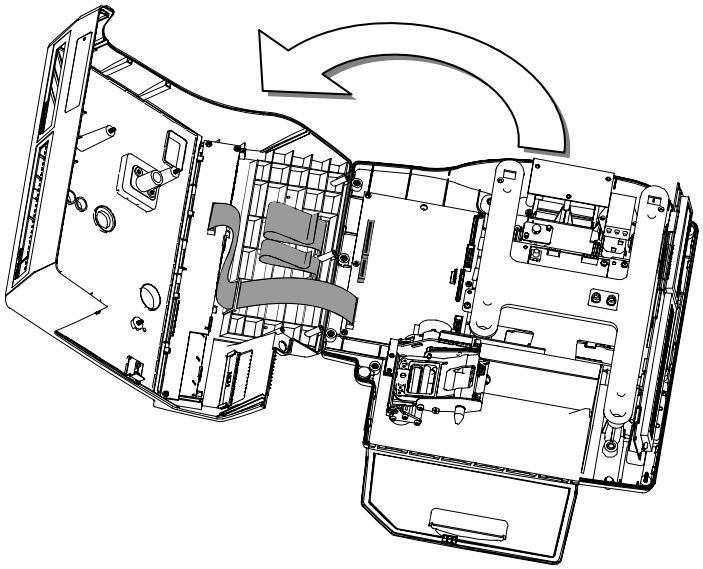


5) Remove 4bolt from upper case



6) Remove keybord and display cable to remove upper case

B,P type:

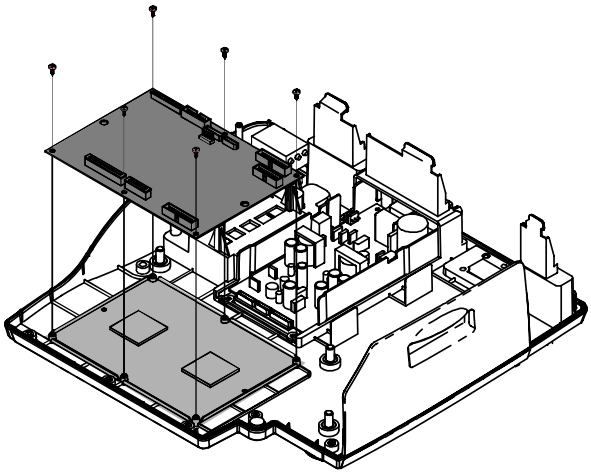


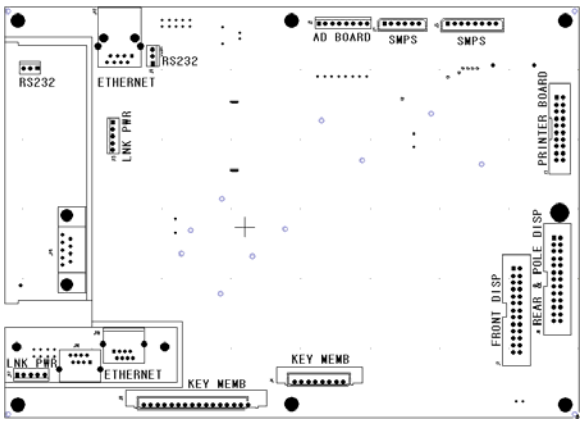
* Carefull with front key pad connector

6.3 Main board Replacement (TODO : change)

1) Turn power off and remove power cord
2) Remove following cables
   - SMPS Line
   - Key Board Line
   - Display Board Line
   - Printer Board Line
   - A/D Board Line
3) Remove following bolt to remove main board

   B,P type:

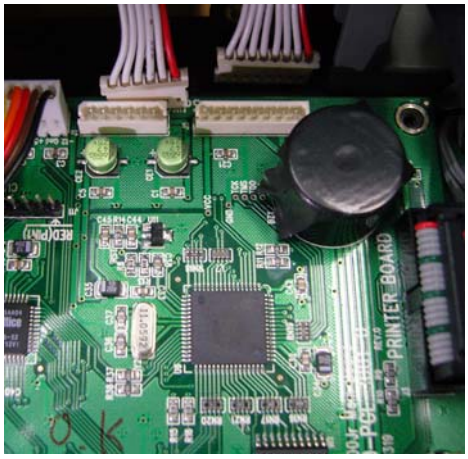




Connector locations

6.4 Power Supply Replacement

1) Turn power off and remove power cord
2) Remove upper case(following 6.2)
3) Remove power lines (white cables)



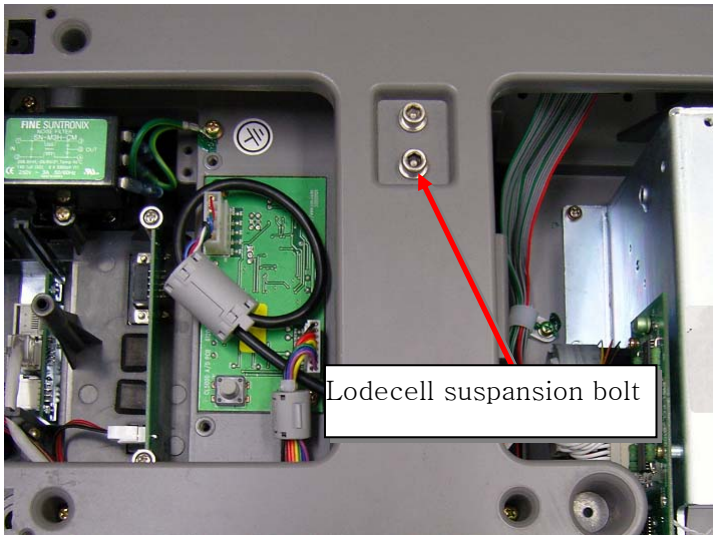
4) Remove bottom Power module(SMPS) bolt(4)

5) Full forward power module and remove power cables on SMPS

6) Disassamble support frame and remove side bolt(4) to remove power supply.

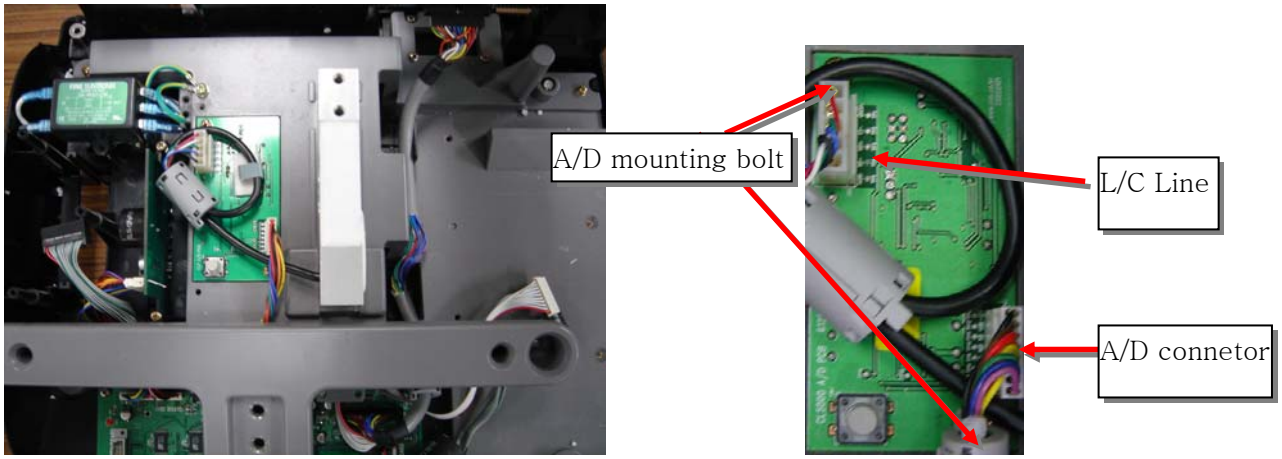
6.5 Load Cell & AD Converter Replacement

1) Turn power off and remove power cord
2) Remove upper case(6.2)
3) Remove upper frame(Load cell moult)bolt



4) Remove bottom frame bolt

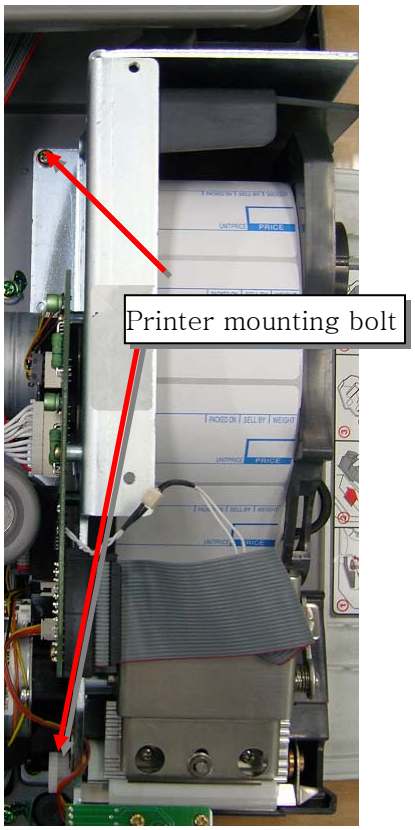
NOTE: Carefull with load cell this procedure may cause critical damage on scale



5) Remove A/D module bolt(2) and cable(A/D data line, L/C line)

6.6 Print Assembly Replacement

1) Turn power off and remove power cord
2) Remove printer cartridge
3) Remove upper case(6.2)
4) Remove printer connecting bolt

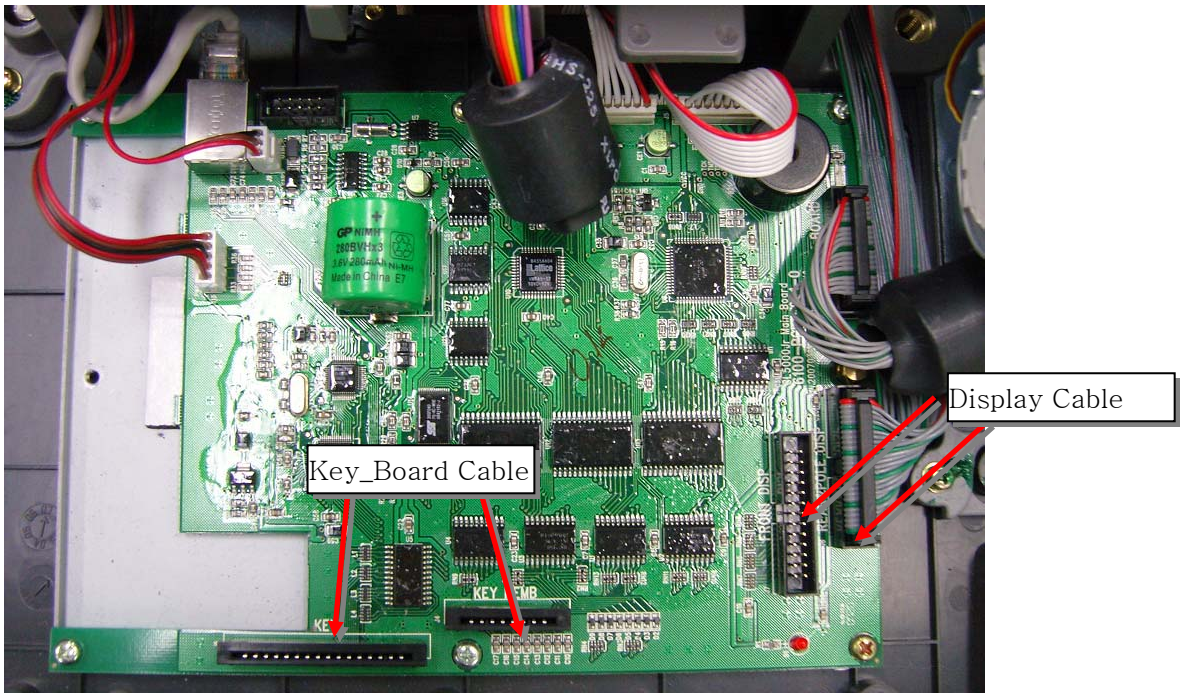


(B,P type)

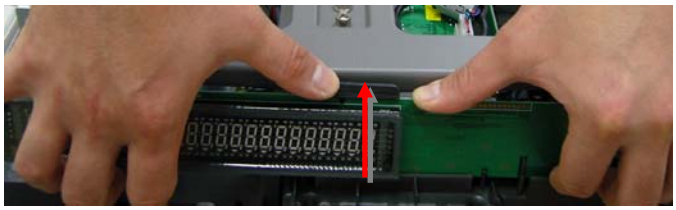
5) Remove printer module (lift upper right side first)

6.7 Display Replacement

1) Turn power off and remove power cord
2) Remove upper case (6.2)
3) Remove keyboard and display cable of main board



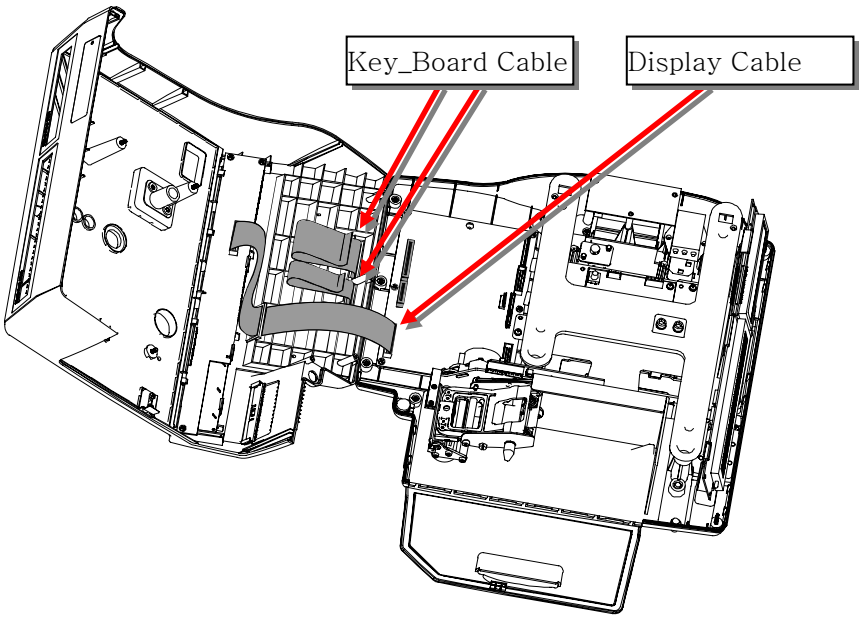
4) Remove front display board B,P type: lift display board at arrow side
Remove rear display board by lifting bottom part to unlock



6.8 Keyboard Replacement A,B(with / without breaking sealing)

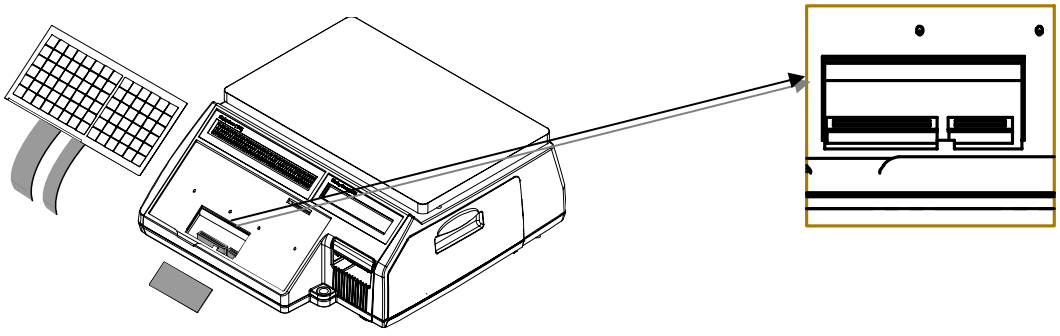
A: with break sealing

1) Turn power off and remove power cord
2) Remove upper case(6.2)
3) Remove keyboardm display cable from main bord and replace new keyboard



B: without break sealing

4) Remove keyboard from upper case
5) Remove keyboard support plate and disconnect key board cable by pull the calble lock
6) Connect keyboard cable by pushing keyboard suspend lock / add metal support plate
7) Stick the keyboard pad



7. Update

7.1 F/W update

Step1: First, Power off the scale and then,

Connect RS232C to computer

Pin-layout is following diagram

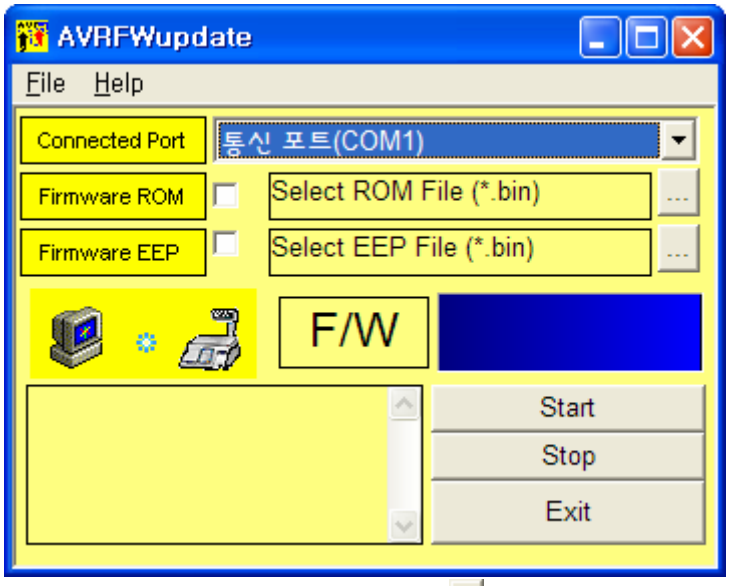
Scale(DB-9 Female) PC (DB-9 Male)

(2) ---------- (3)

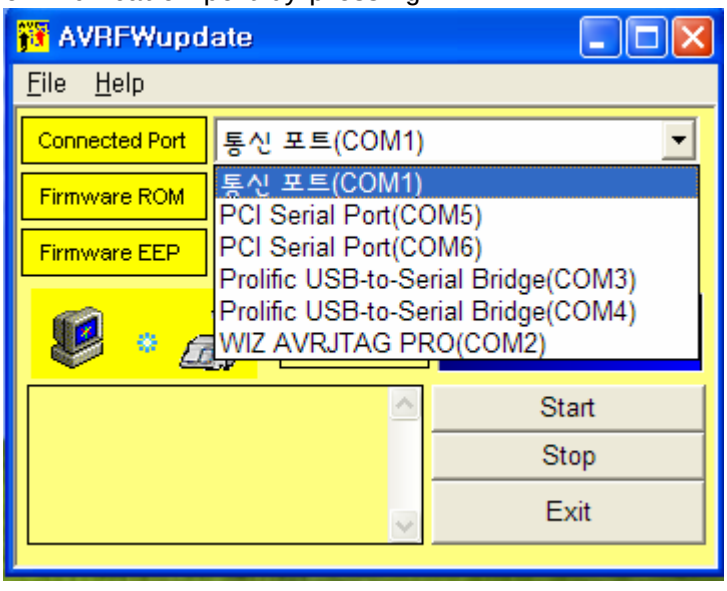
(3) ---------- (2)

(5) ---------- (5)

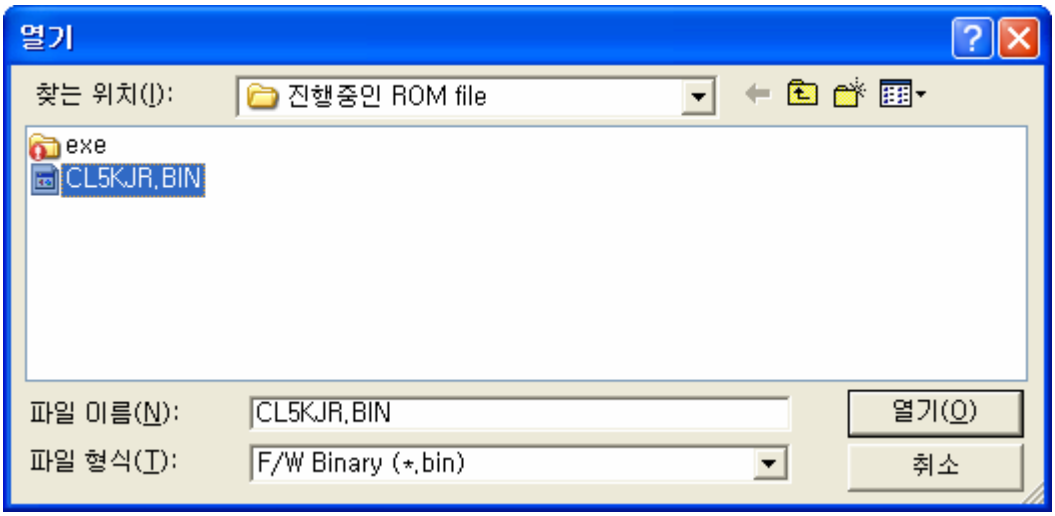
Step2: Execute AVRfwupdate.exe



Step3: Select RS232C communication port by pressing

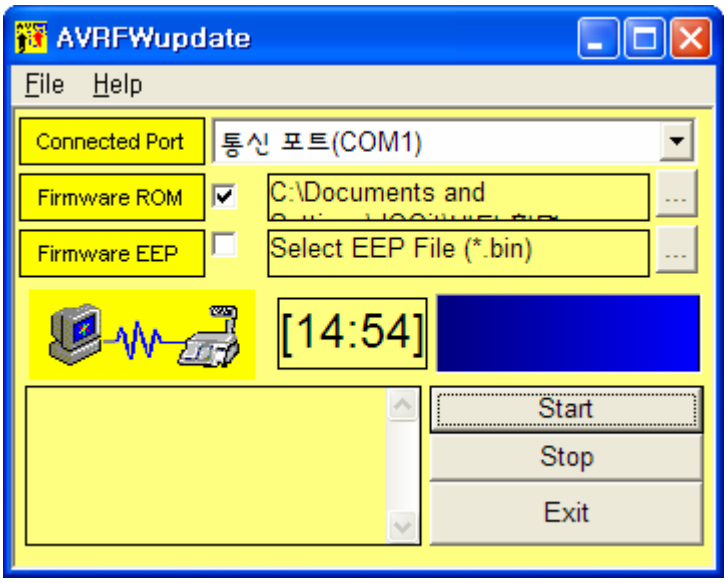


Step4: Select new firmware ROM by check the checkBOX 

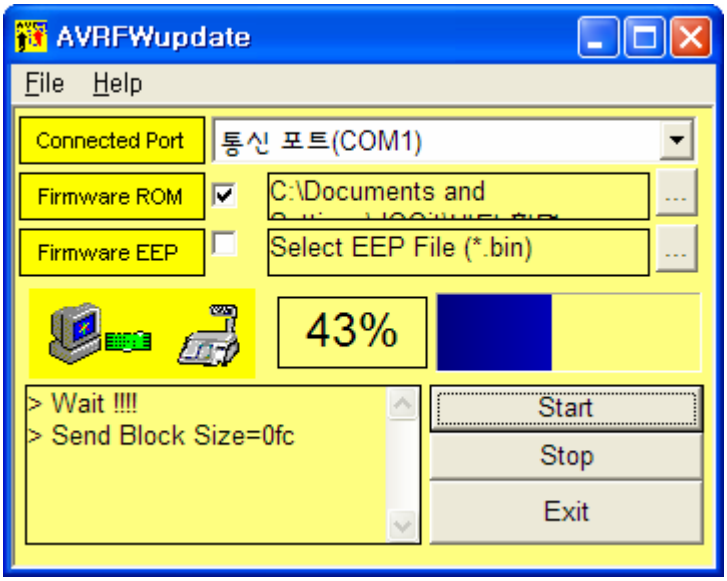


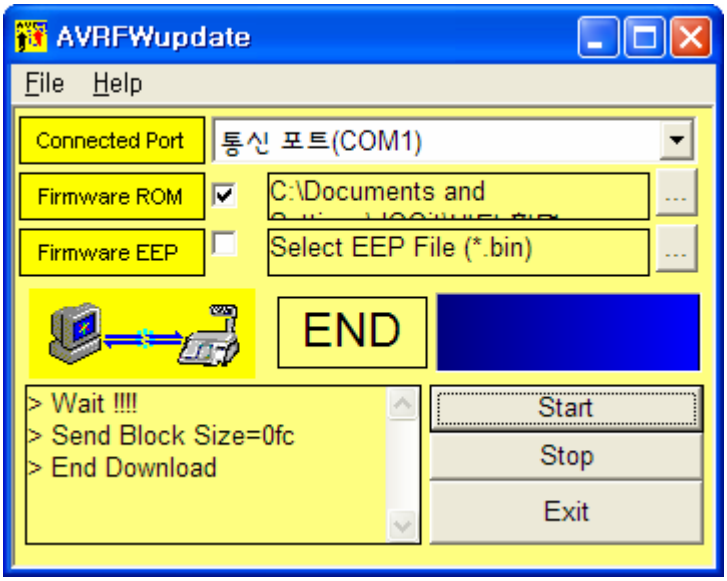
Step5: Press  , ready to F/W –ROM download

* Software will not download if the firmware version is old or file desination is wrong
Window massage will show error massage



Step6: Turn on the scale. After few second download process will occure



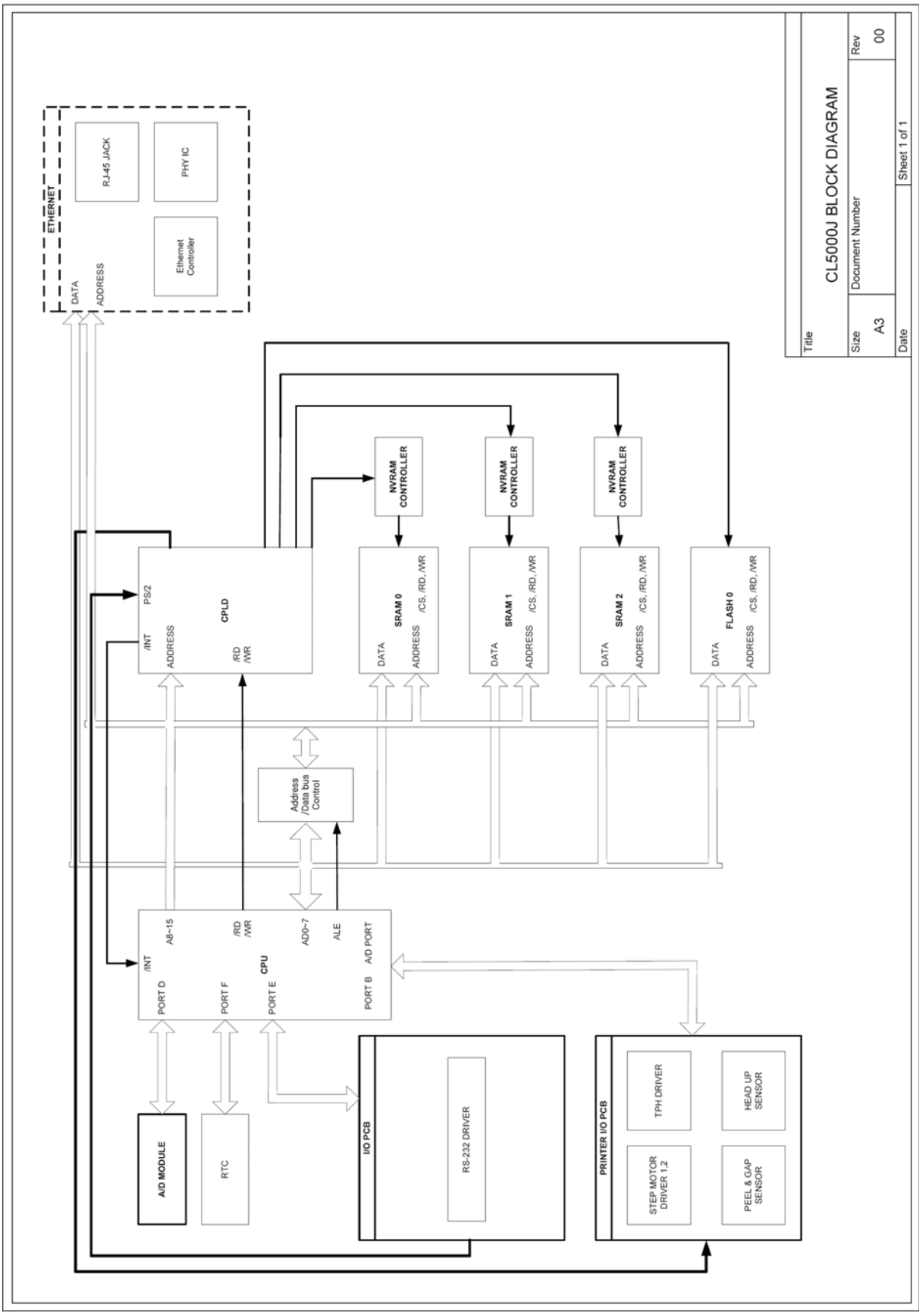


When download finished, scale will reboot

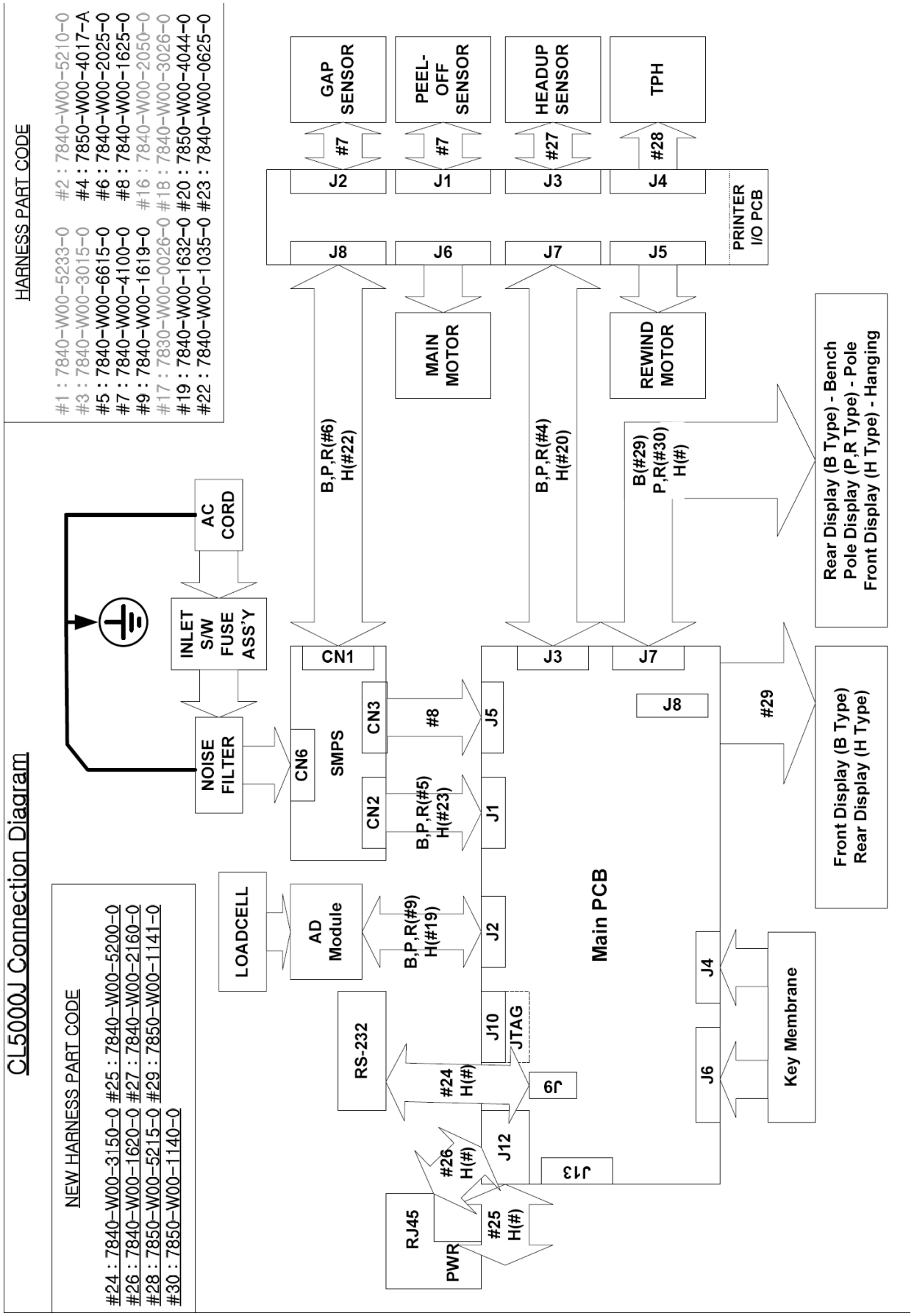
NOTE: During this procedure power or communication connector is cut off
You must redo from step1

8. Schematic & Diagrams

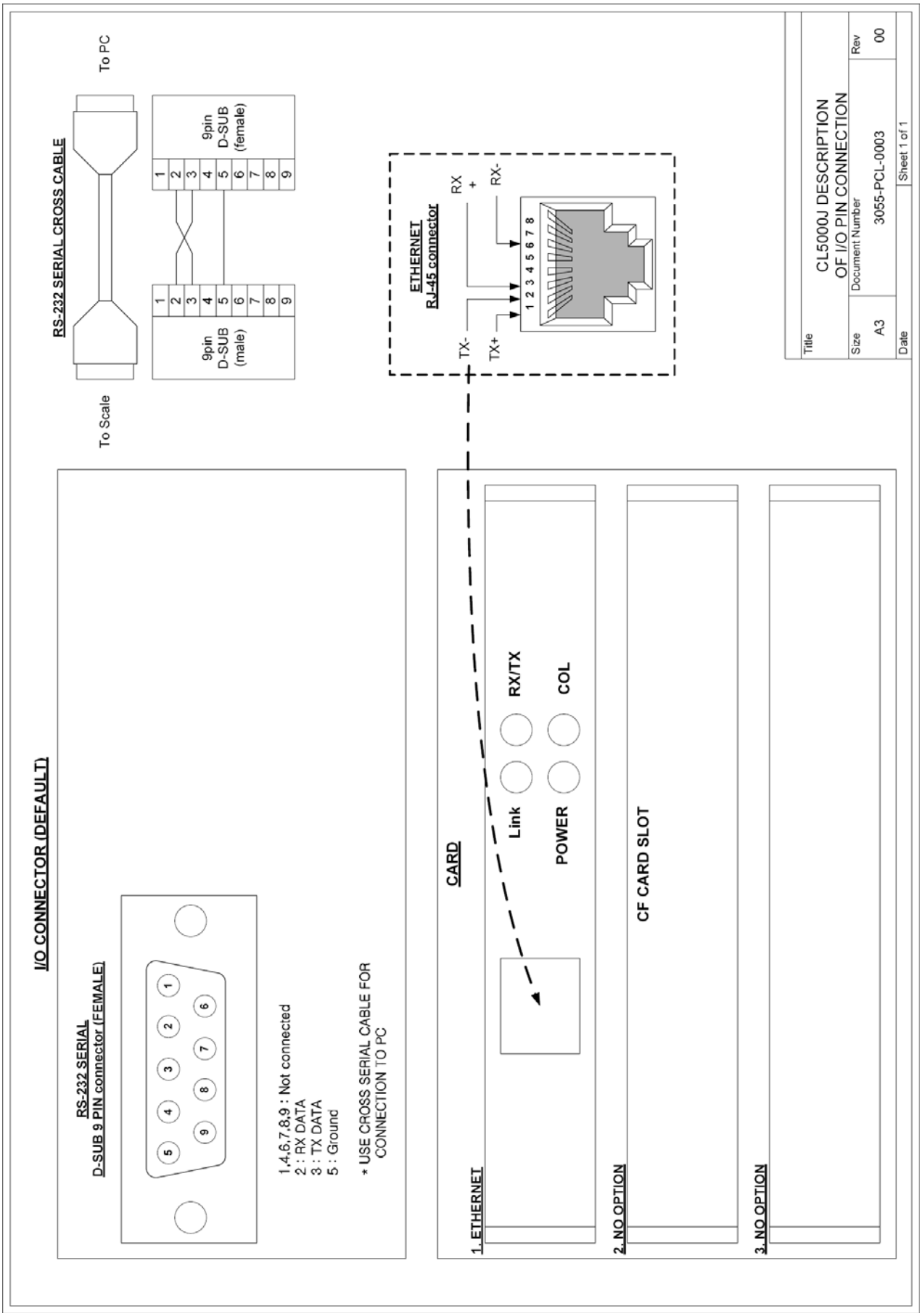
8.1 System Block Diagram



8.2 Connection Diagram

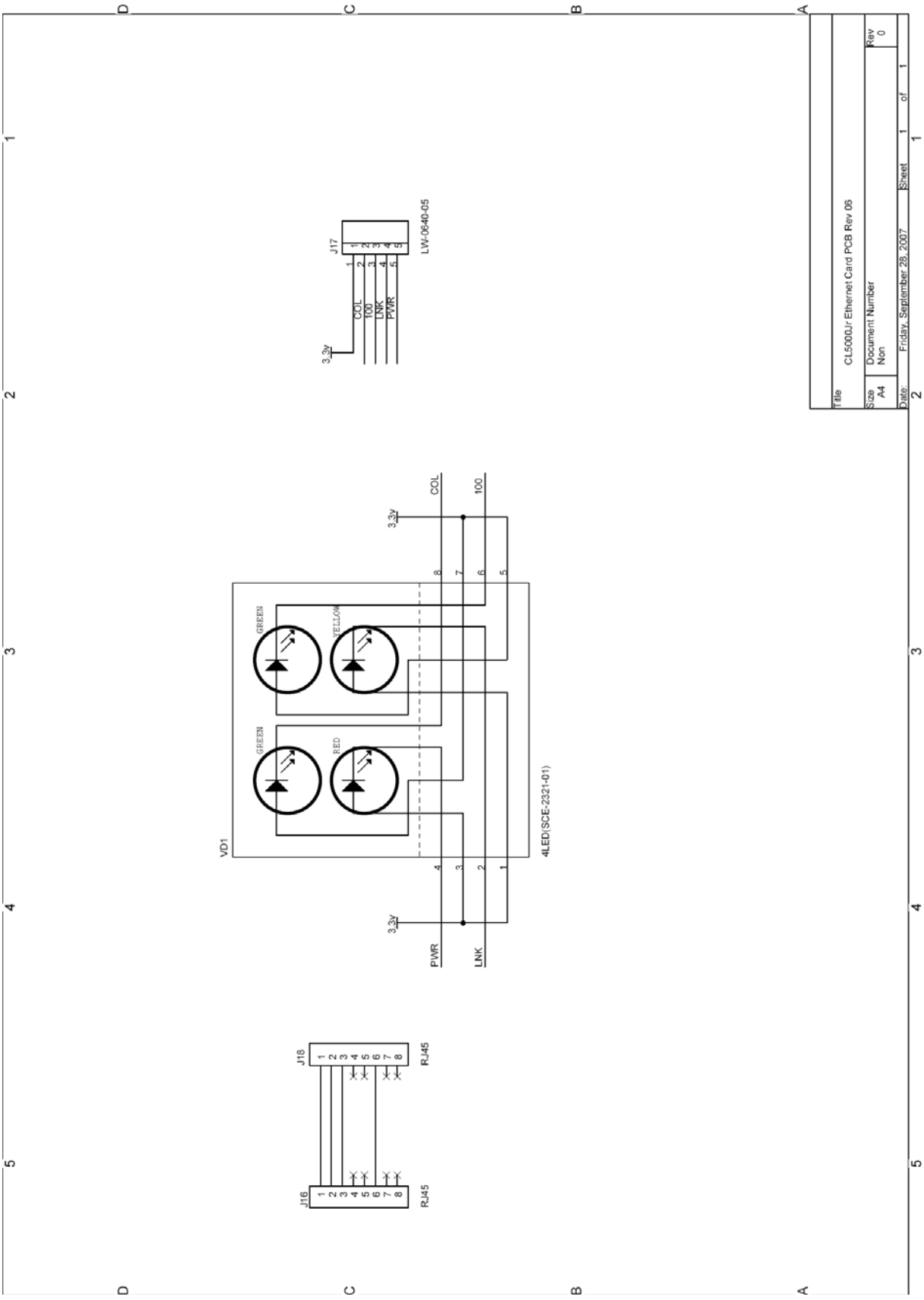


8.3 I / O Pin Connection

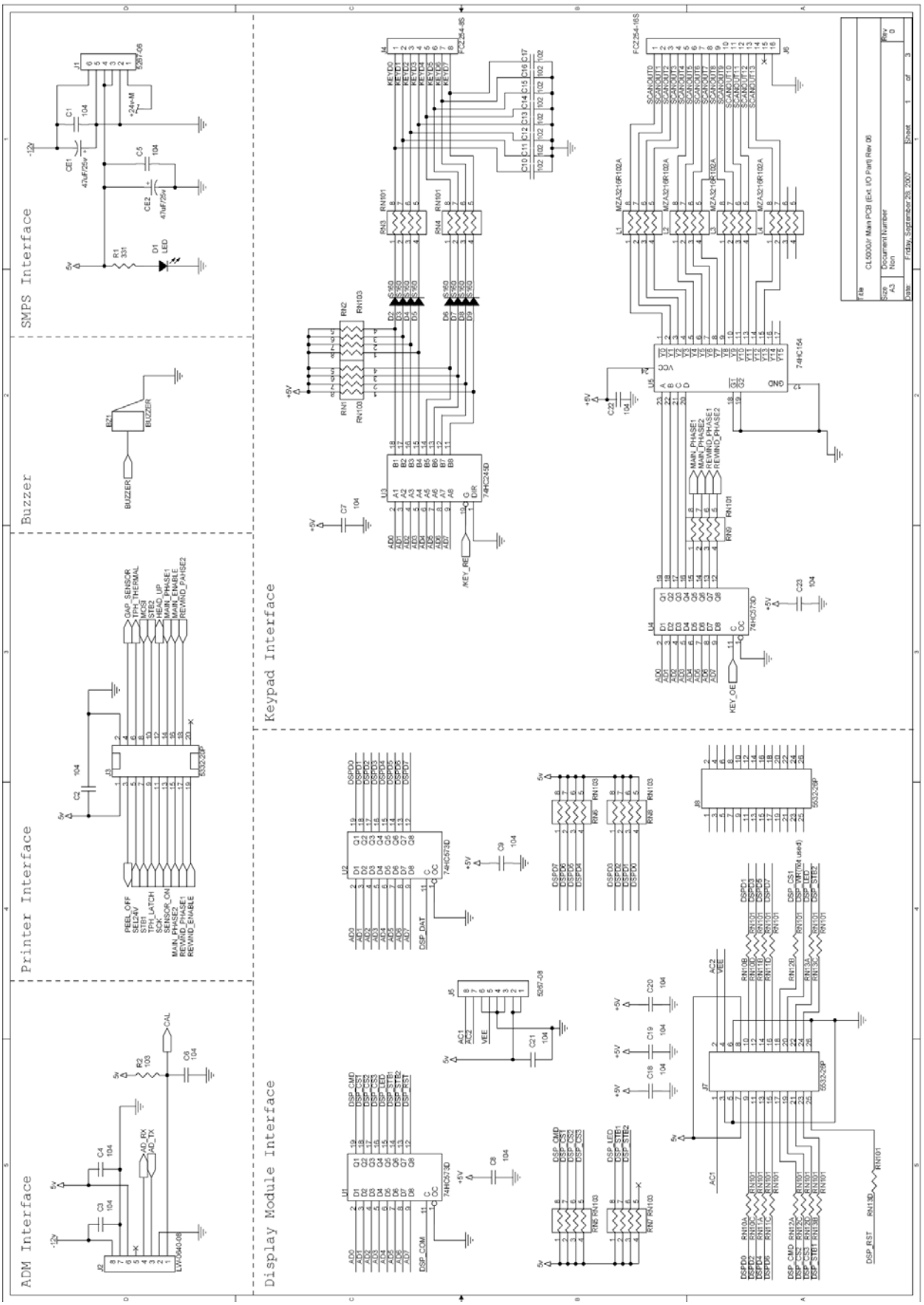


8.4 Main PCB

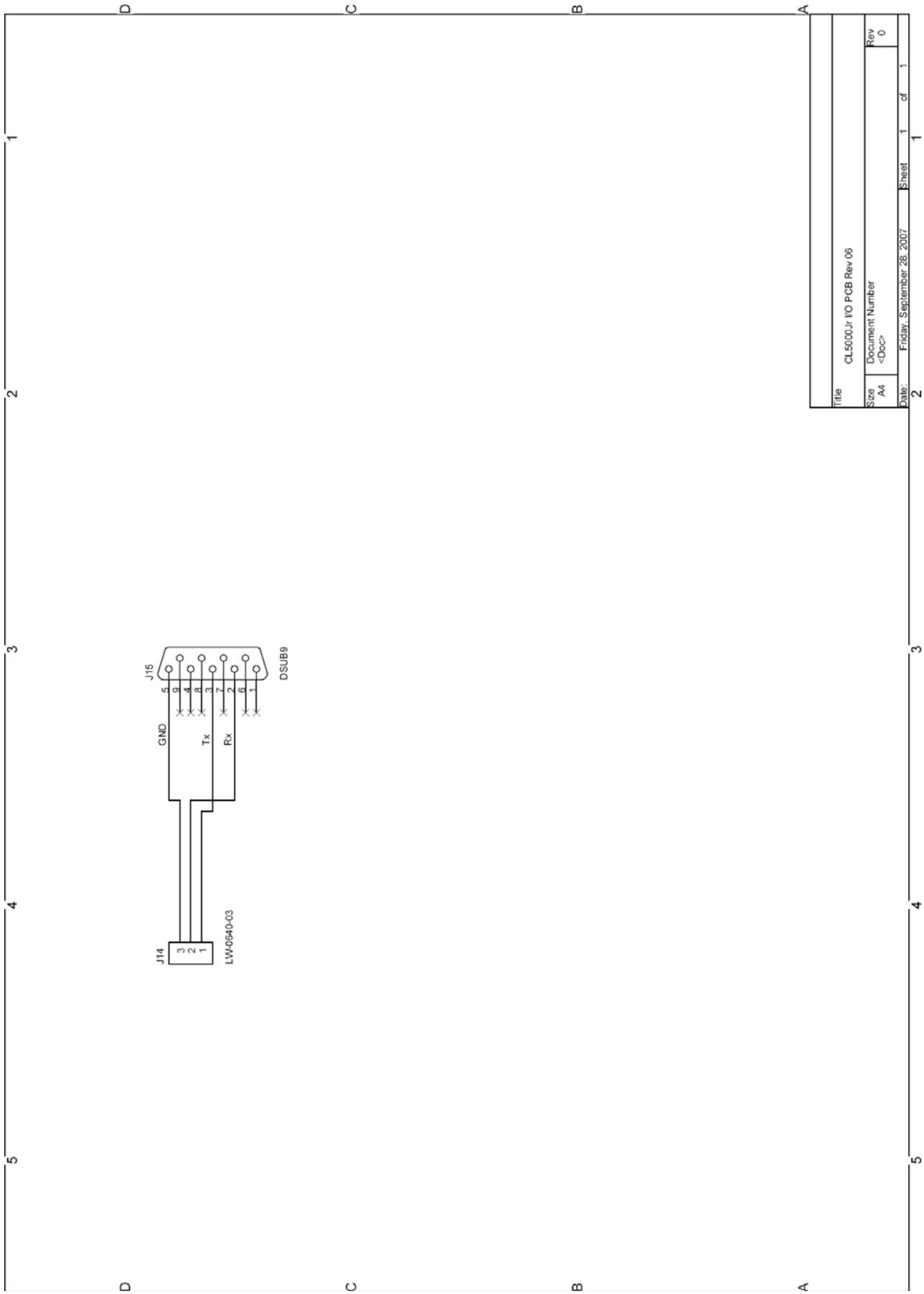
1) part 1



2) part 2


SMPS Interface
Buzzer
Printer Interface
Keypad Interface
ADM Interface
Display Module Interface

3) part3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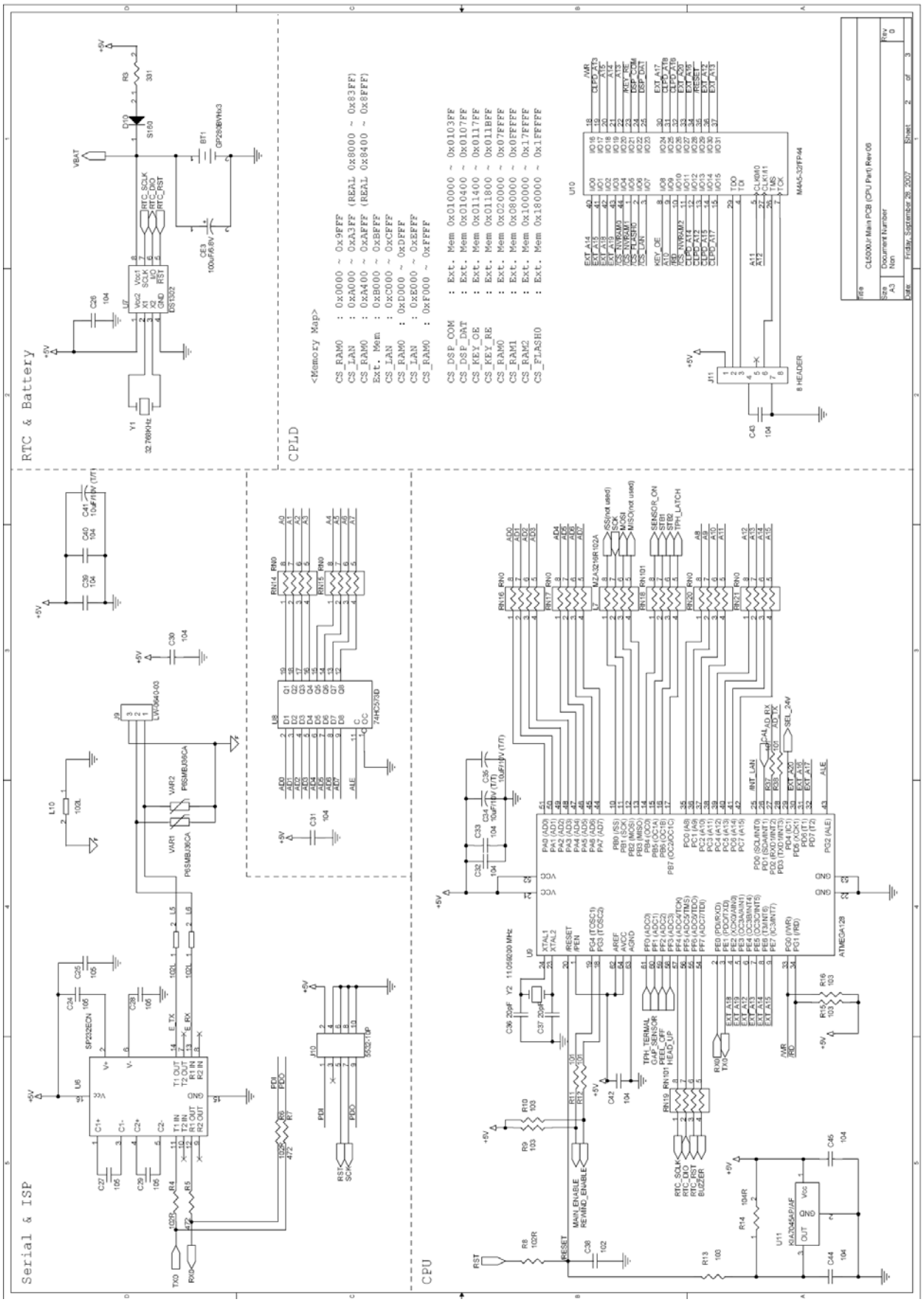
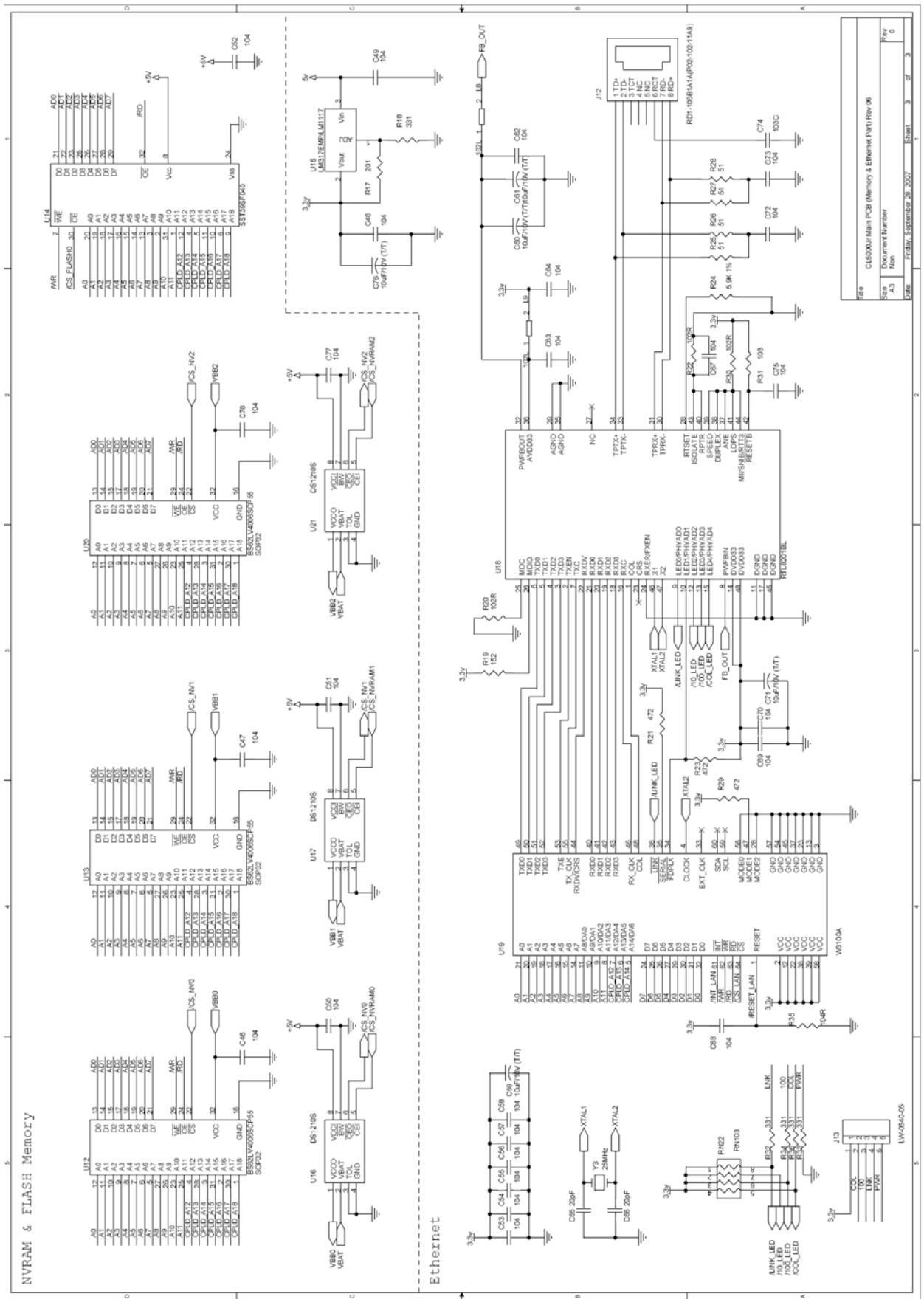
C
B
A
1
2
3
4
5
Title
CL5000Jr I/O PCB Rev 06
Size
A4
Document Number
<Doc>
Rev
0
Date:
Friday, September 28, 2007
Sheet
1
of
1
J15
DSUB9
5
9
4
8
3
7
2
6
1
GND
Tx
Rx
J14
3
2
1
LW-0640-03

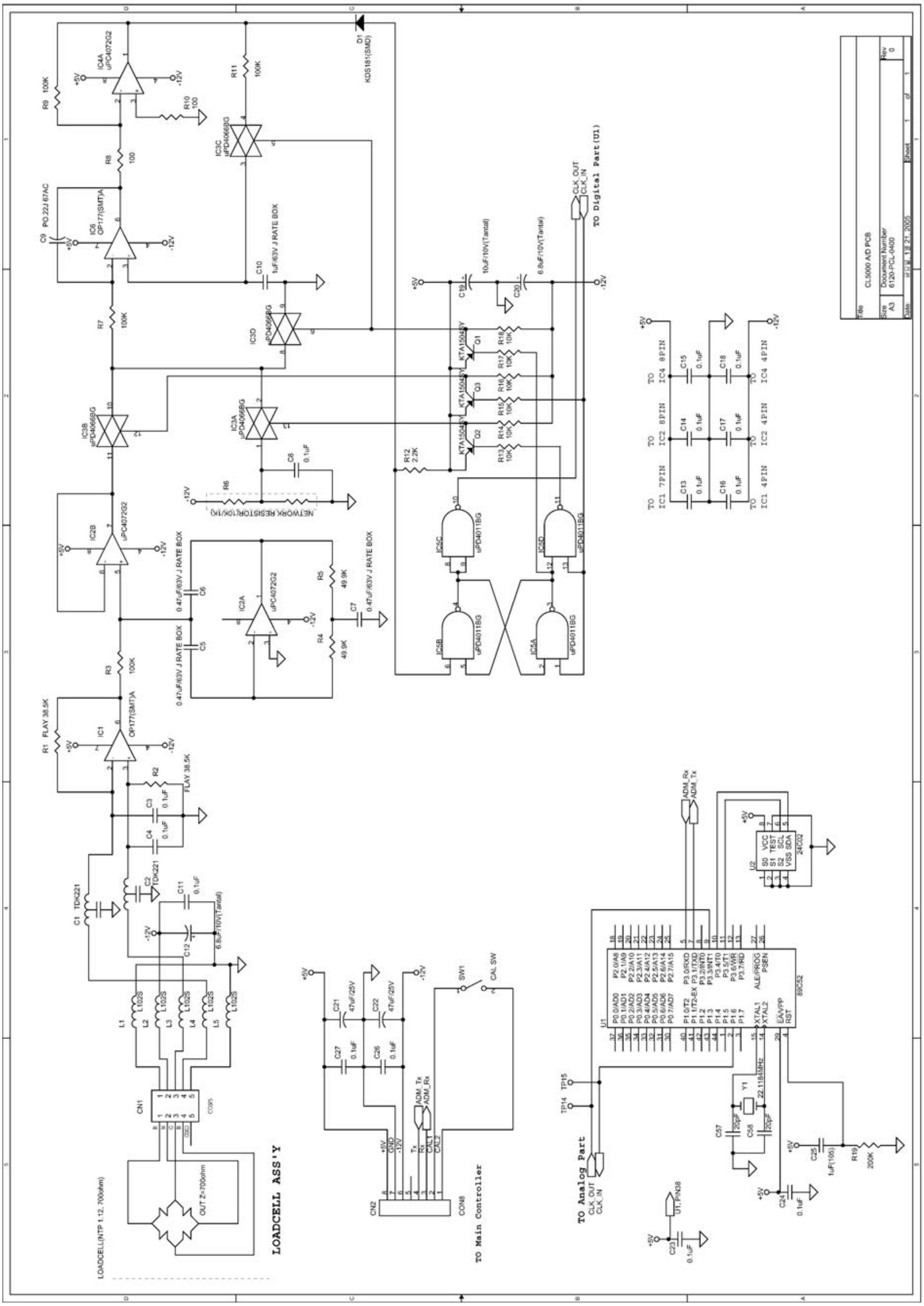
4) part4


RTC & Battery
CPLD
Serial & ISP
CPU
<Memory Map>
CS_RAM0 : 0x0000 ~ 0x9FFF
CS_IAN : 0xA000 ~ 0xA3FF (REAL 0x8000 ~ 0x83FF)
CS_RAM0 : 0xA400 ~ 0xA8FF (REAL 0x8400 ~ 0x88FF)
Ext. Mem : 0xB000 ~ 0xBFFF
CS_IAN : 0xC000 ~ 0xCFFF
CS_RAM0 : 0xD000 ~ 0xDFFF
CS_IAN : 0xE000 ~ 0xEFFF
CS_RAM0 : 0xF000 ~ 0xFFFF
CS_DSP_COM : Ext. Mem 0x010000 ~ 0x0103FF
CS_DSP_DAT : Ext. Mem 0x010400 ~ 0x0107FF
CS_KEY_OE : Ext. Mem 0x011400 ~ 0x0117FF
CS_KEY_RE : Ext. Mem 0x011800 ~ 0x011BFF
CS_RAM0 : Ext. Mem 0x020000 ~ 0x07FFFF
CS_RAM1 : Ext. Mem 0x080000 ~ 0x0FFFFF
CS_RAM2 : Ext. Mem 0x100000 ~ 0x17FFFF
CS_FLASH0 : Ext. Mem 0x180000 ~ 0x1FFFFF
CL6000Jr Main PCB (CPU Part) Rev 06
Document Number
Rev 0
Friday, September 28, 2007
Sheet 2 of 3

5) part5


NVRAM & FLASH Memory
Ethernet
CL6000J/ Main PCB (Memory & Ethernet Part) Rev 06
Document Number
Non
Friday, September 28, 2007
Sheet 3 of 3
Rev 0
Size A3
Date

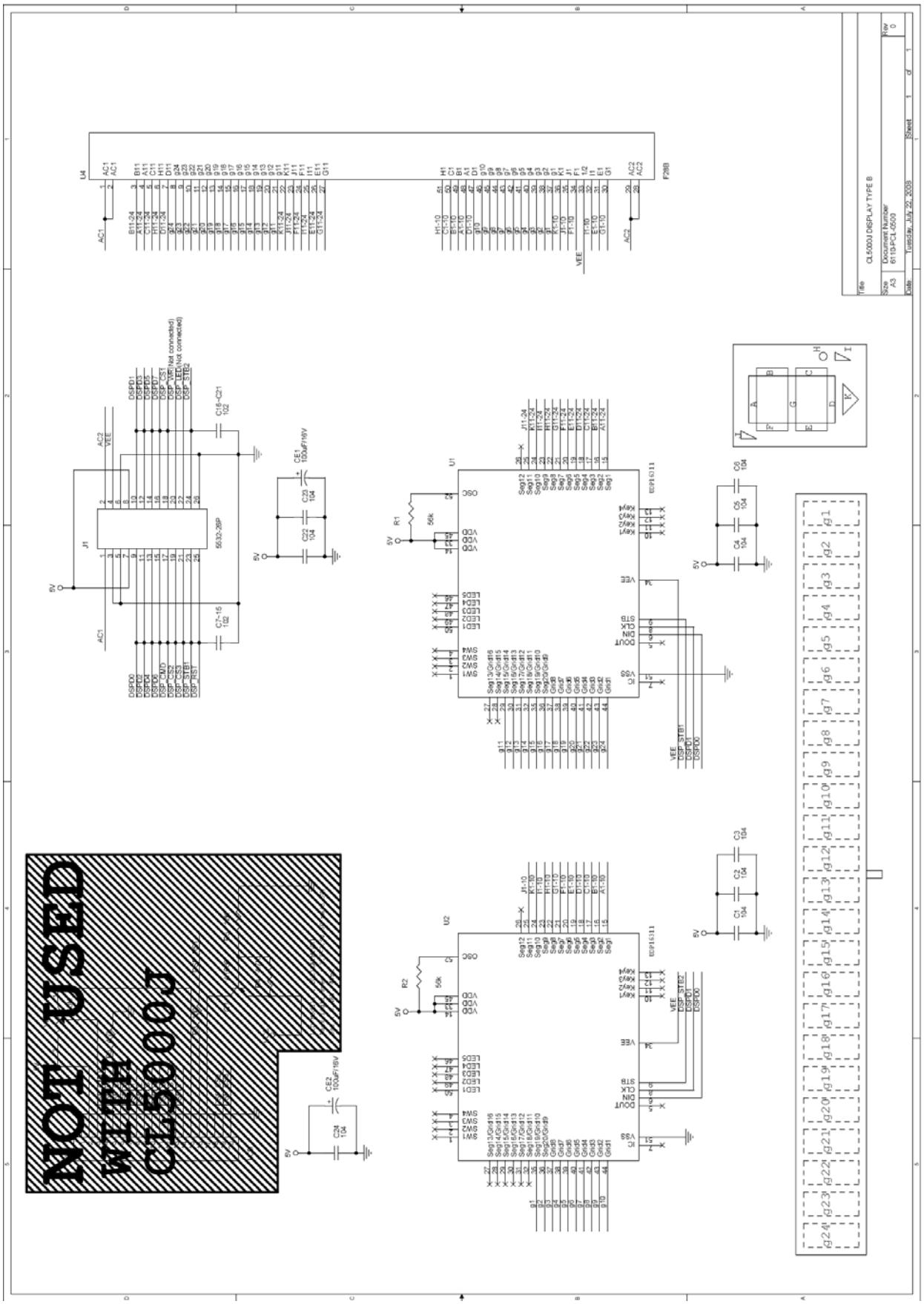
8.5 A / D PCB



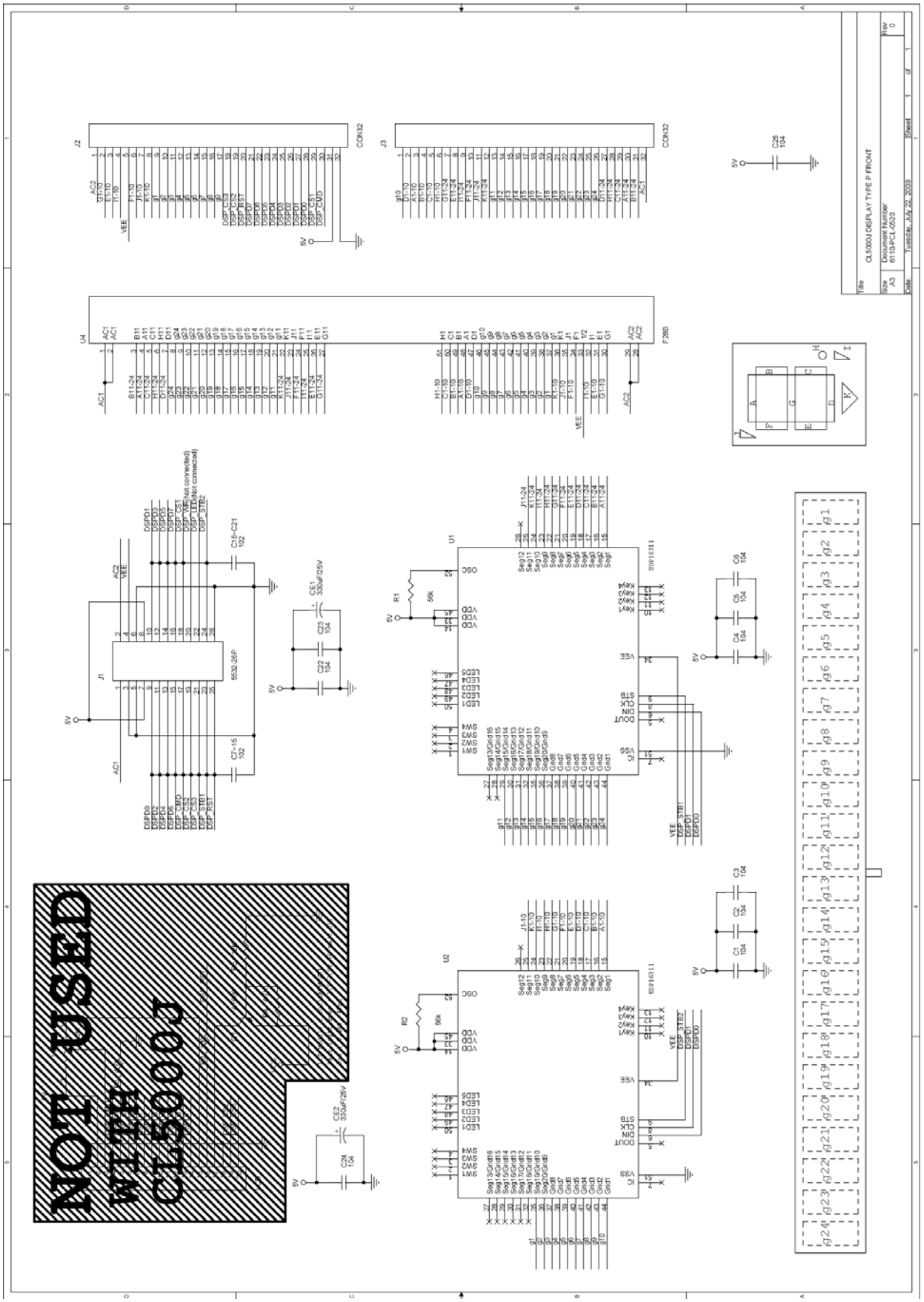
LOADCELL ASS'Y
TO Main Controller
TO Analog Part
TO Digital Part (U1)
CL5000 A/D PCB
6120-PCL-0400
89C52
24C02

8.6 Display PCB

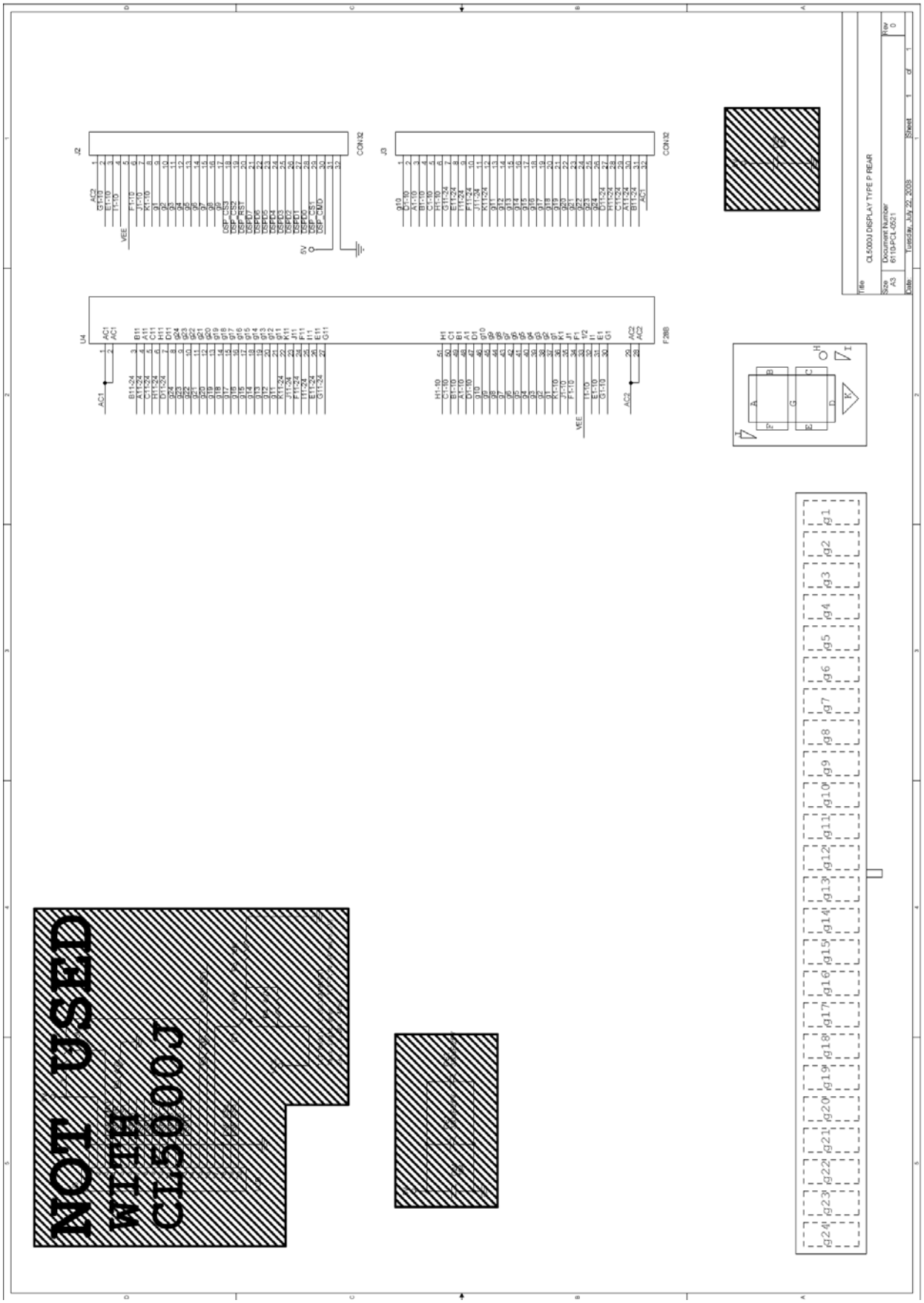
1) Display Type B



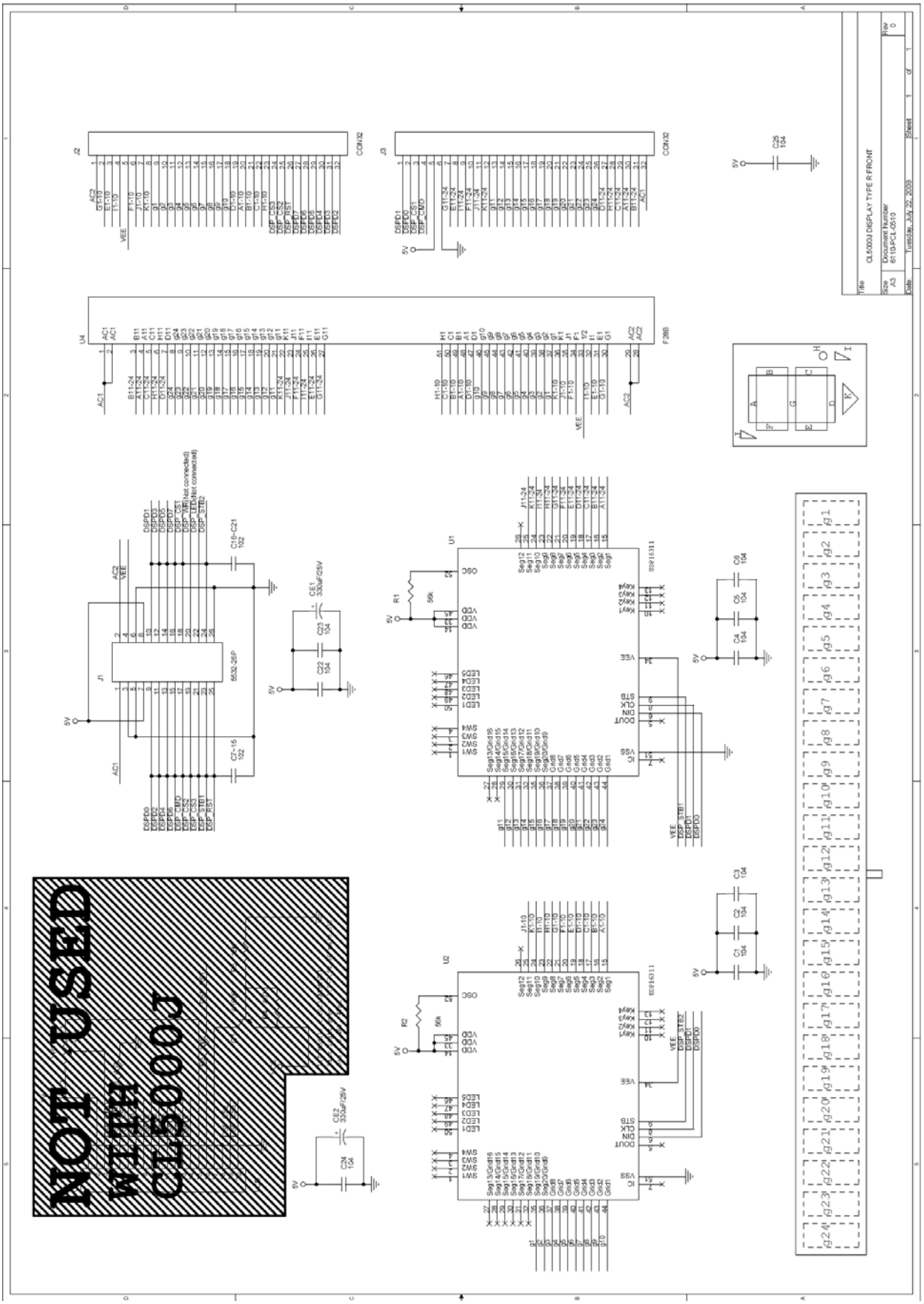
2) Display Type P (Front)



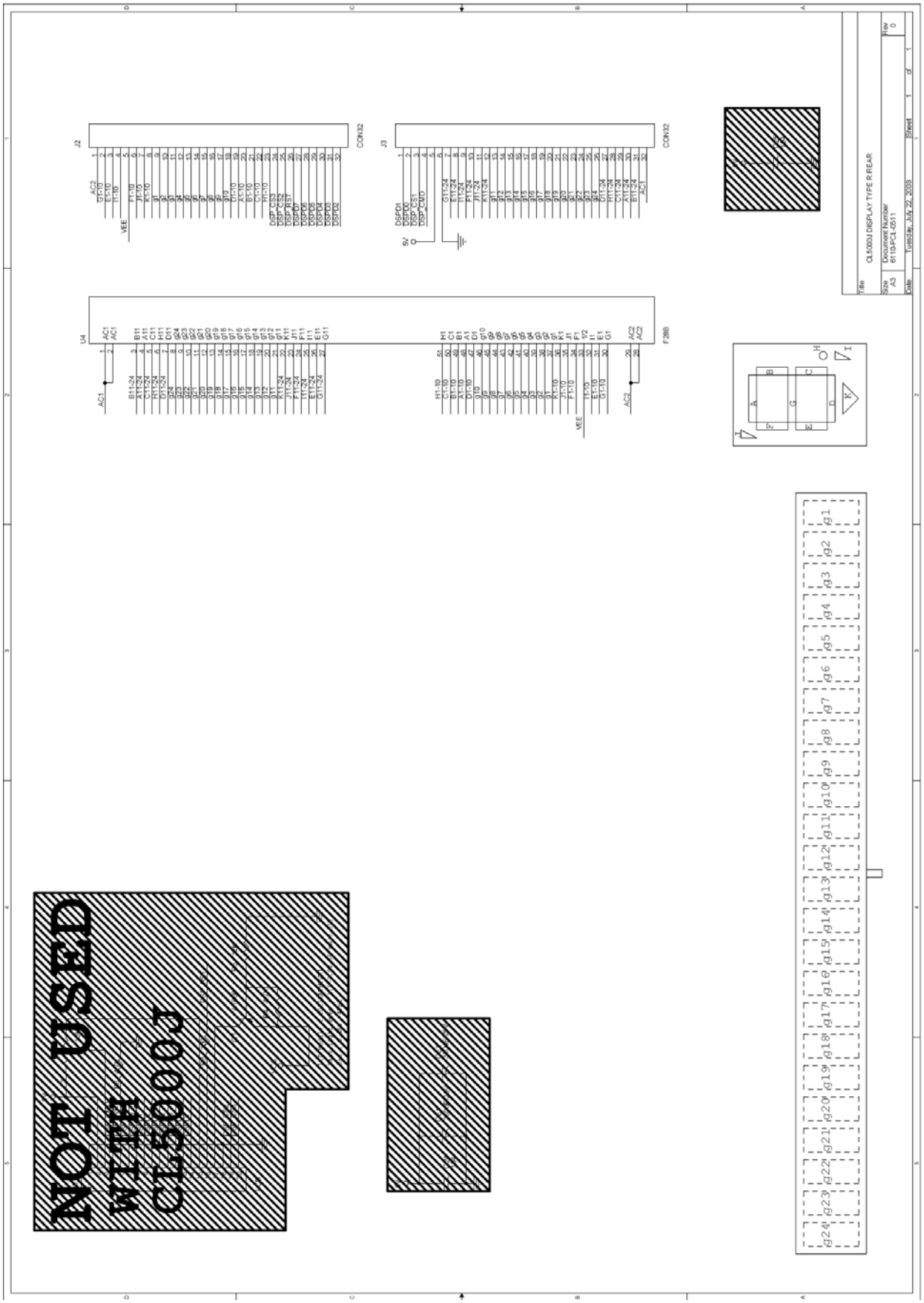
3) Display Type P (Rear)



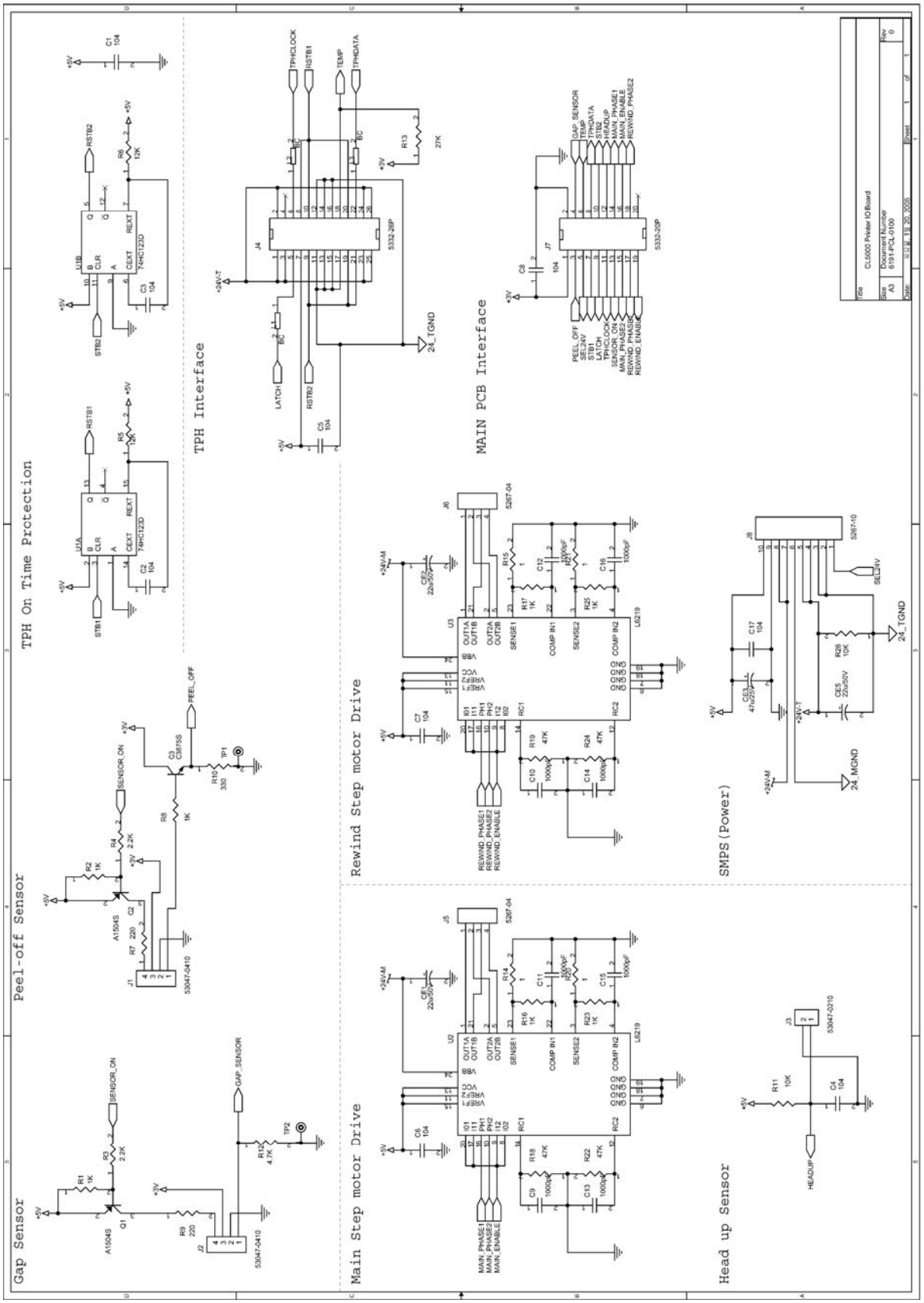
4) Display Type R (Front)



5) Display Type R (Rear)

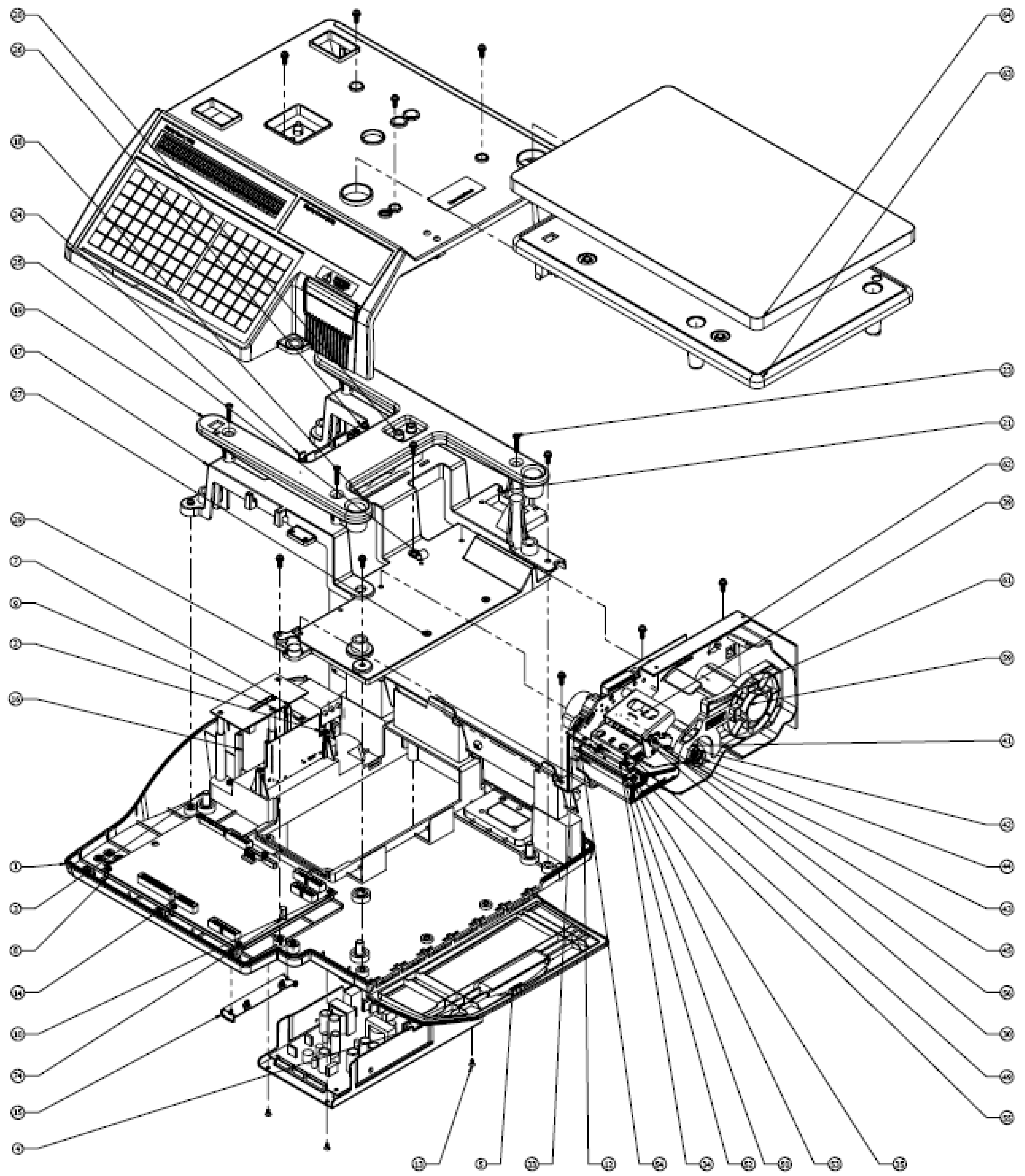


8.7 Printer I/O PCB



9. Exploded Views

9.1 Scale Assy (B-type)



품번	자재코드	자재명	재질	SPEC	수량
1	2004-A00-0388	BODY	ABS(난연)	CL5000 432*400*113	1
2	7612-G00-0004	AC SOCKET CONNECTOR	ABS	JR-101(PCB,S/W 포함)SKT	1
3	2610-A00-0309	FOOT	NBR	NBR M8*1.25*35(TP)	4
4	2004-A00-0389	DOOR PANEL	ABS(난연)	CL5000 260*120*27	1
5	1070-A00-0301	MAGNET	MAGNET	15*3*4(LP-1)(N33)NI	1
6	1210-A00-0393	DOOR SHAFT	SUS 303	CL5000 Φ1.5*266	1
7	6030-F00-0040-0	NOISE FILTER		CLP 40*31.2*23.4	1
8	1020-A00-0307	MAIN PCB COVER	EGI	CL5000 210*150*5.2	1
9	1510-A00-0308	TAPPING SCREW (PH)-1	SCM	M3*8	3
10	1510-A00-0410	TAPPING SCREW (PH)-1	SCM	M4*10	23
11	9300-GPL-0300	CUSHION-EVA	EVA	40*40*3t(nBODY-DF)	2
12	1510-A00-0430	TAPPING SCREW (PH)-1	SCM	M4*30	2
13	1501-A00-0306	MACHINE SCREW (FH)	SCM	M3 * 6	7
14	PPP-CLP-EAMP	MAIN PCB ASS'Y		CLP 210*150*1.6	1
15	1030-A00-0225	SLOT COVER PLATE	SPC	CL5000 96.6*20.6*26.2	1
16	6180-PCL-0710-0]	CF CARD PCB	N/A	N/A	1
17	1100-A00-0368	PLATFORM LOWER	AL DIE CASTING	CL5000 378*349*75	1
18	8043-LT0-036L	LOADCELL	AL2024T4	TP-TYPE	1
19	1100-A00-0367	PLATFORM UPPER	AL DIE CASTING	CL5000 345*215*36	1
20	1535-MSU-0620	WRENCH BOLT	SUS	M6*20	4
21	1503-A00-0412	MACHINE SCREW (WPH)	SCM	WPH M4*12	18
22	1261-A00-0308	LIMIT BOLT	SCM	M5*8.5(Zn도금,15Kg)	1
23	1502-A00-0420	MACHINE SCREW (PH)	SCM	M-S PH M4X20	4
24	7642-G00-0060	METAL CLAMP		6N	1
25	7642-G00-0005	CABLE CLAMP	ABS	DA-4N	1
26	1552-A00-0400	WASHER (OTO)	SCM	φ4	1
27	1501-A00-0408	MACHINE SCREW (FH)	SCM	M4*8	2
28	1030-A00-0233	PCMCIA CARD BRACKET	SPC	CL5000 96.6*20.6*26.2	1
29	2022-A00-0304	WATER LEVEL GAGE		φ14.9*8	1
30	1000-A00-0241	Main Bracket	SUS 304	CL5000R 59*49.5*35*9t	1
31	1030-A00-0220	MECHANISM BRACKET	PO	CL5000 261*111*112.6	1
32	1210-A00-0396	PIN	SUS 304	CL5000 Φ4 * 12.4	4
33	2011-A00-0316	SPUR GEAR	Acetal	CL5000 OD_21.5*M0.5	5
34	1000-A00-0243	TPH BKT HOLDER	SUS304	CL5000JR 57*47.2*21	1
35	1150-A00-0312	TPH HETSINK	A5052-H112	CL1000 64.6*20.6*6	1
36	1210-A00-0394	SHAFT BEARING	SUS 304	CL5000 @7*37	1
37	2011-A00-0313	BUSHING BEARING	ACETAL	CL5000 @28*15.5	1
38	2011-A00-0311	REWIND SHAFT	ACETAL	CL5000 13*13*25	1
39	2011-A00-0312	REWIND GUIDE	ACETAL	CL5000 @42*71	1
40	2620-A00-0029	SILICONE WASHER	SILICONE RUBBER	CL5000 @17*1.5	1
41	2004-A00-0392	REWIND PAPER	ABS(난연)	CLP @33.5*59	1
42	1590-A00-0390	SPRING	SUS304	CL5000 13.5 * 1.0 * 45	1
43	2021-A00-0310	REWIND WASHER	PET	CL5000 @10*0.5t	1
44	2010-A00-0328	REWIND PAPER LOCKER	PC/ABS	CL5000 @29*82	1
45	1003-A00-0059-0	LEVER OPEN	SUS 304	37*15*12*16T(LP-1)	1
46	2011-A00-0317	SPUR GEAR	ACETAL	APS OD_29.4 M_0.5	1
47	2011-A00-0318	SPUR GEAR	ACETAL	CL5000r OD_19.5 M_0.5	1
48	1530-MSU-0610	BOLT WRENCH	SUS	M6*10	1
49	1000-A00-0242	BRK-PRESSURE	SUS 304	CL5000R 51*54.6*9	1
50	2004-A00-0390	CARTRIDGE	ABS(난연)	CL5000 254*107*94	1
51	1537-A00-0415	TAPTITE SCREW	SUS	APS_M4 x 15	3
52	1150-A00-0313	LOWER FRAME	AL Extruding	CL5000R 77*47.5*22.5	1
53	1000-A00-0244	LOWER FRAME COVER	SUS303	CL5000R 43.1*26.9*1t	1
54	1210-A00-0085	SHAFT BUSHING	BSBM-2	APS 구입품	2
55	1537-A00-0408	TAPTITE SCREW	SUS	APS_M4x8	3
56	1550-MSU-0306	WASHER(FLAT)	SUS	φ3*φ6*0.5	1
57	PPP-CLP-EPSP	Peeloff Sensor PCB Ass'y		CLP 49*10*1.5	1
58	1502-A00-0306	MACHINE SCREW (PH)	SCM	M3*6	4
59	2004-A00-0391	ROLL PAPER FEED	ABS(기본)	CLP @34*81	1
60	1000-A00-0217	REWIND STOPPER PLATE	SUS	CL5000 @53*0.5t	1
61	2004-A00-0393	ROLL COVER	ABS(난연)	CL5000 160*80*10	1
62	1070-A00-0303	MAGNET	MAGNET	CLP @15 x 3	2
63	2004-A00-0395	TRAY	ABS(난연)	CL5000 381*245 (ABS)	1
64	1000-A00-0216	TRAY	SUS 304	CL5000 382*264* 1t	1
65	2004-A00-0394	UPPER CASE	ABS(난연)	CL5000 432*400*134	1
65	1000-A00-0219	PAPER CUTTER	SUS	CL5000 77.5*15.3	3
65	1030-A00-0226	DOOR PLATE	SPC	CL5000 26*18*3.8	1
66	1000-A00-0386	TRAY POLE FENCE	SUS304	6*290*37	1
67	2010-A00-0326	W/L GAGE COVER	LEXAN 0.5t	ø18.5*0.5t	1

TOTAL ASS'Y

SHOPPING SCALE

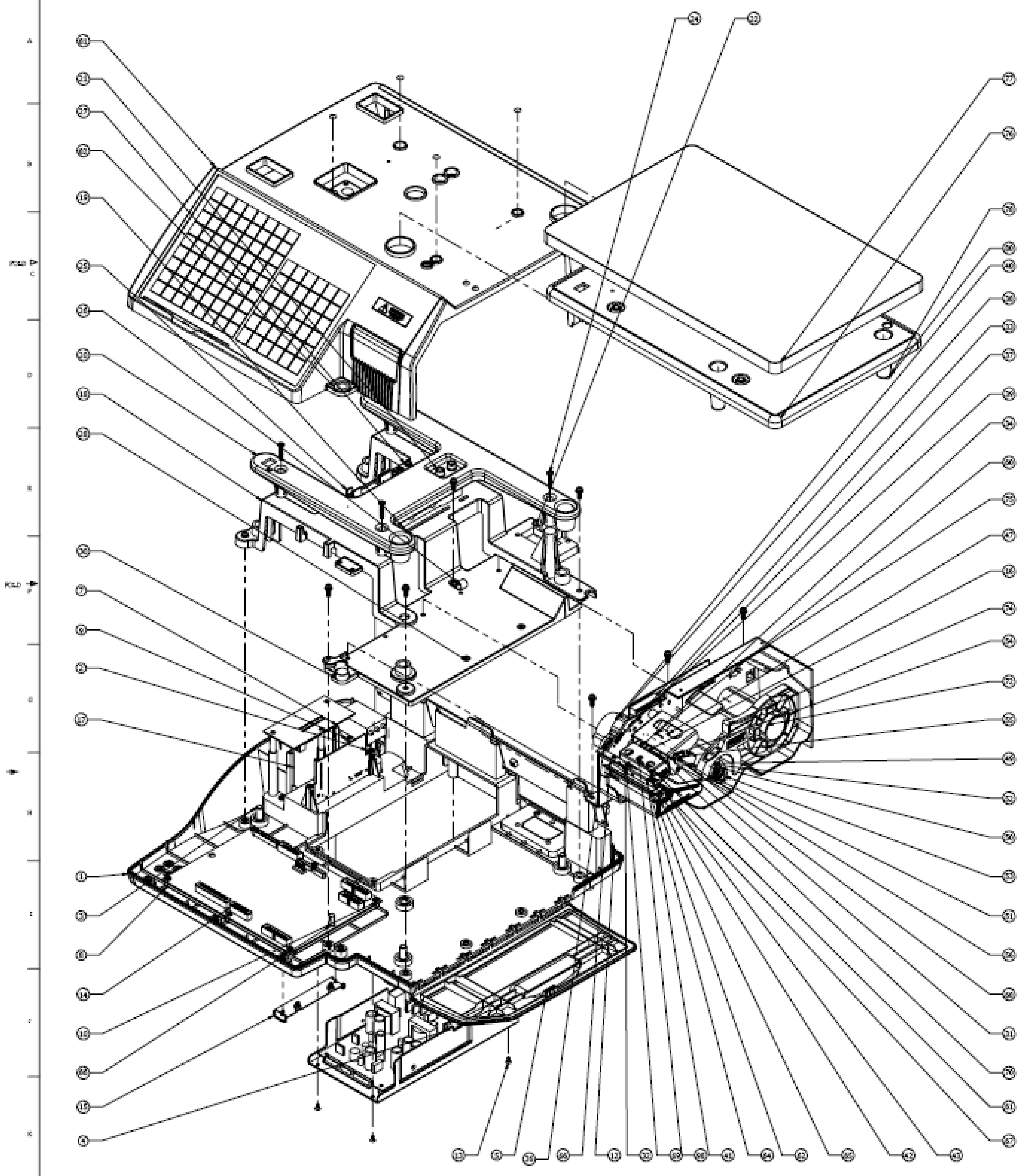
CL5000

WORLD WIDE

CAS

1:2.5

9.2 Scale Assy (P,R-type)



품번	자재코드	자재명	재질	SPEC	수량
1	2004-A00-0080	BODY	ABS(난연)	CL5000 432*408*113	1
2	7612-G00-0304	AC SOCKET CONNECTOR	ABS	JR-101(PDI)S/W 포함SKT	1
3	2610-A00-0039	FOOT	NBR	NBR M6*1.25*30(TP)	4
4	2004-A00-0089	DOOR PANEL	ABS(난연)	CL5000 260*120*27	1
5	1070-A00-0031	MAGNET	MAGNET	15*3*4(LP-C)(N30)HE	1
6	1210-A00-0093	DOOR SHAFT	SUS 303	CL5000 @1.5*296	1
7	6030-F00-0040-0	NOISE FILTER		CLP 48*31.2*23.4	1
8	1020-A00-0037	MAIN PCB COVER	EGI	CL5000 210*150*5.2	1
9	1510-A00-0308	TAPPING SCREW (PH)-1	SCM	M3*8	3
10	1510-A00-0410	TAPPING SCREW (PH)-1	SCM	M4*10	18
11	9300-SPL-0300	CUSHION-EVA	EVA	40*40*3t(BODY-DP)	2
12	1510-A00-0430	TAPPING SCREW (PH)-1	SCM	M4*30	2
13	1501-A00-0306	MACHINE SCREW (FH)	SCM	M3 * 6	7
14	PPP-CLP-EAMP	MAIN PCB ASS'Y		CLP 210*150*1.6	1
15	1030-A00-0225	SLOT COVER PLATE	SPC	CL5000 96.6*20.6*26.2	1
16	1502-A00-0304	MACHINE SCREW (PH)	SCM	M3*4	11
17	6100-PCL-0710-0]	CF CARD PCB	N/A	N/A	1
18	1100-A00-0050	PLATFORM LOWER	AL DIE CASTING	CL5000 370*349*75	1
19	8043-LT0-008L	LOADCELL	AL2024T4	TP-TYPE	1
20	1100-A00-0057	PLATFORM UPPER	AL DIE CASTING	CL5000 345*215*35	1
21	1535-MSU-0620	WRENCH BOLT	SUS	M6*20	4
22	1503-A00-0412	MACHINE SCREW (WPH)	SCM	WPH M4*12	14
23	1261-A00-0038	LIMIT BOLT	SCM	M5*0.5(Zn흑색,15Kg)	1
24	1502-A00-0420	MACHINE SCREW (PH)	SCM	M-S PH M4X20	4
25	7642-G00-0360	METAL CLAMP		6H	1
26	7642-G00-0305	CABLE CLAMP	ABS	DA-4N	1
27	1552-A00-0400	WASHER (OTO)	SCM	φ4	1
28	1501-A00-0408	MACHINE SCREW (FH)	SCM	M4*8	2
29	1030-A00-0233	PCMCIA CARD BRACKET	SPC	CL5000 96.6*20.6*26.2	1
30	2022-A00-0034	WATER LEVEL GAGE		φ14.9*6	1
31	1000-A00-0241	Main Bracket	SUS 304	CL5000R 59*49.5*35*1t	1
32	1030-A00-0220	MECHANISM BRACKET	PO	CL5000 261*111*112.6	1
33	2007-A00-0033	GEAR BOX	NYLON(GLASS 25%)	APS PM42M-040-XXXX	2
34	6410-TPN-0002	APS PRINTER MACHANISM	ABS	APS 구입품	1
35	1210-A00-0096	PIN	SUS 304	CL5000 Φ4 * 12.4	4
36	2011-A00-0016	SPUR GEAR	Acetal	CL5000 OD_21.5*M0.5	5
37	2007-A00-0034	GEAR BOX COVER	NYLON(GLASS 25%)	APS PM42M-040-XXXX	2
38	6450-TMT-0302	NMB MOTOR		APS (PM42M-040-XXXX)	2
39	1502-A00-0320-0	SCREW-MACHINE(PH)	SCM	M3*20	4
40	1551-A00-0300	WASHER(SPR)	SPR	@3	4
41	1000-A00-0243	TPH BKT HOLDER	SUS304	CL5000R 57*47.2*21	1
42	1150-A00-0012	TPH HITSINK	A6063-H112	CL1000 64.6*28.6*5	1
43	1561-MSU-0300	E-RING	SUS	Φ3*Φ7*0.6	3
44	1210-A00-0094	SHAFT BEARING	SUS 304	CL5000 @7*37	1
45	2011-A00-0013	BUSHING BEARING	ACETAL	CL5000 @28*15.5	1
46	2011-A00-0011	REWIND SHAFT	ACETAL	CL5000 13*13*25	1
47	2011-A00-0012	REWIND GUIDE	ACETAL	CL5000 @42*71	1
48	2620-A00-0029	SILICONE WASHER	SILICONE RUBBER	CL5000 @17*1.5	1
49	2004-A00-0092	REWIND PAPER	ABS(난연)	CLP @33.5*69	1
50	1590-A00-0390	SPRING	SUS304	CL5000 13.5 * 1.0 * 45	1
51	2021-A00-0010	REWIND WASHER	PET	CL5000 @18*0.5t	1
52	1000-A00-0218	STOPPER WASHER	SUS	CL5000 @18*1.2t	1
53	2010-A00-0020	REWIND PAPER LOCKER	PC/ABS	CL5000 @29*82	1
54	1561-MSU-0400	E-Ring	SUS	ø4*ø9*0.6-SUS	6
55	1210-A00-0104-0	OPEN LEVER SHAFT	SUS 303	CL5000R ø6*59.3	1
56	1003-A00-0059-0	LEVER OPEN	SUS 304	37*15*12*16T(LP-I)	1
57	2011-A00-0017	SPUR GEAR	ACETAL	APS OD_28.4 M_0.5	1
58	2011-A00-0018	SPUR GEAR	ACETAL	CL5000r OD_19.5 M_0.5	1
59	1530-MSU-0610	BOLT WRENCH	SUS	M6*10	1
60	1590-A00-0041	BRACKET PRESSURE SPRING	SUS	CL5000R 7.2*1*35	1
61	1000-A00-0242	BRK-PRESSURE	SUS 304	CL5000R 51*54.6*9	1
62	2004-A00-0090	CARTRIDGE	ABS(난연)	CL5000 254*107*94	1
63	1537-A00-0415	TAPTITE SCREW	SUS	APS_M4 x 15	3
64	1150-A00-0013	LOWER FRAME	AL Extruding	CL5000R 77*47.5*22.5	1
65	1000-A00-0244	LOWER FRAME COVER	SUS303	CL5000R 43.1*26.9*1t	1
66	1210-A00-0095	SHAFT BUSHING	BSSM-2	APS 구입품	2
67	1537-A00-0408	TAPTITE SCREW	SUS	APS_M4x8	3
68	1550-MSU-0305	WASHER(FLAT)	SUS	φ3*φ8*0.5	1
69	PPP-CLP-EPSP	Peeloff Sensor PCB Ass'y		CLP 49*50*1.5	1
70	2010-A00-0001-0]	GAP SENSOR ASS'Y		CLP	1
71	1502-A00-0306	MACHINE SCREW (PH)	SCM	M3*6	4
72	2004-A00-0091	ROLL PAPER FEED	ABS(白色)	CLP @34*61	1
73	1000-A00-0217	REWIND STOPPER PLATE	SUS	CL5000 @53*0.5t	1
74	2004-A00-0093	ROLL COVER	ABS(난연)	CL5000 163*80*10	1
75	1070-A00-0033	MAGNET	MAGNET	CLP @15 x 3	2
76	2004-A00-0095	TRAY	ABS(난연)	CL5000 381*245 (ABS)	1
77	1000-A00-0216	TRAY	SUS 304	CL5000 382*264* 1t	1
78	1550-MSU-0408	WASHER(FLAT)	SUS	φ4*φ8*0.8	3
79	1000-A00-0086	TRAY POLE FENCE	SUS304	6*290*37	1
80	1540-MSU-0400	NUT(HEX)	SUS	M4*3.7	3
81	2004-A00-0096	UPPER CASE	ABS(난연)	CL5000 432*408*134 (POLE)	1
82	2010-A00-0026	W.L GAGE COVER	LEXAN 0.5t	ø18.5*0.5t	1

NAME OR TITLE: TOTAL ASS'Y

CAS

CAS CORPORATION

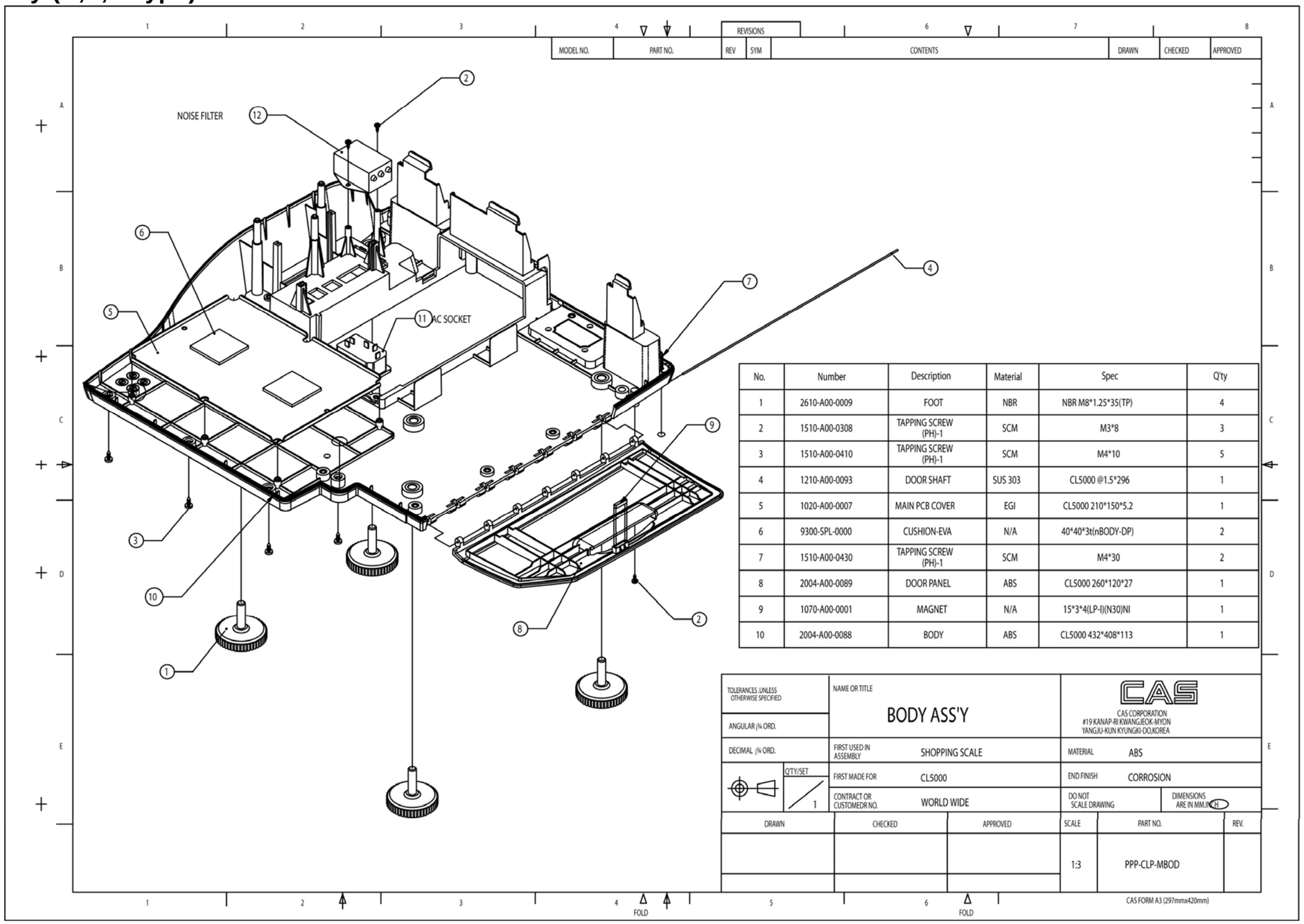
FIRST USED IN ASSEMBLY: SHOPPING SCALE

FIRST MADE FOR: CL5000

CONTRACT OR CUSTOMER NO.: WORLD WIDE

SCALE: 1:2.5 — PART NO.: PPP4.32-153G — REV.: 0

9.2 Body Assy (B,P,R-type)



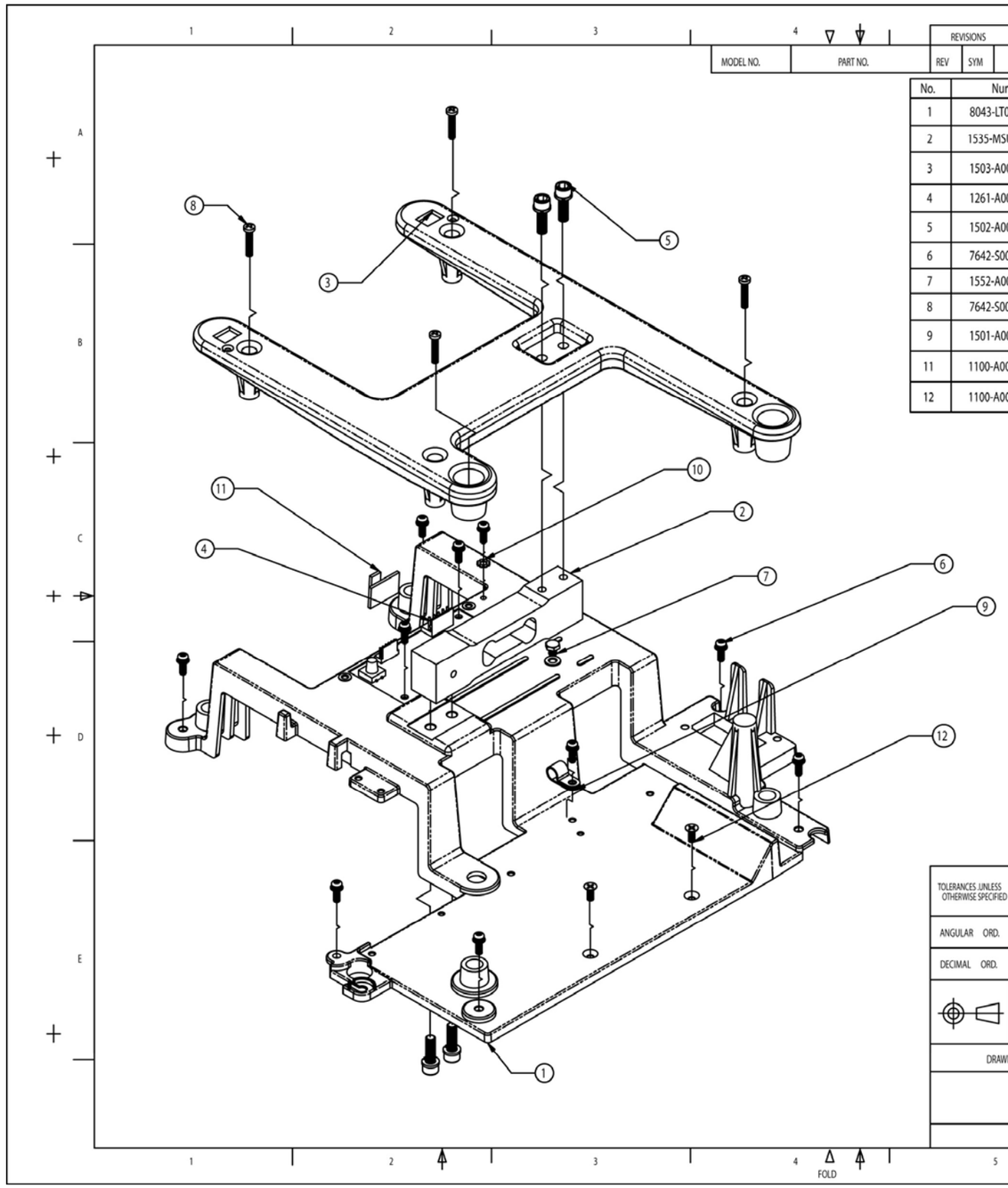
No.	Number	Description	Material	Spec	Q'ty
1	2610-A00-0009	FOOT	NBR	NBR M8*1.25*35(TP)	4
2	1510-A00-0308	TAPPING SCREW (PH)-1	SCM	M3*8	3
3	1510-A00-0410	TAPPING SCREW (PH)-1	SCM	M4*10	5
4	1210-A00-0093	DOOR SHAFT	SUS 303	CL5000 @1.5*296	1
5	1020-A00-0007	MAIN PCB COVER	EGI	CL5000 210*150*5.2	1
6	9300-SPL-0000	CUSHION-EVA	N/A	40*40*3t(nBODY-DP)	2
7	1510-A00-0430	TAPPING SCREW (PH)-1	SCM	M4*30	2
8	2004-A00-0089	DOOR PANEL	ABS	CL5000 260*120*27	1
9	1070-A00-0001	MAGNET	N/A	15*3*4(LP-I)(N30)NI	1
10	2004-A00-0088	BODY	ABS	CL5000 432*408*113	1

TOLERANCES UNLESS OTHERWISE SPECIFIED	NAME OR TITLE: BODY ASS'Y	CAS CORPORATION #19 KANAP-RI KWANGJEOK-MYON YANGJU-KUN KYUNGKI-DO,KOREA	
ANGULAR ¡¾ ORD.			
DECIMAL ¡¾ ORD.	FIRST USED IN ASSEMBLY: SHOPPING SCALE	MATERIAL: ABS	
QTY/SET: 1	FIRST MADE FOR: CL5000	END FINISH: CORROSION	
	CONTRACT OR CUSTOMEDR NO.: WORLD WIDE	DO NOT SCALE DRAWING	DIMENSIONS ARE IN MM,INCH

DRAWN	CHECKED	APPROVED	SCALE	PART NO.	REV.
			1:3	PPP-CLP-MBOD	

CAS FORM A3 (297mmx420mm)

9.3 Platform (B,P-type)



No.	Number	Description	Material	Spec	Q'ty
1	8043-LT0-006L	LOADCELL	AL2024T4	TP-TYPE	1
2	1535-MSU-0620	WRENCH BOLT	SUS	M6*20	4
3	1503-A00-0412	MACHINE SCREW (WPH)	SCM	WPH M4*12	10
4	1261-A00-0008	LIMIT BOLT	SCM	M5*8.5(ZnÉ³ó,15Kg)	1
5	1502-A00-0420	MACHINE SCREW (PH)	SCM	M-S PH M4X20	4
6	7642-S00-0005	CABLE CLAMP	ABS	DA-4N	1
7	1552-A00-0400	WASHER (OTO)	SCM	¥ö4	1
8	7642-S00-0060	METAL CLAMP	N/A	6N	1
9	1501-A00-0408	MACHINE SCREW (FH)	SCM	M4*8	2
11	1100-A00-0068	PLATFORM LOWER	AL DIE CASTING	CL5000 378*349*75	1
12	1100-A00-0067	PLATFORM UPPER	AL DIE CASTING	CL5000 345*215*36	1

MODEL NO. | PART NO. | REVISIONS: REV, SYM, CONTENTS | DRAWN | CHECKED | APPROVED

TOLERANCES UNLESS OTHERWISE SPECIFIED
ANGULAR ORD.
DECIMAL ORD.
Q'TY/SET 1

NAME OR TITLE: PLATFORM ASS'Y

FIRST USED IN ASSEMBLY: SHOPPING SCALE
FIRST MADE FOR: CL5000
CONTRACT OR CUSTOMEDR NO.: WORLD WIDE

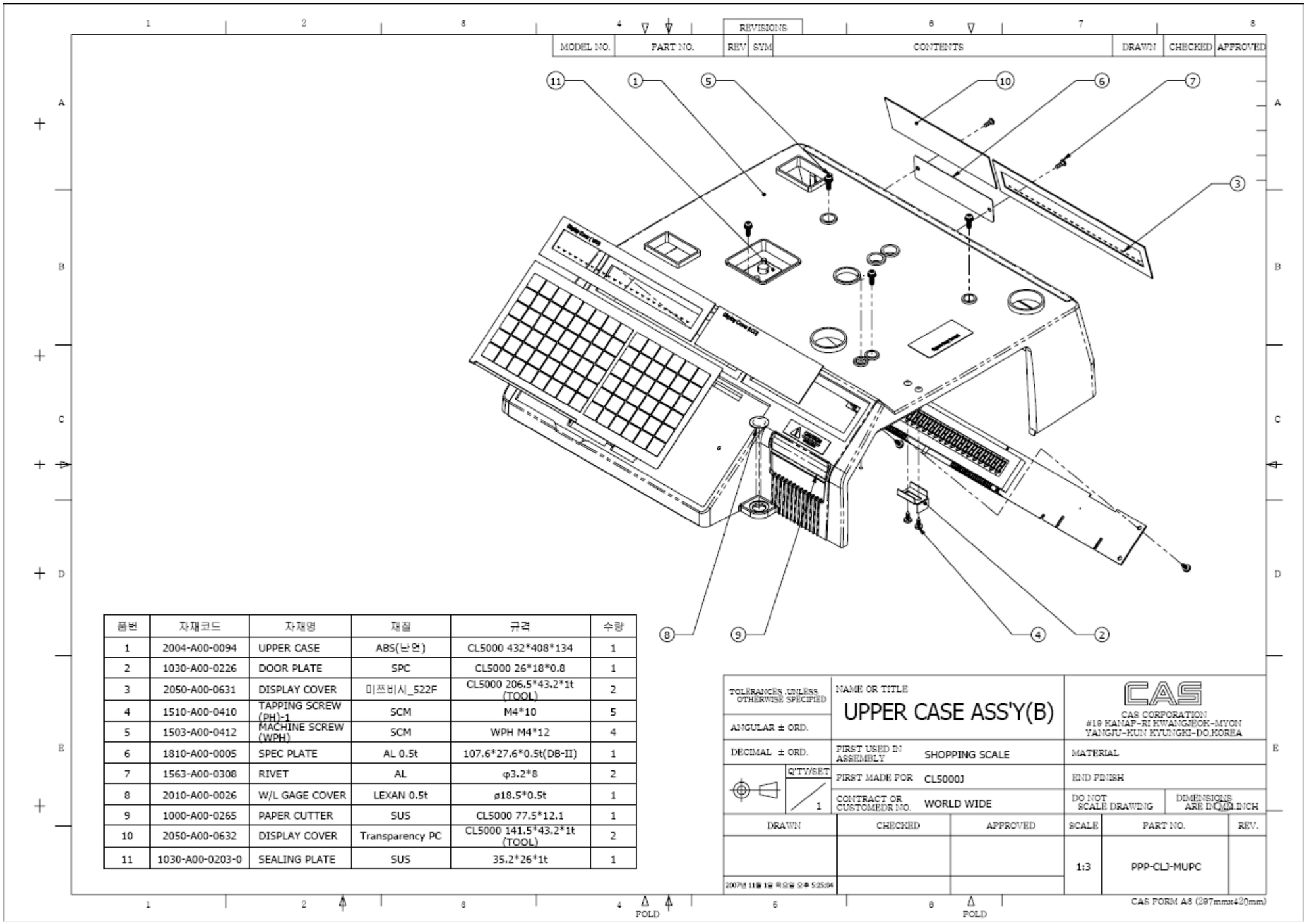
CAS
CAS CORPORATION
#19 KANAP-RI KWANGJEOK-MYON
YANGJU-KUN KYUNGKI-DO,KOREA

MATERIAL: AL DIE CASTING
END FINISH
DO NOT SCALE DRAWING
DIMENSIONS ARE IN MM,INCH

DRAWN	CHECKED	APPROVED	SCALE	PART NO.	REV.
			1:2	PPP-CLP-MPLA	0

FOLD FOLD
CAS FORM A3 (297mmx420mm)

9.4 Upper Case

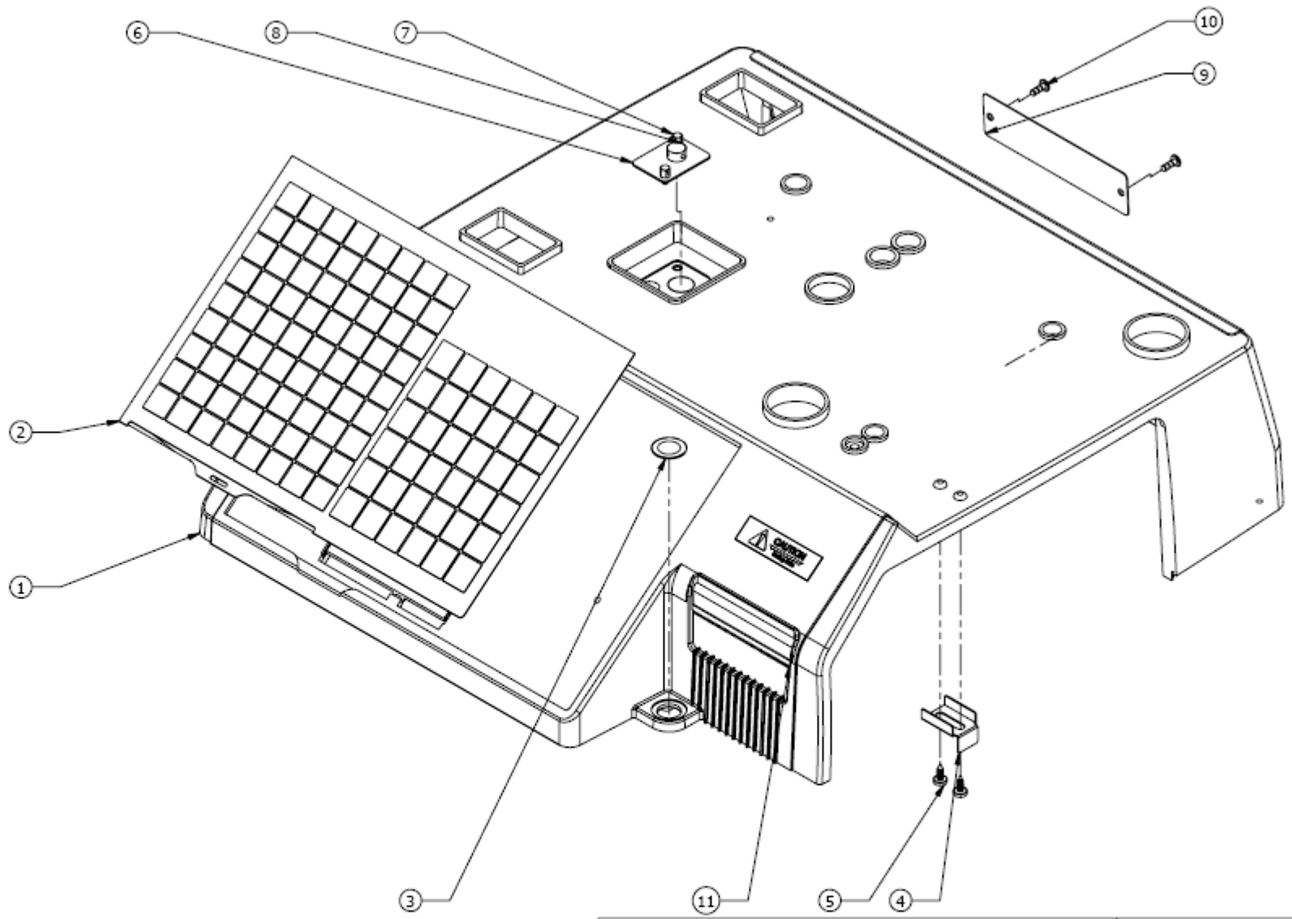


품번	자재코드	자재명	재질	규격	수량
1	2004-A00-0094	UPPER CASE	ABS(난연)	CL5000 432*408*134	1
2	1030-A00-0226	DOOR PLATE	SPC	CL5000 26*18*0.8	1
3	2050-A00-0631	DISPLAY COVER	미쯔비시_522F	CL5000 206.5*43.2*1t (TOOL)	2
4	1510-A00-0410	TAPPING SCREW (PH)-1	SCM	M4*10	5
5	1503-A00-0412	MACHINE SCREW (WPH)	SCM	WPH M4*12	4
6	1810-A00-0005	SPEC PLATE	AL 0.5t	107.6*27.6*0.5t(DB-II)	1
7	1563-A00-0308	RIVET	AL	φ3.2*8	2
8	2010-A00-0026	W/L GAGE COVER	LEXAN 0.5t	ø18.5*0.5t	1
9	1000-A00-0265	PAPER CUTTER	SUS	CL5000 77.5*12.1	1
10	2050-A00-0632	DISPLAY COVER	Transparency PC	CL5000 141.5*43.2*1t (TOOL)	2
11	1030-A00-0203-0	SEALING PLATE	SUS	35.2*26*1t	1

TOLERANCES ,UNLESS OTHERWISE SPECIFIED	NAME OR TITLE	UPPER CASE ASS'Y(B)	CAS	
ANGULAR ± ORD.			CAS CORPORATION #19 KANAF-RI KWANGNEOK-MYON YANGJU-KUN KYUNGKI-DO,KOREA	
DECIMAL ± ORD.	FIRST USED IN ASSEMBLY	SHOPPING SCALE	MATERIAL	
Q'TY/SET 1	FIRST MADE FOR	CL5000J	END FINISH	
	CONTRACT OR CUSTOMEDR NO.	WORLD WIDE	DO NOT SCALE DRAWING	DIMENSIONS ARE IN MILLINCH
DRAWN	CHECKED	APPROVED	SCALE	PART NO. / REV.
2007년 11월 1일 목요일 오후 5:25:04			1:3	PPP-CLJ-MUPC

CAS FORM A3 (297mmx420mm)

MODEL NO.	PART NO.	REVISIONS REV	SYM	CONTENTS	DRAWN	CHECKED	APPROVED



품번	자재코드	자재명	규격	수량
1	2004-A00-0096	UPPER CASE	CL5000 432*408*134 (POLE)	1
2	2100-A00-0234	MEMBRANE S/W	CL5000 256*165.8*1.6 (TOOL)	1
3	2010-A00-0026	W/L GAGE COVER	ø18.5*0.5t	1
4	1030-A00-0226	DOOR PLATE	CL5000 26*18*0.8	1
5	1510-A00-0410	TAPPING SCREW (PH)-1	M4*10	2
6	1030-A00-0203-0	SEALING PLATE	35.2*26*1t	1
7	1265-A00-0001	SEALING BOLT	M3*5 (황동) BI	2
8	9900-A00-0001	SEALING PB	@10	1
9	1810-A00-0005	SPEC PLATE	107.6*27.6*0.5t(DB-II)	1
10	1563-A00-0308	RIVET	φ3.2*8	2
11	1000-A00-0265	PAPER CUTTER	CL5000 77.5*12.1	1

TOLERANCES UNLESS OTHERWISE SPECIFIED
ANGULAR ± ORD.
DECIMAL ± ORD.
Q'TY/SET N/A / 1

NAME OR TITLE: UPPER CASE ASS'Y(P,R)
FIRST USED IN ASSEMBLY: SHOPPING SCALE
FIRST MADE FOR: CL5000J
CONTRACT OR CUSTOMEDR NO.: WORLD WIDE

CAS CORPORATION
#19 KANAP-RI KWANGNEOK-MYON
YANGJU-KUN KYUNGKI-DO,KOREA

MATERIAL: N/A
END FINISH: N/A
DO NOT SCALE DRAWING
DIMENSIONS ARE IN MILLIMETER/INCH

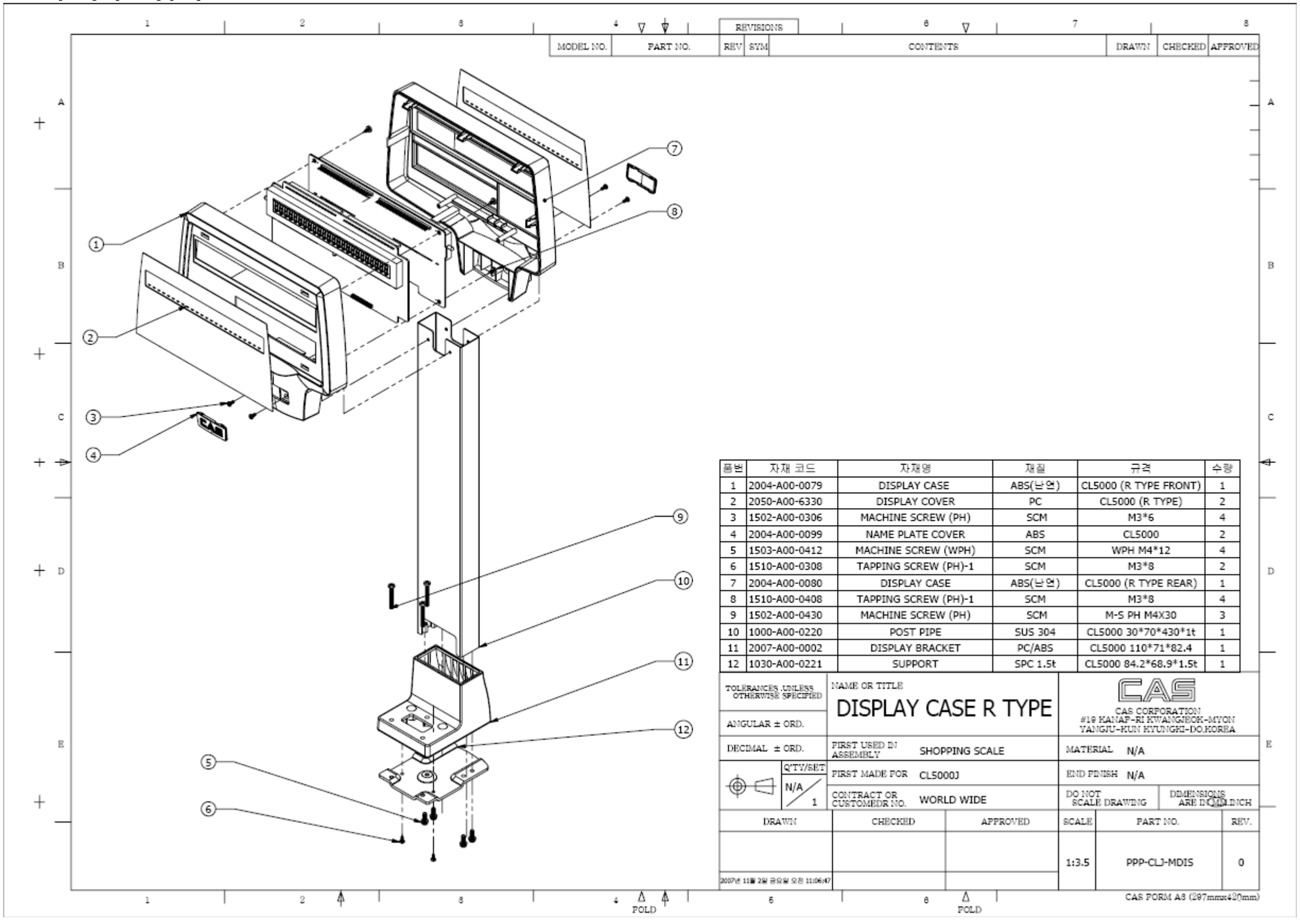
DRAWN	CHECKED	APPROVED	SCALE	PART NO.	REV.
			1:2.5	PPP-CLJ-MUPC	0

2007년 11월 1일 목요일 오후 5:10:47

FOLD FOLD

CAS FORM A3 (297mmx420mm)

10.9 Pole display (R-type)



품번	자재 코드	자재명	재질	규격	수량
1	2004-A00-0079	DISPLAY CASE	ABS(난연)	CL5000 (R TYPE FRONT)	1
2	2050-A00-6330	DISPLAY COVER	PC	CL5000 (R TYPE)	2
3	1502-A00-0306	MACHINE SCREW (PH)	SCM	M3*6	4
4	2004-A00-0099	NAME PLATE COVER	ABS	CL5000	2
5	1503-A00-0412	MACHINE SCREW (WPH)	SCM	WPH M4*12	4
6	1510-A00-0308	TAPPING SCREW (PH)-1	SCM	M3*8	2
7	2004-A00-0080	DISPLAY CASE	ABS(난연)	CL5000 (R TYPE REAR)	1
8	1510-A00-0408	TAPPING SCREW (PH)-1	SCM	M3*8	4
9	1502-A00-0430	MACHINE SCREW (PH)	SCM	M-S PH M4X30	3
10	1000-A00-0220	POST PIPE	SUS 304	CL5000 30*70*430*1t	1
11	2007-A00-0002	DISPLAY BRACKET	PC/ABS	CL5000 110*71*82.4	1
12	1030-A00-0221	SUPPORT	SPC 1.5t	CL5000 84.2*68.9*1.5t	1

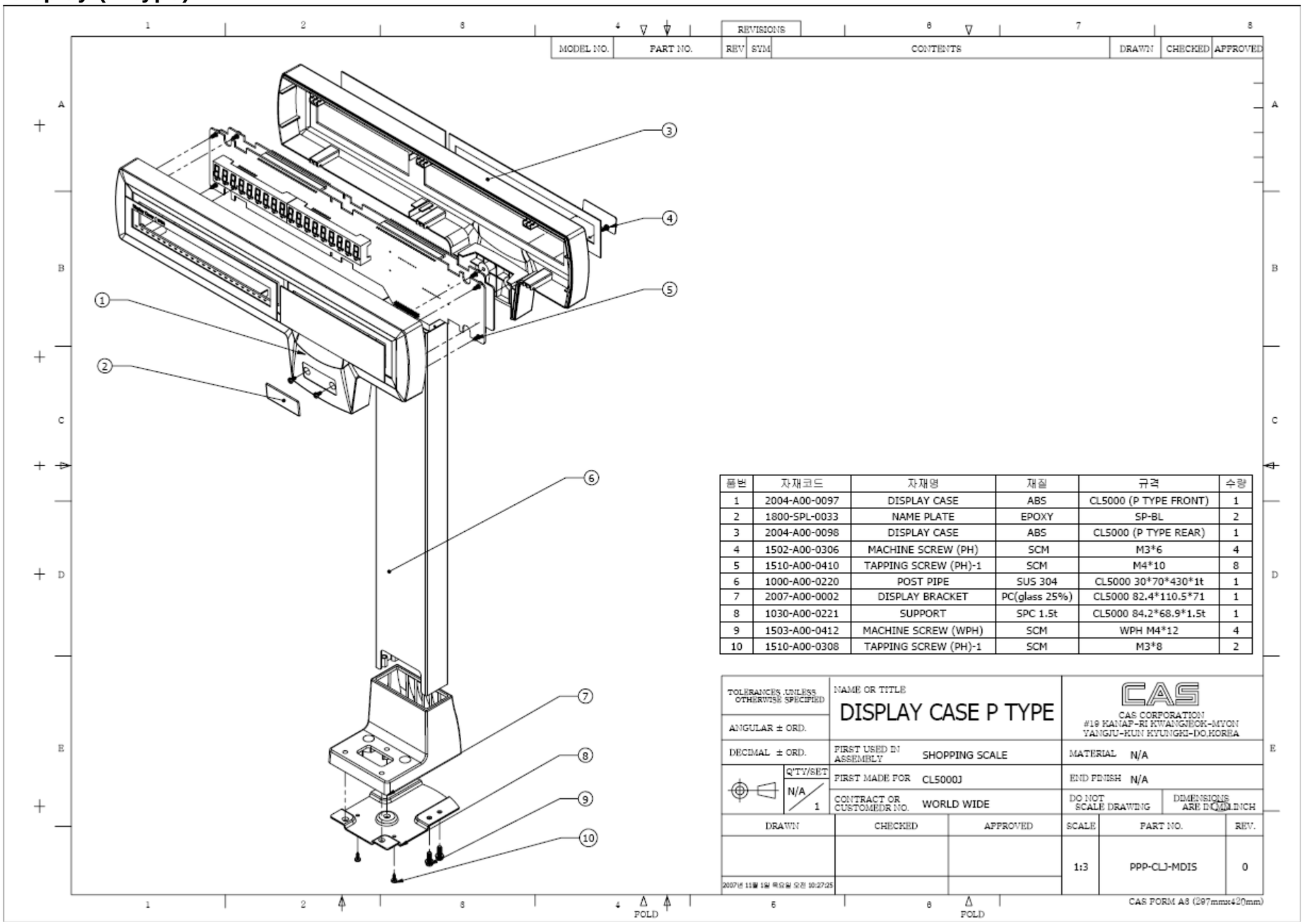
TOLERANCES ,UNLESS OTHERWISE SPECIFIED
ANGULAR ± ORD.
DECIMAL ± ORD.
Q'TY/SET N/A / 1
NAME OR TITLE
DISPLAY CASE R TYPE
FIRST USED IN ASSEMBLY SHOPPING SCALE
FIRST MADE FOR CL5000J
CONTRACT OR CUSTOMEDR NO. WORLD WIDE
CAS CORPORATION
#19 KANAF-RI KWANGNEOK-MYON
YANGJU-KUN KYUNGKI-DO,KOREA
MATERIAL N/A
END FINISH N/A
DO NOT SCALE DRAWING
DIMENSIONS ARE IN MM,INCH

DRAWN	CHECKED	APPROVED	SCALE	PART NO.	REV.
			1:3.5	PPP-CLJ-MDIS	0

2007년 11월 2일 금요일 오전 11:06:47

CAS FORM A3 (297mmx420mm)

9.5 Pole display (P-type)



품번	자재코드	자재명	재질	규격	수량
1	2004-A00-0097	DISPLAY CASE	ABS	CL5000 (P TYPE FRONT)	1
2	1800-SPL-0033	NAME PLATE	EPOXY	SP-BL	2
3	2004-A00-0098	DISPLAY CASE	ABS	CL5000 (P TYPE REAR)	1
4	1502-A00-0306	MACHINE SCREW (PH)	SCM	M3*6	4
5	1510-A00-0410	TAPPING SCREW (PH)-1	SCM	M4*10	8
6	1000-A00-0220	POST PIPE	SUS 304	CL5000 30*70*430*1t	1
7	2007-A00-0002	DISPLAY BRACKET	PC(glass 25%)	CL5000 82.4*110.5*71	1
8	1030-A00-0221	SUPPORT	SPC 1.5t	CL5000 84.2*68.9*1.5t	1
9	1503-A00-0412	MACHINE SCREW (WPH)	SCM	WPH M4*12	4
10	1510-A00-0308	TAPPING SCREW (PH)-1	SCM	M3*8	2

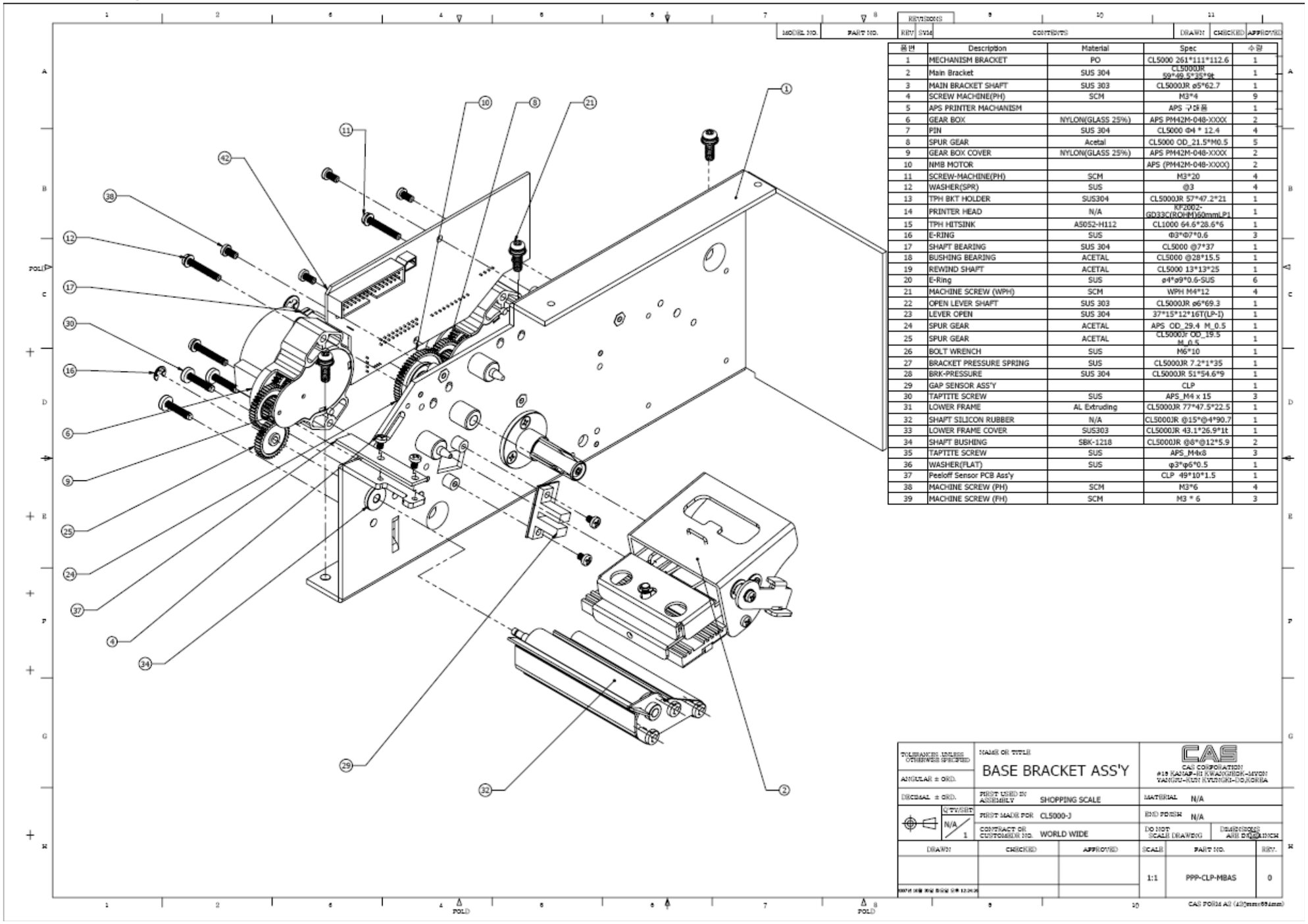
TOLERANCES ,UNLESS OTHERWISE SPECIFIED
ANGULAR ± ORD.
DECIMAL ± ORD.
Q'TY/SET N/A / 1
NAME OR TITLE: DISPLAY CASE P TYPE
FIRST USED IN ASSEMBLY: SHOPPING SCALE
FIRST MADE FOR: CL5000J
CONTRACT OR CUSTOMEDR NO.: WORLD WIDE
CAS CORPORATION
#19 HANAP-RI KWANGNEOK-MYON
YANGJU-KUN KYUNGKI-DO,KOREA
MATERIAL: N/A
END FINISH: N/A
DO NOT SCALE DRAWING
DIMENSIONS ARE IN MILLIMETER/INCH

DRAWN	CHECKED	APPROVED	SCALE	PART NO.	REV.
			1:3	PPP-CLJ-MDIS	0

2007년 11월 1일 목요일 오전 10:27:25

CAS FORM A3 (297mmx420mm)

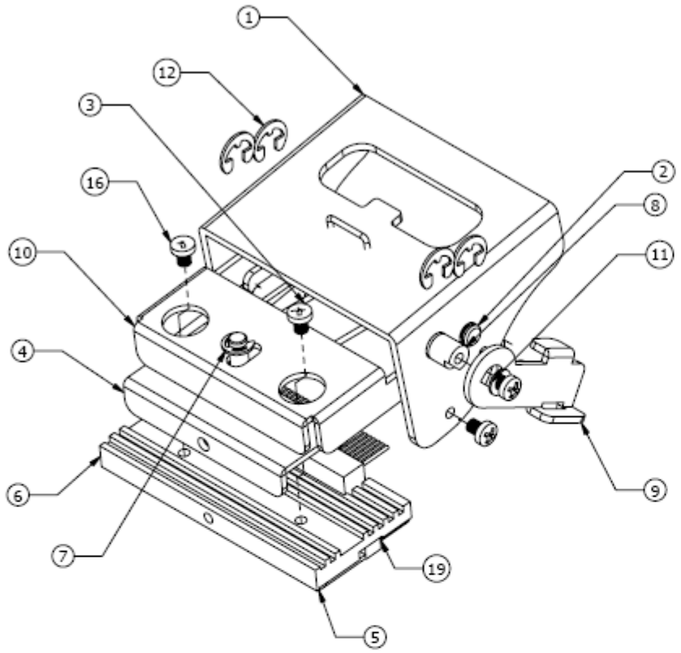
9.6 Printer Assembly

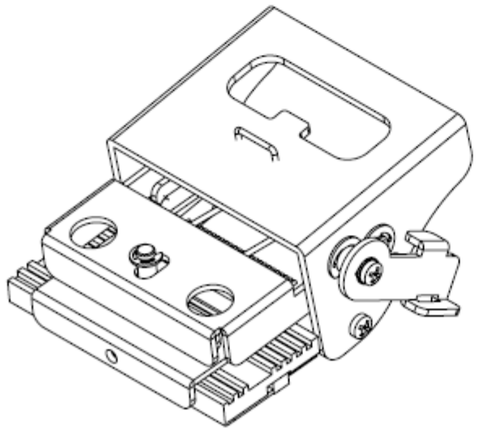


품번	Description	Material	Spec	수량
1	MECHANISM BRACKET	PO	CL5000 261*111*112.6	1
2	Main Bracket	SUS 304	CL5000JR 59*49.5*35*9t	1
3	MAIN BRACKET SHAFT	SUS 303	CL5000JR ø5*62.7	1
4	SCREW MACHINE(PH)	SCM	M3*4	9
5	APS PRINTER MACHANISM		APS 구매품	1
6	GEAR BOX	NYLON(GLASS 25%)	APS PM42M-048-XXXX	2
7	PIN	SUS 304	CL5000 Φ4 * 12.4	4
8	SPUR GEAR	Acetal	CL5000 OD_21.5*M0.5	5
9	GEAR BOX COVER	NYLON(GLASS 25%)	APS PM42M-048-XXXX	2
10	NMB MOTOR		APS (PM42M-048-XXXX)	2
11	SCREW-MACHINE(PH)	SCM	M3*20	4
12	WASHER(SPR)	SUS	@3	4
13	TPH BKT HOLDER	SUS304	CL5000JR 57*47.2*21	1
14	PRINTER HEAD	N/A	KF2002-GD33C(ROHM)90mmLP1	1
15	TPH HITSINK	AS052-H112	CL1000 64.6*28.6*6	1
16	E-RING	SUS	Φ3*Φ7*0.6	3
17	SHAFT BEARING	SUS 304	CL5000 @7*37	1
18	BUSHING BEARING	ACETAL	CL5000 @28*15.5	1
19	REWIND SHAFT	ACETAL	CL5000 13*13*25	1
20	E-Ring	SUS	ø4*ø9*0.6-SUS	6
21	MACHINE SCREW (WPH)	SCM	WPH M4*12	4
22	OPEN LEVER SHAFT	SUS 303	CL5000JR ø6*69.3	1
23	LEVER OPEN	SUS 304	37*15*12*16T(LP-I)	1
24	SPUR GEAR	ACETAL	APS OD_29.4 M_0.5	1
25	SPUR GEAR	ACETAL	CL5000JR OD_19.5 M_0.5	1
26	BOLT WRENCH	SUS	M6*10	1
27	BRACKET PRESSURE SPRING	SUS	CL5000JR 7.2*1*35	1
28	BRK-PRESSURE	SUS 304	CL5000JR 51*54.6*9	1
29	GAP SENSOR ASS'Y		CLP	1
30	TAPTITE SCREW	SUS	APS_M4 x 15	3
31	LOWER FRAME	AL Extruding	CL5000JR 77*47.5*22.5	1
32	SHAFT SILICON RUBBER	N/A	CL5000JR @15*@4*90.7	1
33	LOWER FRAME COVER	SUS303	CL5000JR 43.1*26.9*1t	1
34	SHAFT BUSHING	SBK-1218	CL5000JR @8*@12*5.9	2
35	TAPTITE SCREW	SUS	APS_M4x8	3
36	WASHER(FLAT)	SUS	φ3*φ6*0.5	1
37	Peeloff Sensor PCB Ass'y		CLP 49*10*1.5	1
38	MACHINE SCREW (PH)	SCM	M3*6	4
39	MACHINE SCREW (FH)	SCM	M3 * 6	3

9.7 Printer Header Assemble

MODEL NO.	PART NO.	REVISIONS REV	SYM	CONTENTS	DRAWN	CHECKED	APPROVED





	NUMBER	DISCRIPTION	SPEC	MATERIAL	
1	1000-A00-0241	Main Bracket	CL5000JR 59*49.5*35*9t	SUS 304	1
2	1210-A00-0103-0	MAIN BRACKET SHAFT	CL5000JR ø5*62.7	SUS 303	1
3	6410-TPN-0002	APS PRINTER MACHANISM		n/a	1
4	1000-A00-0243	TPH BKT HOLDER	CL5000JR 57*47.2*21	SUS304	1
5	6412TPH00330	PRINTER HEAD	KF2002-GD33C(ROHM)60mmLP1	N/A	1
6	1150-A00-0012	TPH HITSINK	CL1000 64.6*28.6*6	A5052-H112	1
7	1561-MSU-0300	E-RING	Φ3*Φ7*0.6	SUS	2
8	1210-A00-0104-0	OPEN LEVER SHAFT	CL5000JR ø6*69.3	SUS 303	1
9	1000-A00-0059-0	LEVER OPEN	37*15*12*16T(LP-I)	SUS 304	1
10	1000-A00-0242	BRK-PRESSURE	CL5000JR 51*54.6*9	SUS 304	1
11	1550-MSU-0305	WASHER(FLAT)	φ3*φ6*0.5	SUS	1
12	1561-MSU-0400	E-Ring	ø4*ø9*0.6-SUS	SUS	4
13	1590-A00-0041	BRACKET PRESSURE SPRING	CL5000JR 7.2*1*35	SUS	1
14	1530-MSU-0610	BOLT WRENCH	M6*10	SUS	1
15	1030-A00-0220	MECHANISM BRACKET	CL5000 261*111*112.6	PO	1
16	1502-A00-0304	SCREW MACHINE(PH)	M3*4	SCM	5

출 도
2007/10/23
(주)CAS기술연구소

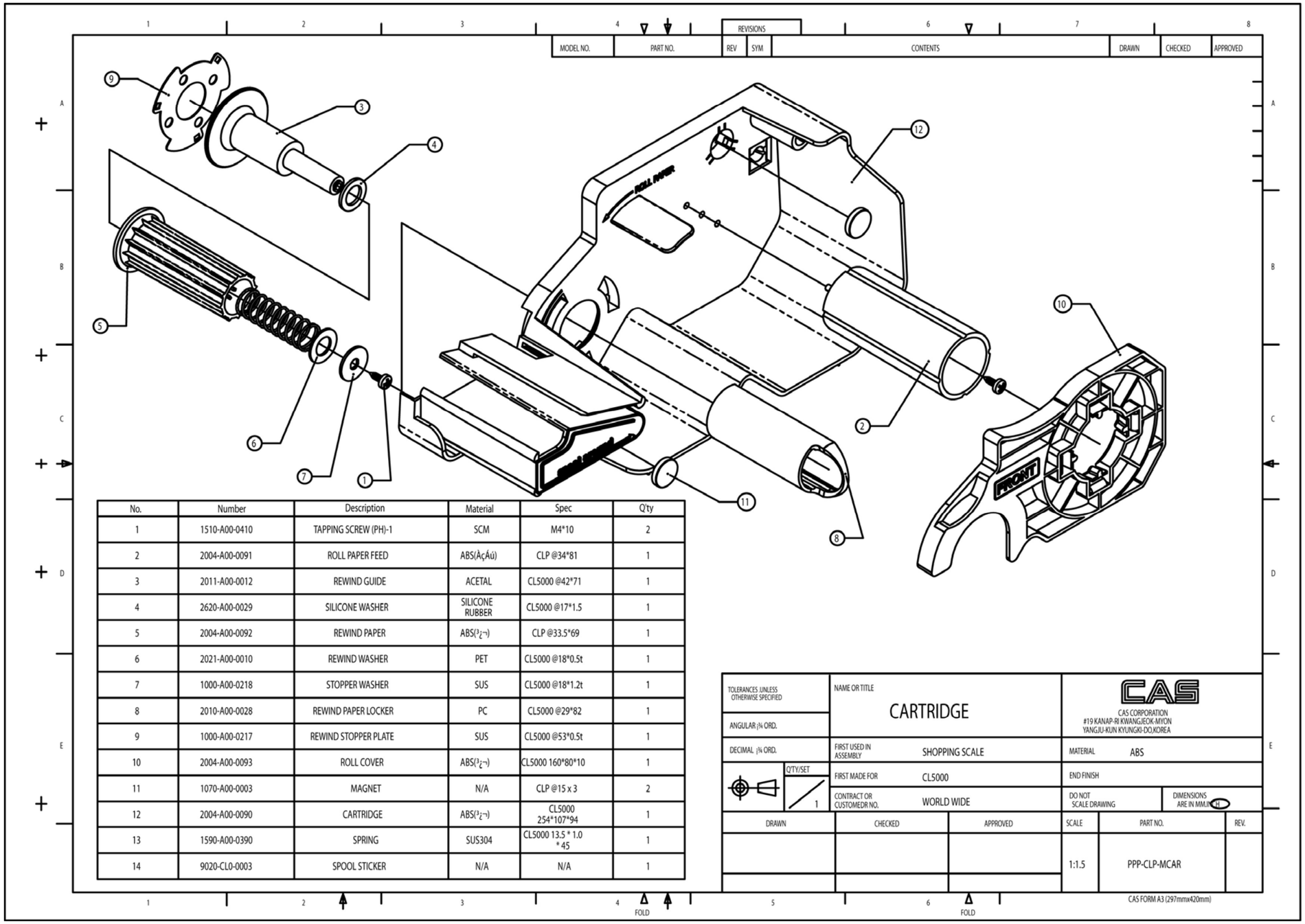
TOLERANCES UNLESS OTHERWISE SPECIFIED	NAME OR TITLE TPH HEAD	CAS CORPORATION #19 HANAF-RI KWANGJEOK-MYON YANGJU-KUN KYUNGHI-DO,KOREA	
ANGULAR ± ORD.			
DECIMAL ± ORD.	FIRST USED IN ASSEMBLY N/A	MATERIAL N/A	
QTY/SET 1/1	FIRST MADE FOR CL5000 JR	END FINISH N/A	
	CONTRACT OR CUSTOMEDR NO. WORLD WIDE	DO NOT SCALE DRAWING	DIMENSIONS ARE IN MM.INCH

DRAWN	CHECKED	APPROVED	SCALE	PART NO.	REV.
양명훈	김창대		1:1	N/A	0

FOLD FOLD

CAS FORM A8 (297mmx420mm)

9.8 Cartridge

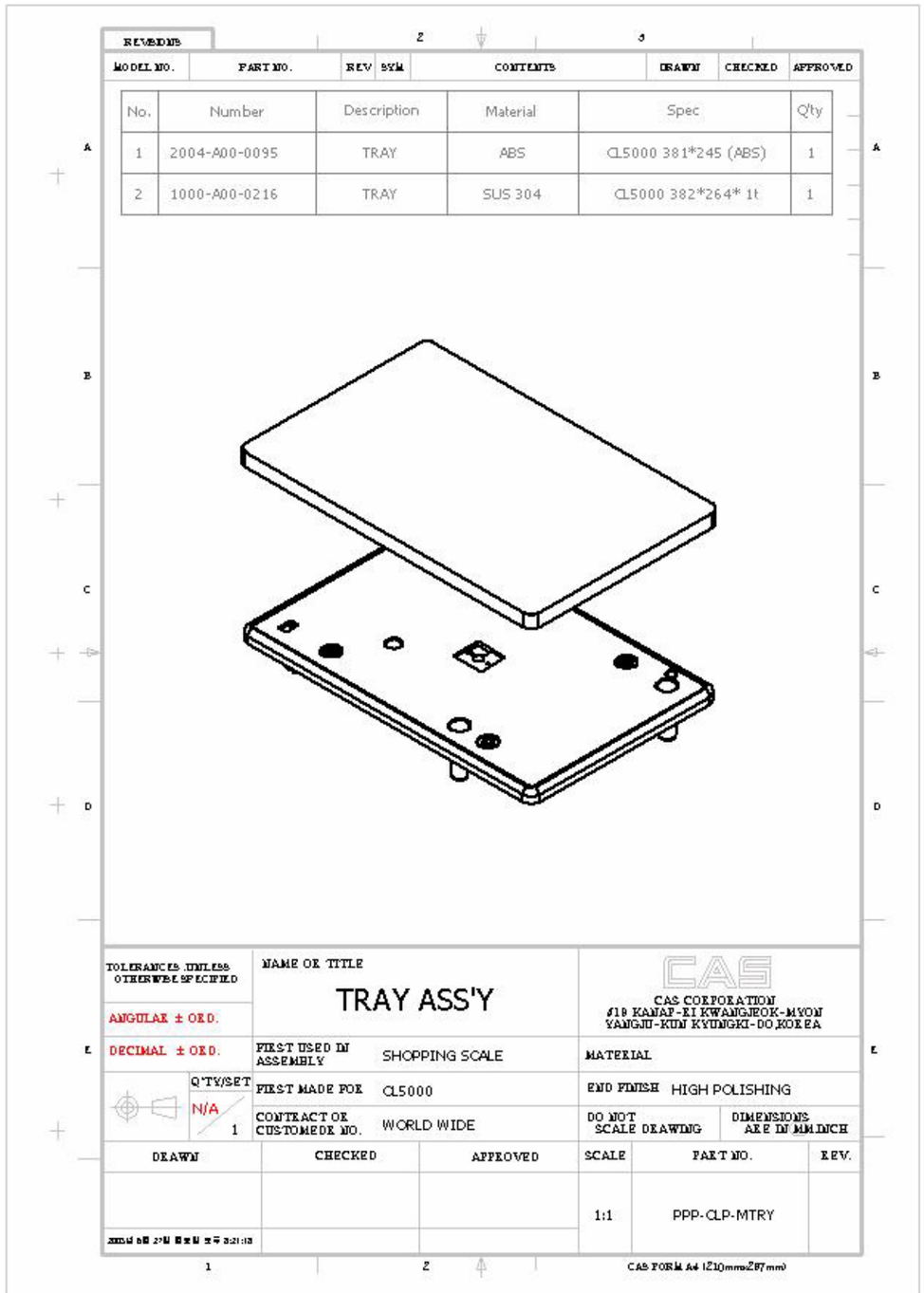


No.	Number	Description	Material	Spec	Q'ty
1	1510-A00-0410	TAPPING SCREW (PH)-1	SCM	M4*10	2
2	2004-A00-0091	ROLL PAPER FEED	ABS(ÀçÁú)	CLP @34*81	1
3	2011-A00-0012	REWIND GUIDE	ACETAL	CL5000 @42*71	1
4	2620-A00-0029	SILICONE WASHER	SILICONE RUBBER	CL5000 @17*1.5	1
5	2004-A00-0092	REWIND PAPER	ABS(³¿¬)	CLP @33.5*69	1
6	2021-A00-0010	REWIND WASHER	PET	CL5000 @18*0.5t	1
7	1000-A00-0218	STOPPER WASHER	SUS	CL5000 @18*1.2t	1
8	2010-A00-0028	REWIND PAPER LOCKER	PC	CL5000 @29*82	1
9	1000-A00-0217	REWIND STOPPER PLATE	SUS	CL5000 @53*0.5t	1
10	2004-A00-0093	ROLL COVER	ABS(³¿¬)	CL5000 160*80*10	1
11	1070-A00-0003	MAGNET	N/A	CLP @15 x 3	2
12	2004-A00-0090	CARTRIDGE	ABS(³¿¬)	CL5000 254*107*94	1
13	1590-A00-0390	SPRING	SUS304	CL5000 13.5 * 1.0 * 45	1
14	9020-CL0-0003	SPOOL STICKER	N/A	N/A	1

TOLERANCES (UNLESS OTHERWISE SPECIFIED	NAME OR TITLE	CARTRIDGE		CAS CORPORATION #19 KANAP-RI KWANGJEOK-MYON YANGJU-KUN KYUNGKI-DO,KOREA	
ANGULAR ¡¾ ORD.					
DECIMAL ¡¾ ORD.	FIRST USED IN ASSEMBLY	SHOPPING SCALE		MATERIAL	ABS
QTY/SET 1	FIRST MADE FOR	CL5000		END FINISH	
	CONTRACT OR CUSTOMEDR NO.	WORLD WIDE		DO NOT SCALE DRAWING	DIMENSIONS ARE IN MM.INCH
DRAWN	CHECKED	APPROVED	SCALE	PART NO.	REV.
			1:1.5	PPP-CLP-MCAR	

CAS FORM A3 (297mmx420mm)

9.9 Tray assembly (B,P,R-type)



10. Part List

10.1 Electronic

10.1.1. BASIC PARTS

10.1.1.1 MAIN PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	2095H0000040	LED HOLDER(GYGR)	SCE-2321-01	EA	1	VD1
2	6100PCL10010	PCB-MAIN	6100-PCL-1001-0(CL5000J)	EA	1	PCB
3	6200IPU0128A	IC(CPU)	ATMEGA128-16AI(LP1.6V,LP-Ⅱ)	EA	1	U9
4	6202IS012100	IC(NV RAM CONTROL)	DS1210S	EA	3	U16,17,21
5	6202IS062400	IC(SRAM)	BS62LV4006SCP55/70	EA	3	U12,13,20
6	6204IS039040	IC(FLASH MEMORY)	SST39SF040-70-4C-WH	EA	1	U14
7	6210IS070450	IC(RESET)	KIA7045F	EA	1	U11
8	6216IS000320	IC(CPLD)	M4A5-32/32-10VC	EA	1	U10
9	6220IS011170	IC(REGULATOR)	LM(AP)1117(SOT-223)	EA	1	U15
10	6228IS013020	IC(TIMER)	DS1302S(LP-1 1.6Ver)	EA	1	U7
11	6232IS012320	IC(INTERFACE)	SP232ECN(SIPEX)	EA	1	U6
12	6232IS031000	IC(INTERFACE)	W3100A	EA	1	U19
13	6232IS082010	IC(INTERFACE)	RTL8201BL	EA	1	U18
14	6236IS001540	IC(C MOS)	74HC154D(LP-Ⅱ)	EA	1	U5
15	6236IS00245A	IC(C MOS)	74HC245D(LP-II)	EA	1	U3
16	6236IS00573A	IC(C MOS)	74HC573D (LP-II)	EA	4	U1,2,4,8
17	6294ICP01600	DIODE-CHIP	KDS160(SMD)	EA	9	D2~10
18	6527ID005100	RESISTOR-CHIP 1/10W	RR1220P-510D(51Ω)	EA	4	R25~28
19	6527ID010000	RESISTOR-CHIP 1/10W	RR1220P-101D(100Ω)	EA	4	R11,12,37,38
20	6527ID020000	RESISTOR-CHIP 1/10W	RR1220P-201D(200Ω)	EA	1	R17
21	6527ID033000	RESISTOR-CHIP 1/10W	RR1220P-331D (330Ω)	EA	7	R1,3,18,32,33,34,36
22	6527ID300100	RESISTOR-CHIP 1/10W	RR1220P-102D(1K)	EA	6	R4,6,8,20,22,30
23	6527ID300150	RESISTOR-CHIP	RR1220P-152D(1.5 kΩ)	EA	1	R19

		1/10W				
24	6527ID300470	RESISTOR-CHIP 1/10W	RR1220P-472D(4.7 kΩ)	EA	5	R5,7,21,23,29
25	6527ID300590	RESISTOR-CHIP 1/10W	RR1220P-592D(5.9K)	EA	1	R24
26	6527ID301000	RESISTOR-CHIP 1/10W	RR1220P-103D(10K)	EA	7	R2,9,10,13,15,16,31
27	6527ID310000	RESISTOR-CHIP 1/10W	RR1220P-104D(100K)	EA	2	R14, 35
28	6598IJ000000	RESISTOR-CHIP-ARRAY	RP164P000J(=1608 0Ω X 4PCS)	EA	6	RN14~17,20,21
29	6598IJ010000	RESISTOR-CHIP-ARRAY	RP164P101J(=1608 100Ω X 4PCS)	EA	9	RN3,4,9~13,18,19
30	6598IJ301000	RESISTOR-CHIP-ARRAY	RP164P103J(=1608 10kΩ X 4PCS)	EA	7	RN1,2,5~8,22
31	6670T0001020	INDUCTANCE	HB-1M2012-102JT(TP2,LP2,DBB)	EA	5	L5,6,8~10
32	6702CAP0106A	CONDENSER-TANTAL CHIP	10MCS 106 MB2 TER	EA	8	C34,35,41,59~61,71,76
33	6706C2500470	CONDENSER-ELECTRIC CHIP	47uF/25V ø6.3	EA	2	CE1,2
34	6706C6801000	CONDENSER-ELECTRIC CHIP	100uF/6.3V ø6.3	EA	1	CE3
35	6712CHP01020	CONDENSER-CHIP	CL21B 102KBNC	EA	9	C10~17,38
36	6712CHP01030	CONDENSER-CHIP	CL21F 103KBNC	EA	1	C74
37	6712CHP01040	CONDENSER-CHIP	CL21F 104KBNC	EA	51	C1~9,C18~23,26,30~33,39,40,42~58,62~64,67~70,72.73,75,77,78
38	6712CHP01050	CONDENSER-CHIP	105(1uF-0805 TYPE)	EA	5	C24,25,27~29
39	6712CHP02000	CONDENSER-CHIP	CL21C 200JBNC(20PF)	EA	4	C36,37,65,66
40	6810F0001020	FERRITE BEAD SMD ARRAY	MZA3216R102A(TDK)	EA	5	L1~4,7
41	6830F0000020	TRANSIENT SUPPRESSOR	P6SMBJ36CA(CHIP)	EA	2	VAR1,2
42	7002Z0001100	PIEZO BUZZER	23C2912P(SL1I-12FsP)	EA	1	BZ1
43	7010ZK032760	CRYSTAL	32.768KHz	EA	1	Y1
44	7010ZM01105A	CRYSTAL	11.0592MHz(ATS-49/U)SMD	EA	1	Y2
45	7010ZM025000	CRYSTAL	25MHz(DIP) ATS-49/U	EA	1	Y3
46	7232DR000020	LED LAMP	ø2.9-RED	EA	1	D1
47	7520P0002800	BATTERY-NIMH	GP280(320)BVH3A2H	EA	1	BT1

48	7801CLW00030	CONNECTOR(WAFER)	LW0640-03 (LPH01-03)	EA	2	J9,J14
49	7801CLW00050	CONNECTOR(WAFER)	LW0640-05 (LPH01-05)	EA	2	J13,17
50	7801CLW00080	CONNECTOR(WAFER)	LW0640-08 (LPH01-08)	EA	1	J2
51	7805CCN67060	CONNECTOR(WAFER)	06-5267	EA	1	J1
52	7805CCN67080	CONNECTOR(WAFER)	08-5267	EA	1	J5
53	7807CFP00080	FPC-CONNECTOR	FCZ254-8S	EA	1	J4
54	7807CFP00160	FPC CONNECTOR	FCZ254-16S	EA	1	J6
55	7810C0000080	ETHERNET JACK	8P(LP-II)ETHERNET JACK	EA	2	J16,J18
56	7810C0011080	ETHERNET JACK	RD1-106B11A1A	EA	1	J12
57	7810C0092940	CONNECTOR	929400-40(MALE)	EA	1	J11
58	7812C000009B	D-SUB CONNECTOR	RD9S	EA	1	J15
59	7813C0000100	PIN HEADER	HIF-3F-10PA-2.54-DSA	EA	1	J10
60	7813C0000200	SOCKET CONNECTOR	5332-20P(HIF-3FB-20PA-DSA)LP-2	EA	1	J3
61	7813C0000260	SOCKET CONNECTOR	5332-26P LP- II	EA	2	J7,8

10.1.1.2 CONTROLLER(PRINTER IO) PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	6191PCL01000	PCB-CONTROLLER	6191-PCL-0100-0(CL5000)	EA	1	PCB
2	6224IS062190	IC(DRIVER)	L6219DS	EA	2	U2,3
3	6236IS001230	IC(C MOS)	74HC123(SOP)	EA	1	U1
4	6281I0015040	TRANSISTOR CHIP	KTA1504 SY	EA	2	Q1,2
5	6281I0038750	TRANSISTOR CHIP	KTC3875 SY	EA	1	Q3
6	6513CJ000100	RESISTOR 1W	CFR 1Ω (±5%)	EA	4	R14,15,20,21
7	6527ID022000	RESISTOR-CHIP 1/10W	RR1220P-221D (220Ω)	EA	2	R7,9
8	6527ID033000	RESISTOR-CHIP 1/10W	RR1220P-331D (330Ω)	EA	1	R10
9	6527ID300100	RESISTOR-CHIP 1/10W	RR1220P-102D(1K)	EA	7	R1,2,8,16,17,23,25
10	6527ID300220	RESISTOR-CHIP 1/10W	RR1220P-222D(2.2K)	EA	2	R3,4
11	6527ID300470	RESISTOR-CHIP 1/10W	RR1220P-472D(4.7 kΩ)	EA	1	R12
12	6527ID301000	RESISTOR-CHIP 1/10W	RR1220P-103D(10K)	EA	2	R11,26
13	6527ID301200	RESISTOR-CHIP 1/10W	RR1220P-123D(12 kΩ)	EA	2	R5,6

14	6527ID302700	RESISTOR-CHIP 1/10W	RR1220P-273D(27 kΩ)	EA	1	R13
15	6527ID304700	RESISTOR-CHIP 1/10W	RR1220P-473D(47 kΩ)	EA	4	R18,19,22,24
16	6670T0001020	INDUCTANCE	HB-1M2012-102JT(TP2,LP2,DBB)	EA	3	L1,2,3
17	6706C2500470	CONDENSER-ELECTRIC CHIP	47uF/25V ø6.3	EA	1	CE3
18	6706C5000220	CONDENSER-ELECTRIC CHIP	22uF/50V ø6.3	EA	3	CE1,2,5
19	6712CHP01020	CONDENSER-CHIP	CL21B 102KBNC	EA	8	C9~16
20	6712CHP01040	CONDENSER-CHIP	CL21F 104KBNC	EA	9	C1~8,17
21	7805CCN67040	CONNECTOR(WAFER)	04-5267	EA	2	J5,6
22	7805CCN67100	CONNECTOR(WAFER)	10-5267	EA	1	J8
23	7808CGD04100	CONNECTOR(WAFER)	12512WS-04(53047-0410)	EA	2	J1,2
24	7813C0000200	SOCKET CONNECTOR	5332-20P(HIF-3FB-20PA-DSA)LP-2	EA	1	J7
25	7813C0000260	SOCKET CONNECTOR	5332-26P LP-II	EA	1	J4
26	7840W0020500	CONNECTOR WIRE	2P*50(CL5000-B,P,R,H)유상	EA	1	J3

10.1.1.3 INTERFACE(IO) PCB ASS'Y

→MAIN PCB.

10.1.1.4 AD PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	6120PCL04000	PCB-ANALOG	6120-PCL-0400-0(CL5000)	EA	1	PCB
2	6200IS078580	IC(CPU)	W78E58BF-40(QFP)	EA	1	U1
3	6205IS024020	IC(EEP ROM)	AT24C02-SMD(2K)	EA	1	U2
4	6236IS04011A	IC(C MOS)	SLS 4011BD(GATE)	EA	1	IC5
5	6236IS04066A	IC(C MOS)	SLS 4066BD(ANALOG S/W)	EA	1	IC3
6	6240IS001770	IC(OP AMP)	OP-177GS	EA	2	IC1,6
7	6240IS040720	IC(OP AMP)	UPC 4072G2	EA	2	IC2,4
8	6281I0015040	TRANSISTOR CHIP	KTA1504 SY	EA	3	Q1,2,3
9	6294ICP01810	DIODE-CHIP	KDS181	EA	1	D1
10	6527ID010000	RESISTOR-CHIP 1/10W	RR1220P-101D(100Ω)	EA	2	R8,10
11	6527ID300220	RESISTOR-CHIP	RR1220P-222D(2.2K)	EA	1	R12

		1/10W				
12	6527ID301000	RESISTOR-CHIP 1/10W	RR1220P-103D(10K)	EA	6	R13~18
13	6527ID304990	RESISTOR-CHIP 1/10W	RR1220P-4992D(49.9K)	EA	2	R4,5
14	6527ID310000	RESISTOR-CHIP 1/10W	RR1220P-104D(100K)	EA	4	R3,7,9,11
15	6527ID320000	RESISTOR-CHIP 1/10W	RR1220P-204D(200KΩ)	EA	1	R19
16	6540LA303850	RESISTOR-PRECISION	FLAY 38K500B	EA	2	R1,2
17	6550RM00400A	RESISTOR-NETWORK	2S-02(1K/10K)	EA	1	R6
18	6670T0001020	INDUCTANCE	HB-1M2012-102JT(TP2,LP2,DBB)	EA	5	L1~5
19	6702CAP0106A	CONDENSER-TANTAL CHIP	10MCS 106 MB2 TER	EA	1	C19
20	6702CAP06850	CONDENSER-TANTAL CHIP	16MCS 685 MB TER	EA	2	C12,20
21	6706C2500470	CONDENSER-ELECTRIC CHIP	47uF/25V ø6.3	EA	2	C21,22
22	6712CHP01040	CONDENSER-CHIP	CL21F 104KBNC	EA	14	C3,4,8,11,13~18,23,24,26,27
23	6712CHP01050	CONDENSER-CHIP	105(1uF-0805 TYPE)	EA	1	C25
24	6712CHP02000	CONDENSER-CHIP	CL21C 200JBNC(20PF)	EA	2	C57,58
25	6720CAP0105A	CONDENSER-POLYESTER	1uF/63V-J(BOX)	EA	1	C10
26	6720CAP0474A	CONDENSER-POLYESTER	0.47uF/63V-J(BOX)	EA	3	C5,6,7
27	6722CAP0224A	CAPACITOR-P.P	0.22uF/67V-AC	EA	1	C9
28	6800F0002200	EMI FILTER	EFST221YTB(220PF)	EA	2	C1,2
29	7010ZM02211A	CRYSTAL	22.1184MHz(ATS-49/V)	EA	1	Y1
30	7600STA12120	TACT S/W	12*12(SKHK)DJTA-1103E	EA	1	SW1
31	7801CLW00080	CONNECTOR(WAFER)	LW0640-08 (LPH01-08)	EA	1	CN2

10.1.1.5 DISPLAY TYPE B FRONT PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	2631A0000010	CUSHION-VFD	30*20*2T	EA	4	
2	6110PCL0500B	PCB-DISPLAY	6110-PCL-0500-A(CL5000)	EA	1	DISPLAY PCB(B TYPE)
3	6224IS063110	IC(FIP DRIVER)	PT6311 QFP	EA	2	U1,2
4	6527ID305600	RESISTOR-CHIP	RR1220P-563D(56K)	EA	2	R1,2

		1/10W				
5	6706C1601000	CONDENSER- ELECTRIC CHIP	100uF/16V ø6.3	EA	2	CE1,2
6	6712CHP01020	CONDENSER-CHIP	CL21B 102KBNC	EA	15	C7~21
7	6712CHP01040	CONDENSER-CHIP	CL21F 104KBNC	EA	9	C1~6,22,23,24
8	7202D0035240	VFD(FIP)	VFD35-2401(24DIGIT)	EA	1	U4
9	7813C0000260	SOCKET CONNECTOR	5332-26P LP-II	EA	1	J1

10.1.1.6 DISPLAY TYPE B REAR PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	2631A0000010	CUSHION-VFD	30*20*2T	EA	4	
2	6110PCL0500B	PCB-DISPLAY	6110-PCL-0500-A(CL5000)	EA	1	DISPLAY PCB(B TYPE)
3	6224IS063110	IC(FIP DRIVER)	PT6311 QFP	EA	2	U1,2
4	6527ID305600	RESISTOR-CHIP 1/10W	RR1220P-563D(56K)	EA	2	R1,2
5	6706C1601000	CONDENSER- ELECTRIC CHIP	100uF/16V ø6.3	EA	2	CE1,2
6	6712CHP01020	CONDENSER-CHIP	CL21B 102KBNC	EA	15	C7~21
7	6712CHP01040	CONDENSER-CHIP	CL21F 104KBNC	EA	9	C1~6,22,23,24
8	7202D0035240	VFD(FIP)	VFD35-2401(24DIGIT)	EA	1	U4
9	7813C0000260	SOCKET CONNECTOR	5332-26P LP-II	EA	1	J1

10.1.1.7 SLOT PCB ASS'Y

→ DO NOT USE.

10.1.1.8 INTERRUPT SENSOR PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	2010A0000010	SENSOR CAP	7.9*4.3*12(LP)	EA	2	
2	6154PLP01820	PCB-SENSOR-1	6154-PLP-0182-0	EA	1	PCB
3	7236DPS02030	PHOTO INTERRUPTER	OPSI203UITL(LP-1)	EA	1	
4	7840W0041000	CONNECTOR WIRE	4P*100(CL5000-B,P,R,H)	EA	1	

10.1.1.9 PEEL OFF SENSOR PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	6154PCL09000	PCB-SENSOR	6154-PCL-0900-0(CL5000)	EA	1	PCB
2	7236DPS00010	PHOTO INTERRUPTER	ITR20001/T	EA	1	
3	7840W0041000	CONNECTOR WIRE	4P*100(CL5000-B,P,R,H)	EA	1	

10.1.1.10 BODY ASS'Y(TYPE B DISP)

No	Part Number	Part Name	Specification	단위	수량	비고
1	6190PCL01000	SMPS	CAS-100(CL5000)	EA	1	SMPS
2	6830F0001300	NOISE FILTER	SN-M3H-CM(LP)	EA	1	INLET ASS'Y
3	6830F0007300	CLAMP FILTER	ZCAT1518-0730(BW-HIGH)	EA	1	AD
4	6830F0011300	CLAMP FILTER	ZCAT2132-1130(DB-Ⅱ,CE)	EA	1	L/C
5	7560PAC00310	POWER CORD	POSCALE,ER(유럽향)	EA	1	AC CORD
6	7600SOF00194	ON/OFF S/W	RA15KKFTOF(2PIN, 8A):CL5000 용	EA	1	INLET ASS'Y
7	7612S0000042	AC SOCKET CONNECTOR	JR-101(POSCALE,SWITCH 미포함)	EA	1	INLET ASS'Y
8	7620S055000A	FUSE	5A/250(ø5*20) UL,VDE (CL5000)	EA	1	INLET ASS'Y
9	7840W0002700	CONNECTOR WIRE	1P*1P*70(CL5000-B,P,R,H)	EA	1	INLET ASS'Y
10	7840W001110A	CONNECTOR WIRE	1P*1P*100(CL5000-B,P,R,H)	EA	1	INLET ASS'Y
11	7840W0011700	CONNECTOR WIRE	1P*1P*70(CL5000-B,P,R,H)	EA	1	INLET ASS'Y
12	7840W0016190	CONNECTOR WIRE	8P*8P*190mm(CL5000-B,P,R)	EA	1	MAIN-AD
13	7840W0016200	MODULA CABLE	8P*8P*200(CL5000J LAN BRIDGE)	EA	1	
14	7840W0016250	CONNECTOR WIRE	8P*8P*250(CL5000-B,P,R,H)	EA	1	SMPS-MAIN
15	7840W0020250	CONNECTOR WIRE	10P*10P*250(CL5000-B,P,R)	EA	1	SMPS-PRT IO
16	7840W0031500	CONNECTOR WIRE	3P*3P*150 (CL5000J)	EA	1	
17	7840W003220A	CONNECTOR WIRE	3P*2P*200(CL5000-B,P,R)	EA	1	INLET ASS'Y
18	7840W0052000	CONNECTOR WIRE	5P*5P*200 (CL5000J)	EA	1	
19	7840W0066150	CONNECTOR WIRE	6P*6P*150(CL5000-B,P,R)	EA	1	SMPS-MAIN
20	7850W0011410	FLAT CABLE CONNECTOR	26P*26P*400 (CL5000J-B)	EA	2	MAIN-DISP TYPE B
21	7850W004017A	FLAT CABLE CONNECTOR	20P*20P*170(CL5000-B,P,R)	EA	1	MAIN-PRT IO
22	7860GND02700	GROUND WIRE	1P*1P*70(CL5000-B,P,R,H)	EA	1	INLET ASS'Y
23	7860GND11500	GROUND WIRE	1P*1P*50(CL5000-B,P,R,H)	EA	1	INLET ASS'Y

10.1.2. OPTION

10.1.2.1 BODY ASS'Y(TYPE POLE)

No	Part Number	Part Name	Specification	단위	수량	비고
1	6190PCL01000	SMPS	CAS-100(CL5000)	EA	1	SMPS
2	6830F0001300	NOISE FILTER	SN-M3H-CM(LP)	EA	1	INLET ASS'Y
3	6830F0007300	CLAMP FILTER	ZCAT1518-0730(BW-HIGH)	EA	1	AD
4	6830F0009300	CLAMP FILTER	ZCAT2035-0930(HS1,HS2)	EA	1	DISP
5	6830F0011300	CLAMP FILTER	ZCAT2132-1130(DB-Ⅱ,CE)	EA	1	L/C
6	7560PAC00310	POWER CORD	POSCALE,ER(유럽향)	EA	1	AC CORD
7	7600SOF00194	ON/OFF S/W	RA15KKFTOF(2PIN, 8A):CL5000 용	EA	1	INLET ASS'Y
8	7612S0000042	AC SOCKET CONNECTOR	JR-101(POSCALE,SWITCH 미포함)	EA	1	INLET ASS'Y
9	7620S055000A	FUSE	5A/250(ø5*20) UL,VDE (CL5000)	EA	1	INLET ASS'Y
10	7840W0002700	CONNECTOR WIRE	1P*1P*70(CL5000-B,P,R,H)	EA	1	INLET ASS'Y
11	7840W001110A	CONNECTOR WIRE	1P*1P*100(CL5000-B,P,R,H)	EA	1	INLET ASS'Y
12	7840W0011700	CONNECTOR WIRE	1P*1P*70(CL5000-B,P,R,H)	EA	1	INLET ASS'Y
13	7840W0016190	CONNECTOR WIRE	8P*8P*190mm(CL5000-B,P,R)	EA	1	MAIN-AD
14	7840W0016200	MODULA CABLE	8P*8P*200(CL5000J LAN BRIDGE)	EA	1	
15	7840W0016250	CONNECTOR WIRE	8P*8P*250(CL5000-B,P,R,H)	EA	1	SMPS-MAIN
16	7840W0020250	CONNECTOR WIRE	10P*10P*250(CL5000-B,P,R)	EA	1	SMPS-PRT IO
17	7840W0031500	CONNECTOR WIRE	3P*3P*150 (CL5000J)	EA	1	
18	7840W003220A	CONNECTOR WIRE	3P*2P*200(CL5000-B,P,R)	EA	1	INLET ASS'Y
19	7840W0052000	CONNECTOR WIRE	5P*5P*200 (CL5000J)	EA	1	
20	7840W0066150	CONNECTOR WIRE	6P*6P*150(CL5000-B,P,R)	EA	1	SMPS-MAIN
21	7850W0011400	FLAT CABLE CONNECTOR	26P*26P*1140 (CL5000J-P,R)	EA	1	MAIN-DISP TYPE P,R
22	7850W004017A	FLAT CABLE CONNECTOR	20P*20P*170(CL5000-B,P,R)	EA	1	MAIN-PRT IO
23	7860GND02700	GROUND WIRE	1P*1P*70(CL5000-B,P,R,H)	EA	1	INLET ASS'Y
24	7860GND11500	GROUND WIRE	1P*1P*50(CL5000-B,P,R,H)	EA	1	INLET ASS'Y

10.1.2.2 DISPLAY TYPE P FRONT PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	2631A0000010	CUSHION-VFD	30*20*2T	EA	4	
2	6110PCL05200	PCB-DISPLAY	6110-PCL-0520-0(CL5000)	EA	1	PCB
3	6224IS063110	IC(FIP DRIVER)	PT6311 QFP	EA	2	U1,2
4	6527ID305600	RESISTOR-CHIP 1/10W	RR1220P-563D(56K)	EA	2	R1,2
5	6704C2503300	CONDENSER-ELECTRIC	330uF/25V	EA	2	CE1,2
6	6712CHP01020	CONDENSER-CHIP	CL21B 102KBNC	EA	15	C7~21
7	6712CHP01040	CONDENSER-CHIP	CL21F 104KBNC	EA	10	C1~6,22~25
8	7202D0035240	VFD(FIP)	VFD35-2401(24DIGIT)	EA	1	U4
9	7810C0092940	CONNECTOR	929400-40(MALE)	EA	2	J2,3
10	7813C0000260	SOCKET CONNECTOR	5332-26P LP-II	EA	1	J1

10.1.2.3 DISPLAY TYPE P REAR PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	2631A0000010	CUSHION-VFD	30*20*2T	EA	4	
2	6110PCL05210	PCB-DISPLAY	6110-PCL-0521-0(CL5000)	EA	1	PCB
3	7202D0035240	VFD(FIP)	VFD35-2401(24DIGIT)	EA	1	U4
4	7810C0092990	CONNECTOR	929974-40 (FEMALE)	EA	2	J2,3

10.1.2.4 DISPLAY TYPE R FRONT PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	2631A0000010	CUSHION-VFD	30*20*2T	EA	4	
2	6110PCL0510A	PCB-DISPLAY	6110-PCL-0510-0(CL5000)	EA	1	DISPLAY PCB(R/H TYPE)
3	6224IS063110	IC(FIP DRIVER)	PT6311 QFP	EA	2	U1,2
4	6527ID305600	RESISTOR-CHIP 1/10W	RR1220P-563D(56K)	EA	2	R1,2
5	6704C2503300	CONDENSER-ELECTRIC	330uF/25V	EA	2	CE1,2
6	6712CHP01020	CONDENSER-CHIP	CL21B 102KBNC	EA	15	C7~21
7	6712CHP01040	CONDENSER-CHIP	CL21F 104KBNC	EA	10	C1~6,22~25
8	7202D0035240	VFD(FIP)	VFD35-2401(24DIGIT)	EA	1	U4
9	7810C0092940	CONNECTOR	929400-40(MALE)	EA	2	J2,3
10	7813C0000260	SOCKET CONNECTOR	5332-26P LP-II	EA	1	J1

10.1.2.5 DISPLAY TYPE R REAR PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	2631A0000010	CUSHION-VFD	30*20*2T	EA	4	
2	6110PCL05110	PCB-DISPLAY	6110-PCL-0511-0(CL5000)	EA	1	PCB
3	7202D0035240	VFD(FIP)	VFD35-2401(24DIGIT)	EA	1	U4
4	7810C0092990	CONNECTOR	929974-40 (FEMALE)	EA	2	J2,3

10.2 Mechnical

10.2.1. BASIC PARTS

10.2.1.1 BASE BRACKET ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1000A0000590	LEVER OPEN	37*15*12*16T(LP-I)유상	EA	1	
2	1000A0002690	MAIN BRACKET	59*49.5*35*9t(CL-J,MADE IN KOR	EA	1	한국제작
3	1000A0002700	BRACKET PRESSURE	51*54.6*9(CL-J,MADE IN KOREA)	EA	1	한국제작
4	1000A0002710	TPH BKT HOLDER	57*47.2*21(CL-J,MADE IN KOREA)	EA	1	한국제작
5	1000A0002720	LOWER FRAME COVER	43.1*26.9*1t (CL-J,MAD IN KORE	EA	1	한국제작
6	1030A000420A	MECHANISM BRACKET	CL5000J 261*112*2t	EA	1	MKU-07041
7	1150A0000120	TPH HEATSINK	CL1000 64.6*6*28.6	EA	1	
8	1150A0000130	LOWER FRAME	CL5000JR 77*47.5*22.5	EA	1	
9	1210A0000940	SHAFT BEARING	CL5000 @7*37	EA	1	
10	1210A0000950	SHAFT BUSHING	CL5000JR @8*@12*5.9	EA	2	
11	1210A0000960	PIN	CL5000JR @4*12.4(SUS304)	EA	4	
12	1210A0001030	MAIN BRACKET SHAFT	CL5000JR ø5*62.7(SUS303)	EA	1	
13	1210A0001040	OPEN LEVER SHAFT	CL5000JR ø6*69.3(SUS303)	EA	1	
14	1501A0003060	SCREW-MACHINE(FH)	M3*6	EA	4	
15	1502A0002080	SCREW-MACHINE(PH)	M2*8	EA	2	
16	1502A0003060	SCREW-MACHINE(PH)	M3*6	EA	8	
17	1502A0003200	SCREW-MACHINE(PH)	M3*20	EA	4	
18	1502MSU03040	SCREW-MACHINE(PH)	M3*4-SUS	EA	5	
19	1503A0004120	SCREW-MACHINE(WPH)	M4*12	EA	3	
20	1530MSU06100	BOLT-WRENCH	M6*10-SUS	EA	1	
21	1537A0004080	TAPTITE SCREW	APS_M4x8	EA	3	
22	1537A0004150	TAPTITE SCREW	APS M4 x15	EA	3	
23	1550A0002040	WASHER(FLAT)	ø2	EA	2	
24	1550MSU03050	WASHER(FLAT)	ø3*ø6*0.5-SUS	EA	1	
25	1551A0003000	WASHER(SPR)	ø3	EA	4	

26	1561MSU03000	E-RING	ø3*ø7*0.6-SUS	EA	2	
27	1561MSU04000	E-RING	ø4*ø9*0.6-SUS	EA	6	
28	1590A0000090	OPEN LEVER SPRING	ø06*ø9*199(LP) -외주	EA	1	
29	1590A0000410	BRACKET PRESSURE SPRING	CL5000JR 7.2*1*35	EA	1	
30	1590A0000420	TPH BKT SPRING	CL5000 JR @1*10*27	EA	2	
31	2007A0000030	GEAR BOX	CL5000-J 34*55.2*15.4	EA	2	
32	2007A0000040	GEAR BOX COVER	CL5000-J 34.6*31.6*2t	EA	2	
33	2011A0000110	REWIND SHAFT	CL5000 13*13*25	EA	1	
34	2011A0000130	BUSHING BEARING	CL5000 ø28*15.5	EA	1	
35	2011A0000160	SPUR GEAR	CL5000JR OD_21.5*M_0.5	EA	4	
36	2011A0000170	SPUR GEAR	CL5000JR OD_29.4 M_0.5	EA	2	
37	2011A0000180	SPUR GEAR	CL5000JR OD_19.5 M_0.5	EA	2	
38	2620A0000300	SHAFT SILICON RUBBER	CL5000JR @15*@4*90.7	EA	1	
39	2632A0000230	DOUBLE FACED TAPE	3M 9460PC 61*8.5(CL500J)	EA	1	
40	6191PCL01010	PCB-CONTROLLER	6191-PCL-0101-0(CL5000J TPH)	EA	1	PCB
41	6412TPH00330	PRINTER HEAD	KF2002-GD33C(ROHM)60mmLP1	EA	1	
42	6450TMT00020	NMB MOTOR	NMB(PM42L-048-YKJO)	EA	2	
43	7600S0003020	LIMIT S/W	DM-03S-2P-Z(CL5000JR)	EA	1	
44	7840W0021600	CONNECTOR WIRE	2P*160(CL5000J from APS PRT)	EA	1	HEAD UP
45	7850W0052150	FLAT CABLE CONNECTOR	26P*26P*150 (CL5000J, APSPARTS	EA	1	26P FLAT

10.2.1.2 BODY ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1020A0000070	MAIN PCB PLATE	CL5000 210*150*1.2t	EA	1	BODY
2	1030A0002250	SLOT COVER PLATE	CL5000 96*20.6*1t(STANDARD)	EA	1	BODY 바닥
3	1070A0000010	MAGNET	15*3*4(LP-I)(N30)NI	EA	1	DOOR PANEL
4	1210A0000930	DOOR SHAFT	CL5000 @1.5*296	EA	1	BODY + DOOR PANEL
5	1502A0003080	SCREW-MACHINE(PH)	M3*8 (외주)	EA	2	
6	1507A0004130	BOLT-CONNECTOR	M4*13(H)*6(D)(CL5000)	EA	1	
7	1510A0003080	SCREW-TAPPING(PH)-1	M3*8	EA	3	NOISE FILTER
8	1510A0004100	SCREW-TAPPING(PH)-1	M4*10	EA	3	BODY
9	1510A0004120	SCREW-TAPPING(PH)-1	M4*12	EA	4	BODY 하부조립
10	2004A000088A	BODY	CL5000 432*408*113(ABS 난연)	EA	1	
11	2004A0000890	DOOR PANEL	CL5000 260*120*27(난연)	EA	1	
12	2022A0000041	WATER LEVEL GAGE	ø14.9*8(S-2000)상보	EA	1	
13	2600A0000900	PS2 RUBBER COVER	CL 1000 36.7*19*8.5	EA	1	
14	2610A0000090	FOOT	NBR M8*1.25*35(TP-1,2)	EA	4	
15	7650S0000100	TIE BAND	100mm	EA	2	

16	9300SPL00000	CUSHION-EVA	40*40*3t(nBODY-DP)	EA	2	MAIN PCB COVER

10.2.1.3 CARTRIDGE ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1000A0002170	REWIND STOPPER PLATE	CL5000 @53*0.5t	EA	1	REWIND GUIDE
2	1000A0002180	STOPPER WASHER	CL5000 @18*1.2t	EA	1	SCREW-T(M4*10) + REWIN PAPER
3	1070A0000030	MAGNET	CL5000 @15 x 3 (CL5000)(N30)NI	EA	2	CARTRIDGE
4	1510A0004100	SCREW-TAPPING(PH)-1	M4*10	EA	2	REWIND PAPER, ROLL PAPER FEED
5	1590A0000390	PRESSURE COIL SPRING	CL5000 @18*@13.5*44	EA	1	REWIND PAPER
6	2004A0000900	CARTRIDGE	CL5000 254*107*94(난연)	EA	1	
7	2004A0000910	ROLL PAPER FEED	CL5000 @34*81(난연)	EA	1	
8	2004A0000920	REWIND PAPER	CL5000 @33.5*69(난연)	EA	1	
9	2004A0000930	ROLL COVER	CL5000 160*80*10(난연)	EA	1	ROLL PAPER FEED
10	2010A000028A	REWIND PAPPER LOCKER	CL5000 @29*82	EA	1	
11	2011A0000120	REWIND GUIDE	CL5000 ø42*71	EA	1	
12	2021A0000100	REWIND WASHER	CL5000 @18*0.5t	EA	1	SCREW-T(M4*10) + REWIND PAPER
13	2620A0000290	SILICONE WASHER	CL5000 @17*1.5	EA	1	REWIND GUIDE
14	9010A0000150	LABEL STICKER	58*40(400 매;영문)	EA	1	LABEL STICKER

10.2.1.4 C/T BOX ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1030A0002030	SEALING PLATE	35.2*26*1t DB-II	EA	1	
2	1265A0000010	BOLT-SEALING	M3*9(황동,HEAD 3mm 포함)	EA	2	
3	9106CL000010	PAD	CL5000 640*570*7t (UPPER)	EA	1	
4	9106CL000020	PAD	CL5000 374*238*7t (TRAY)	EA	1	
5	9106CL001330	C/T BOX	CL5000 650*581*309	EA	1	
6	9206AS000150	STYROFORM BOX	CL5000 650*225*301.8 (RIGHT)	EA	1	STYROFOAM R
7	9206AS000160	STYROFORM BOX	CL5000 650*265.9*301.8 (LEFT)	EA	1	STYROFOAM L
8	9300A0000020	POLY BAG	90*150*0.05T(FUSE)	EA	1	
9	9300A000003A	POLY BAG	230*330*0.05T(MANUAL)	EA	1	
10	9307A000003B	POLY BAG	700*750*0.04T(SET,HD)	EA	1	
11	9400A0000460	SILICAGEL	10g	EA	3	
12	9900A0000010	봉인납	수출용	EA	1	

10.2.1.5 ETHERNET PCB ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1030A0002240	ETHERNET CARD BRACKET	CL5000 96*20.6*1t(유선)	EA	1	
2	1502A0003040	SCREW-MACHINE(PH)	M3*4	EA	2	

10.2.1.6 IMAGE ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1810CL000CI1	SPEC PLATE	CL5000 (RUSSIA) CT	EA	1	
2	2050LJ000CI0	DISPLAY COVER	CL5000J-B/P, RUSSIA	EA	2	CL5000J-B,P DIGIT
3	2050LJ115CI0	DISPLAY COVER	CL5000J-B/P,Russia,15kg	EA	2	CL5000J-B,P SPEC PANEL
4	2100CL000CI2	MEMBRANE S/W	CL5000-B(RUSSIA)	EA	1	
5	9002A0000950	WARRANTY CARD	SCALE	EA	1	
6	9020A000032A	SEALING STICKER	러시아(DWVF)	EA	1	

10.2.1.7 PLATFORM ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1100A0000670	PLATFORM UPPER	CL5000 345*215*36	EA	1	
2	1100A000068A	PLATFORM LOWER	CL5000 378*349*75	EA	1	
3	1261A0000080	BOLT-LIMIT	M5*0.8*8.5(Zn 황색,15K)(AP)외주	EA	1	PLATFORM LOWER
4	1501A0004080	SCREW-MACHINE(FH)	M4*8	EA	2	PLATFROM LOWER
5	1502A0004200	SCREW-MACHINE(PH)	M4*20	EA	4	PLATFORM UPPER
6	1503A0004120	SCREW-MACHINE(WPH)	M4*12	EA	10	BODY+PLATFORM LOWER
7	1535MSU06200	BOLT-WRENCH(WA)	M6*20-SUS	EA	4	LOADCELL + PLATFORM
8	1540MSU04000	NUT(HEX)	M4*07-SUS	EA	4	BOLT-W(M4*15)
9	1552A0004000	WASHER(OTO)	ø4	EA	1	PLATFORM LOWER
10	7642S0000070	CABLE CLAMP	DA-6N	EA	1	PLATFORM LOWER
11	7642S0000600	METAL CLAMP	6N	EA	1	PLATFORM LOWER
12	7650S0000100	TIE BAND	100mm	EA	2	PLATFORM LOWER

10.2.1.8 STICKER ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	9020CL00001A	STICKER-FUSE	CL5000, 영공(공용)	EA	1	FUSE STICKER
2	9020CL000020	STICKER-DOOR	CL5000 DOOR	EA	1	BODY ASS'Y
3	9020CL000050	STICKER-TRAY	CL5000(공용)	EA	1	UPPER CASE ASS'Y
4	9020CL100330	SPOOL STICKER	CL5000 용지감는방향(영공)	EA	1	
5	9020CL200330	STICKER-부품부착	CL5000, 영공(칼날주의)	EA	1	UPPER CASE ASSY
6	9020CW000330	STICKER	POWER ON/OFF	EA	1	BODY ASS'Y

7	9030A0000260	STICKER	GROUND (접지)	EA	1	PLATFORM ASS'Y

10.2.1.9 TRAY ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1000A0002160	TRAY	CL5000 382*264*1t	EA	1	SUS
2	2004A000095A	TRAY	CL5000 381*245(ABS 난연)	EA	1	

10.2.1.10 UPPER CASE ASS'Y

No	Part Number	Part Name	Specification	단위	수량	비고
1	1000A0002190	PAPER CUTTER	CL5000 77.5*12*0.5t	EA	1	
2	1030A0002260	DOOR PLATE	CL5000 23*16.5	EA	1	
3	1502MSU04100	SCREW-MACHINE(PH)	M4*10-SUS	EA	4	
4	1510A0004100	SCREW-TAPPING(PH)-1	M4*10	EA	5	DISPLAY PCB, DOOR PLATE
5	1563A0003080	RIVET	@3.2*8	EA	2	SPEC PLATE
6	2004A0000940	UPPER CASE	CL5000 432*408*134(난연)	EA	1	BENCH TYPE
7	2010A0000260	WATER LEVEL GAGE COVER	GAGE COVER(POSCALE)	EA	1	

10.2.2. OPTION

10.2.2.1 UPPER CASE ASS'Y (TYPE POLE)

No	Part Number	Part Name	Specification	단위	수량	비고
1	1000A0002190	PAPER CUTTER	CL5000 77.5*12*0.5t	EA	1	
2	1030A0002260	DOOR PLATE	CL5000 23*16.5	EA	1	
3	1502MSU04100	SCREW-MACHINE(PH)	M4*10-SUS	EA	4	
4	1510A0004100	SCREW-TAPPING(PH)-1	M4*10	EA	5	DISPLAY PCB, DOOR PLATE
5	1563A0003080	RIVET	@3.2*8	EA	2	SPEC PLATE
6	2004A0000960	UPPER CASE(POLE)	CL5000 432*408*134(난연)	EA	1	POLE TYPE
7	2010A0000260	WATER LEVEL GAGE COVER	GAGE COVER(POSCALE)	EA	1	

10.2.2.2 DISPLAY CASE ASS'Y (P TYPE)

No	Part Number	Part Name	Specification	단위	수량	비고
1	1000A000220A	POST PIPE	CL5000 30*70*430*1t	EA	1	
2	1030A0002210	SUPPORT	CL5000 107*79*3.2t	EA	1	
3	1502A0003060	SCREW-MACHINE(PH)	M3*6	EA	4	DISPLAY CASE
4	1502A0004300	SCREW-MACHINE(PH)	M4*30	EA	3	BODY+SUPPORT

5	1510A0003080	SCREW-TAPPING(PH)-1	M3*8	EA	2	SUPPORT+BRACKET
6	2004A0000970	DISPLAY CASE(FRONT)	CL5000 391*134.5*35(P)	EA	1	FRONT
7	2004A0000980	DISPLAY CASE(REAR)	CL5000 391*134.5*35(P)	EA	1	REAR
8	2007A0000020	DISPLAY BRACKET	CL5000 82.4*110.5*71	EA	1	

10.2.2.3 IMAGE ASS'Y (P TYPE)

No	Part Number	Part Name	Specification	단위	수량	비고
1	1800SPL0033B	NAME PLATE	SP,ER,CL,POSCALE,TP-R(PC0.5T)	EA	2	
2	1810CL000CI1	SPEC PLATE	CL5000 (RUSSIA) CT	EA	1	
3	2050LJ000CI0	DISPLAY COVER	CL5000J-B/P, RUSSIA	EA	2	
4	2050LJ115CI0	DISPLAY COVER	CL5000J-B/P,Russia,15kg	EA	2	
5	2100CL100CI2	MEMBRANE S/W	CL5000-P/R(RUSSIA)	EA	1	
6	9002A0000970	WARRANTY CARD	기타지역	EA	1	신규 WARRANTY CARD
7	9002LJ000CI0	MANUAL	CL5000J(RUSSIA)	EA	1	
8	9020A000032A	SEALING STICKER	러시아(DWVF)	EA	1	

10.2.2.4 DISPLAY CASE ASS'Y (R TYPE)

No	Part Number	Part Name	Specification	단위	수량	비고
1	1000A000220A	POST PIPE	CL5000 30*70*430*1t	EA	1	
2	1030A0002210	SUPPORT	CL5000 107*79*3.2t	EA	1	
3	1502A0003060	SCREW-MACHINE(PH)	M3*6	EA	4	DISPLAY CASE
4	1502A0004300	SCREW-MACHINE(PH)	M4*30	EA	3	BODY+SUPPORT
5	1510A0003080	SCREW-TAPPING(PH)-1	M3*8	EA	2	SUPPORT+BRACKET
6	2004A000079A	DISPLAY CASE	CL5000 147*204*38(R)	EA	1	
7	2004A000080A	DISPLAY CASE	CL5000 147*204*38(R)	EA	1	
8	2004A0000990	NAME PLATE COVER-R	CL5000 44.4*20*4.1	EA	2	DISPLAY CASE
9	2007A0000020	DISPLAY BRACKET	CL5000 82.4*110.5*71	EA	1	

10.2.2.5 IMAGE ASS'Y (R TYPE)

No	Part Number	Part Name	Specification	단위	수량	비고
1	1810CL000CI1	SPEC PLATE	CL5000 (RUSSIA) CT	EA	1	
2	2010A0000290	DISPLAY FILTER	CL5000 196.7*37.6*1.0t	EA	2	
3	2050LJ215CI0	DISPLAY COVER	CL5000J-R,Russia,15kg	EA	2	
4	2100CL100CI2	MEMBRANE S/W	CL5000-P/R(RUSSIA)	EA	1	
5	9002A0000950	WARRANTY CARD	SCALE	EA	1	
6	9020A000032A	SEALING STICKER	러시아(DWVF)	EA	1	

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