

Can & Bottle Vending Machine

Kubota

MANUAL SERVICE



KB-GS20-S



KB-GS30-S



KB-GS24-S

PT METEC SEMARANG

www.kubota-ptms.co.id

INTRODUCTION

Thank you for buying Kubota Vending Machine. This manual describes the guide, work instruction, service, installation and list of parts. Read carefully and follow the instruction so as to understand the features and functions of installation and use of Vending Machine.

This Vending Machine is used to sell can- and PET bottle-packed drinks by using Malaysian paper money and the coins.

All of selling system, pricing and machine features can be controlled using the control system. Identification of machine unit is adjusted to the model and serial number on the Plate Brand attached on the front lower part of the door. Keep the serial number, in case of any issues or questions of the Vending Machine, it must refer to the model and serial number of the Vending Machine.

After reading this Service Manual, keep it safely and refer to it if you do not understand something. In case of questions of installation, operation, assembly and replacement of parts, please contact local dealer or service agent.

Thank you.

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1 SAFETY CHAPTER

Meaning of displays and symbols

- Meaning of displays and symbols used in this manual are as follows:

WARNING

Incorrect handling may cause serious injury or death to user.

CAUTION

Incorrect handling may cause injury to user, or cause physical damage.

※ Physical damage means any damage to facilities near the machine.

- Examples of symbols



Indicating caution (danger, warning). An icon inside or word behind the symbol shows caution. Left mark indicates caution of electric shock.



Indicating restriction. An icon inside or word behind the symbol shows restriction. Left mark indicates no touching restriction.



Indicating constraints. An icon inside or word behind the symbol shows constraint. Left mark indicates unplug the power.

Safety Tips

Important contents on safety. Please read before using and follow the instructions.

WARNING



A specialist contractor or installer should do installation and re-installation.

- Poor installation may cause fall accident, electricity shock, fires.
































CAUTION



- Always plug into grounded three pole socket.
- Do not connect ground to gas pipes, water pipes, lightning rods, phone wires.
- Grounding resistance must be less than 4Ω.
- Incomplete grounding may cause electricity shock.

1 SAFETY CHAPTER

Important contents on safety. Read it carefully before using.

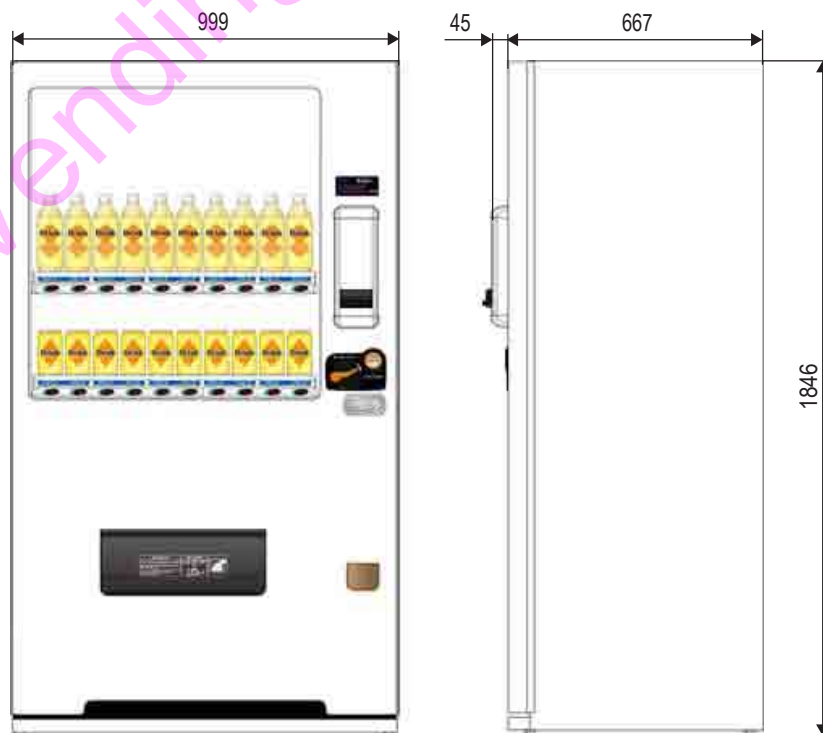
 WARNING		 CAUTION		 CAUTION	
	Use special outlet for power, be sure to insert the plug until it reaches the base. Use specified power capacity. • Extension cords and octopus wiring may cause fires.		Clean and renew the warning indication in order to be able read it correctly. • May cause accident if it can not be read correctly.		Do not load leaked or deformed products. • May cause accident.
	When leakage breaker is working, do not switch ON, request for inspection. • Forced Switch ON may cause electric shock or fires.		When installing on the following locations, discuss first with the fire department. • Get in the way of traffic or disaster prevention • Around the fire extinguishing facilities • Area that handle flammable materials or gas • Gasoline station • Passage and facilities for evacuation		Use protective gears (gloves, long sleeves) when touching column or detaching components, except for product packing or column setting. • May cause injury.
	Do not install nor use flammable substance (e.g. thinner) or gas or highly volatile material near the machine. • May cause fire or explosion.		When installing on the following locations, discuss first with the supplier. • Area exposed to briny air & corrosive gases • Area with great amount of shakes and vibrations.		Turn power off when replacing fluorescent tubes(LED lamp). • May cause electric shock.
	During product replenishment on rainy or snowy days, beware not to make internal electrical components wet. • May cause electric shock.		Regularly inspect installation surface and its brackets. • Incomplete installation may cause fall accident.		Replace fluorescent tubes (LED lamp) after cooling down. • May cause burning.
	Soda drink cannot be warmed. • Container may burst and it is very dangerous.		Check operation of leakage breaker more than 1x/month by pressing the test button. • Abnormal operation may cause electric shock		Turn power off during cleaning and inspection. • May cause electric shock and injuries.
	In abnormal conditions, immediately unplug the power, and contact professional repairers or technicians. • Continue operating under abnormal conditions, may cause electric shock or fire.		Periodically clean the power plug, and insert plug until it reaches the base. • Dust on the poor merge may cause fire.		During maintenance, do not apply water directly by water hose or bucket. • May cause electric shock or machine failure.
	Do not overhaul or repair, unless by professional. • May cause injury, electric shock, or fire.		Use only specified voltage and frequency. • Operating under unspecified voltage and frequency may cause accident.		While cleaning the condenser, when opening the cover, do not touch the edges, use the holes on the left and right side. • May cause injury.
	When the machine is submerged, immediately unplug power. • May cause fire or electric shock.		Don't block air inlets and outlets. • Poor ventilation may cause accident.		While cleaning the condenser, do not touch the fins. • May cause injury.
	Do not use water washed electrical components and wiring anymore. • May cause fire or electric shock.		Keep heating device away from the power cord. • May cause fire, electric shock if the cord melts.		Do not touch the delivery chute, when compartment is heated. Turn off power, wait until it cools down. • May cause burning.
	Store vending machine in a warehouse and lock the vending machine and the warehouse. • May be used for children playground and cause fall accident.		Use products without contents for display. • May explode as temperature increase, and cause injury.		Don't touch moving part. • May cause injury.
	Do not operate electric plug and switch using wet hands. • May cause electric shock.		Be careful of passers or vehicles when opening the door. • May cause accident by passers or vehicles.		While cleaning the front panel and display, beware of the projections. • May cause injury.
	Do not modify, pull, place heavy object on top, or damage the power code. • May cause fire or electric shock.		When the opening the door, fix it not to close. • May cause injury if the door suddenly close due to wind.		Do not look straight in to the LED lighting for long time. • May have bad effect on your eyes.
			When opening and closing the door, be careful of fingers.		When disposing the machine, delete device features for notes, cards, coins identification. • May cause criminal fraud and forgery.
			Load only the given products. • Loading unspecified product may cause accident.		Destroy the key when disposing the machine. • May cause abuse.
					When disposing the machine, Fluorescent tubes, Freon, nickel-cadmium batteries must be disposed of in accordance with the prescribed method. • May cause environmental destruction
					This machine is designed for domestic use only. Do not use in foreign country. • Due to difference in voltage, may cause fire, smoke, or burnout.

2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

		KB-GS20-S	KB-GS30-S	KB-GS24-S
E D i m e n t i o n s	Height (mm)	1846	1846	1846
	Width (mm)	999	1160	1160
	Depth (mm)	712 (45+667)	794 (45+749)	839 (90+749)
	Required rear clearance (mm)	50	50	50
Empty Weight (Kg)		235 kg	290 kg	285 kg
Selection		20 Selection (20 Selection Button)	30 Selection (30 Selection Button)	24 Selection (24 Selection Button)
Vending Mechanic		5 rows serpentine rack (Solenoid Operated)	6 rows serpentine rack (Solenoid Operated)	6 rows serpentine rack (Solenoid Operated)
Coin mech e-money		Factory default not equipped -	Factory default not equipped -	Factory default not equipped -
Bill validator		Factory default not equipped	Factory default not equipped	Factory default not equipped
Power		Single phase AC230V 50Hz	Single phase AC230V 50Hz	Single phase AC230V 50Hz
Cooling Unit		AC-3C1101E	AC-3C1102E	AC-3C1102E
Refrigerator/volume		R134a/220 g	R134a/220 g	R134a/220 g
Lamp		LED x 4 pcs	LED x 4 pcs	LED x 3 pcs

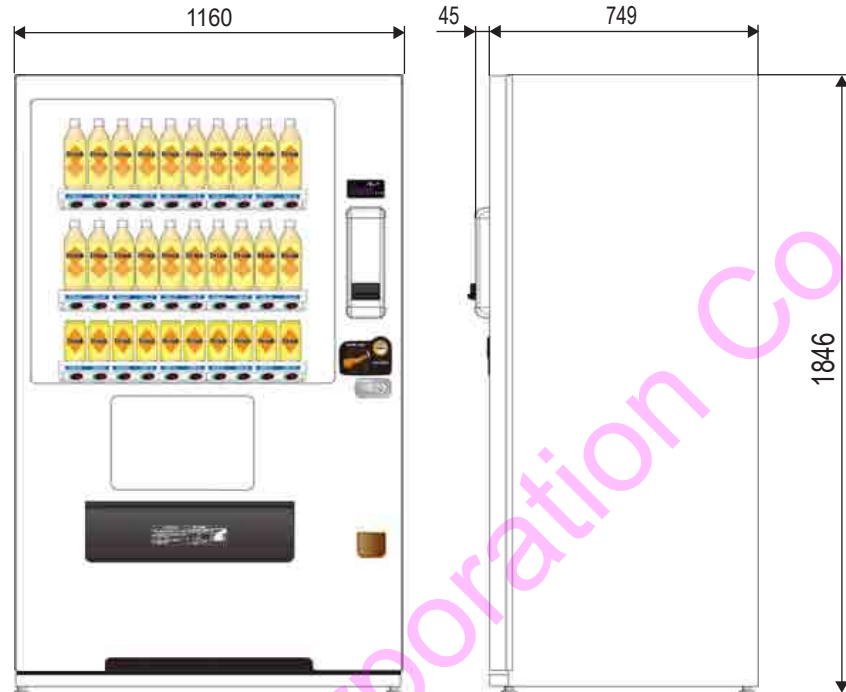
KB-GS20-S



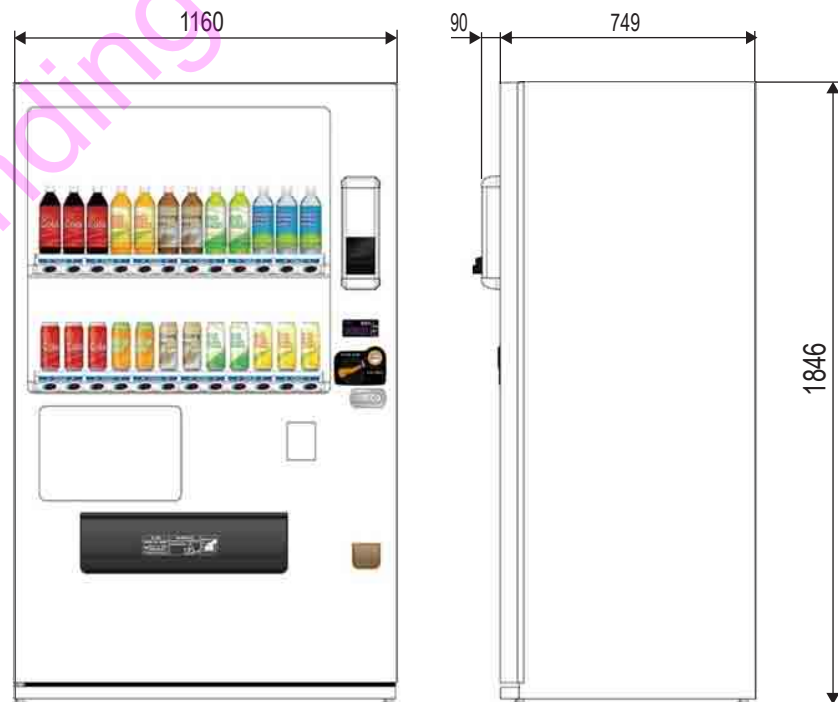
2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

KB-GS30-S



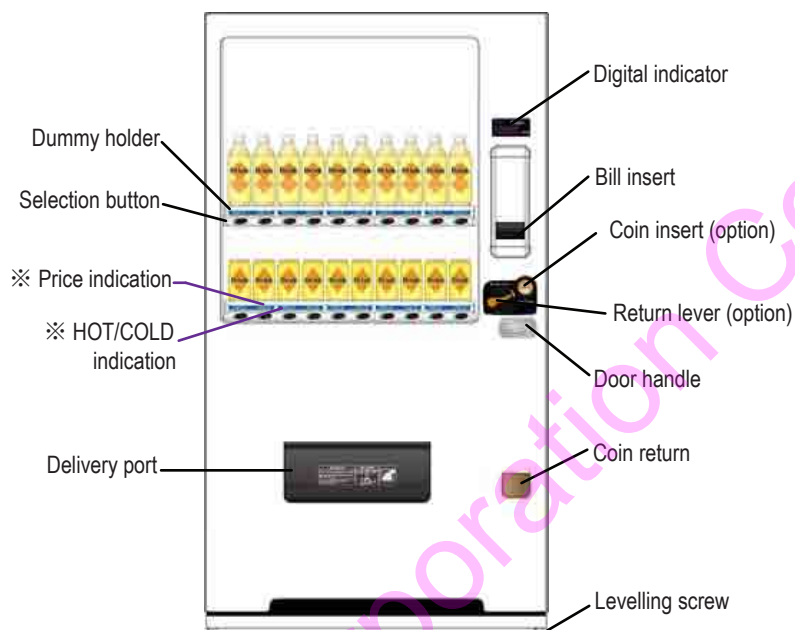
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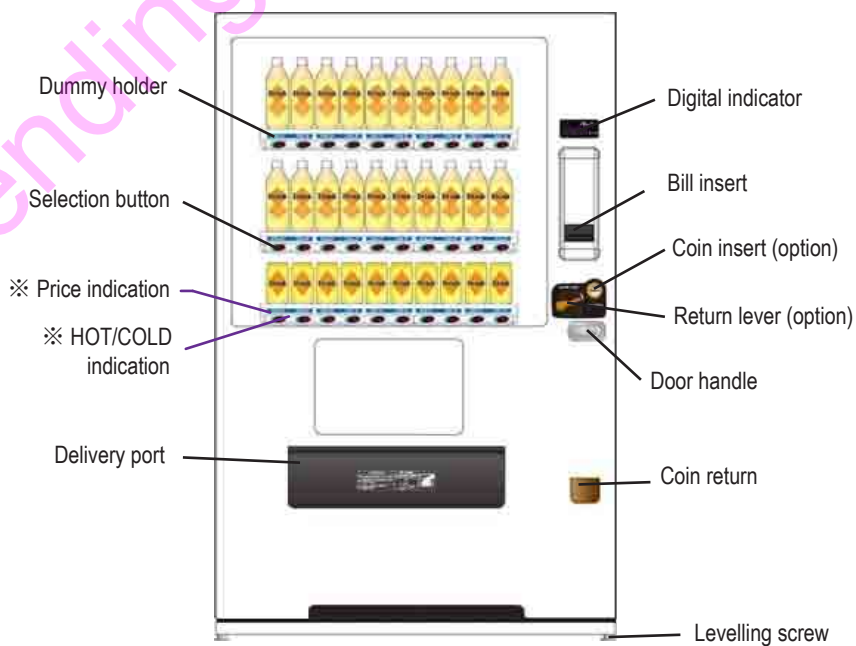
2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

KB-GS20-S



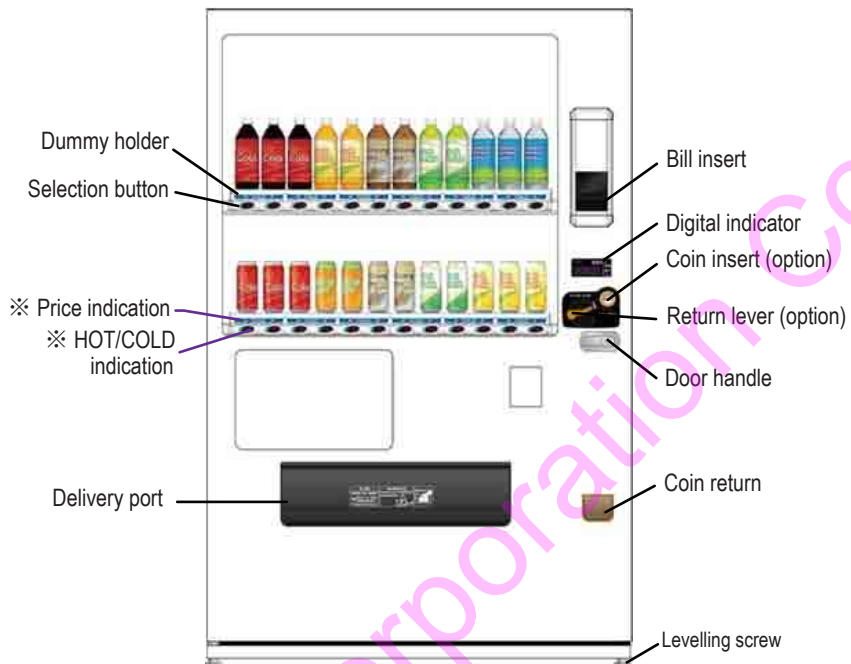
KB-GS30-S



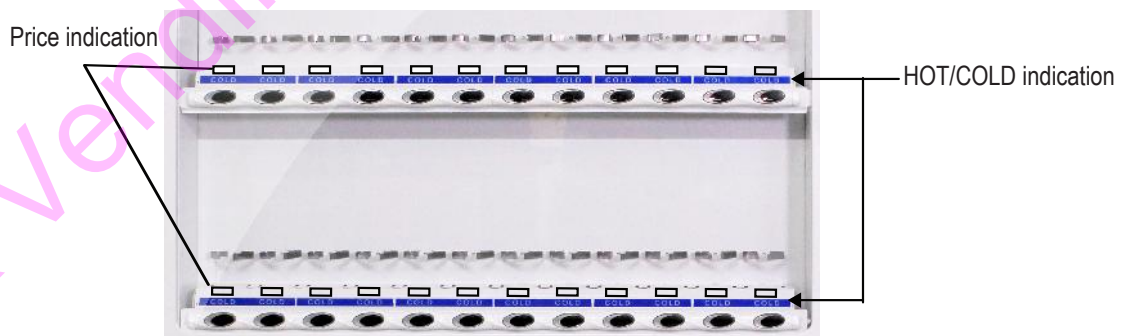
2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

KB-GS24-S



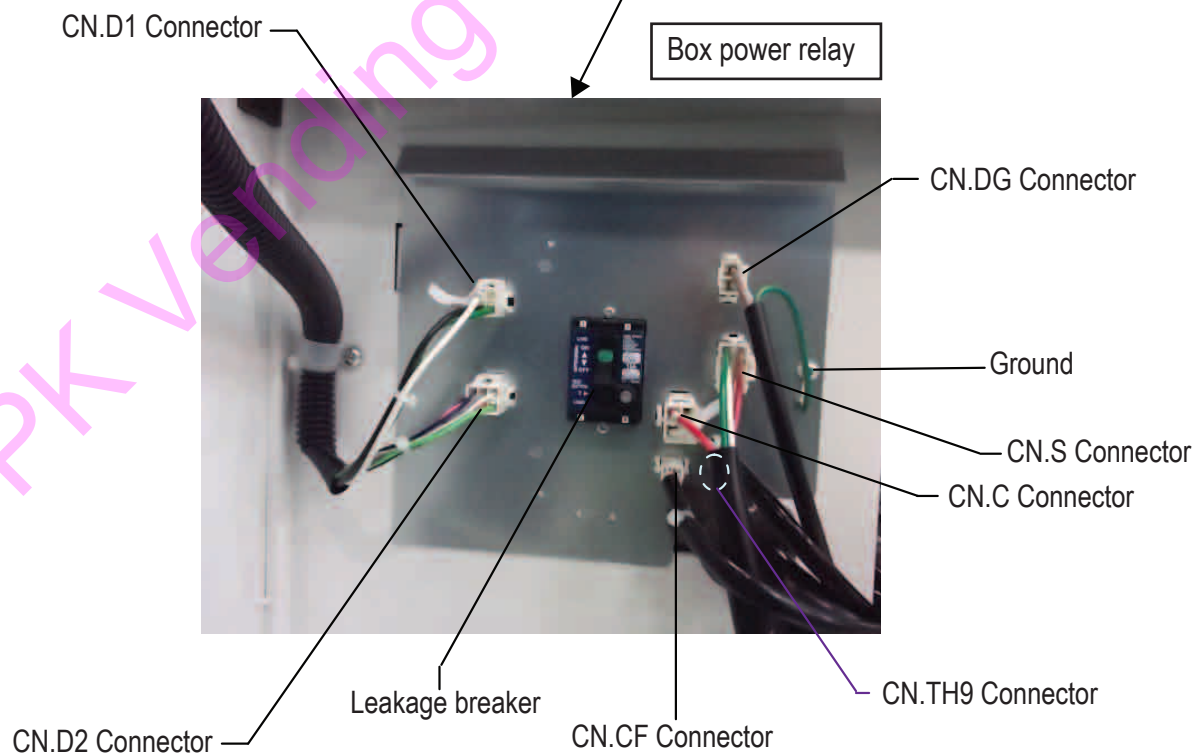
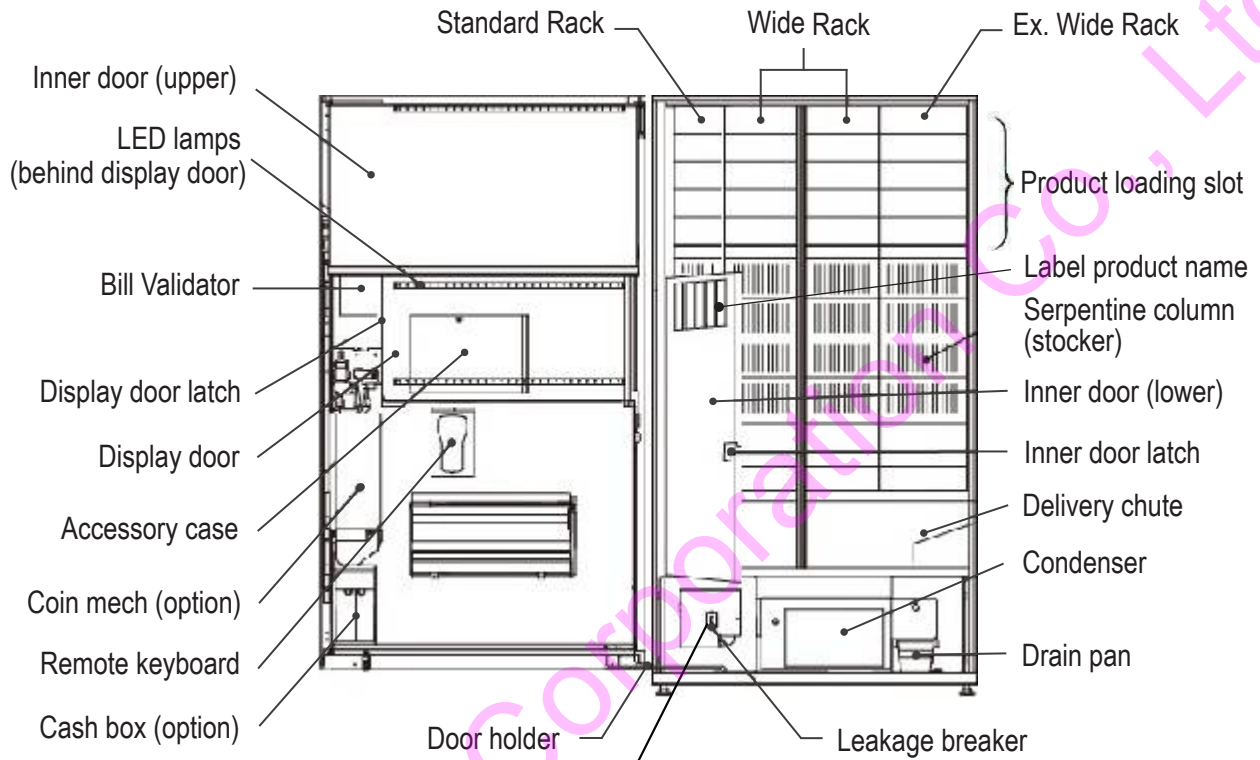
※ Price • HOT/COLD indication



2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

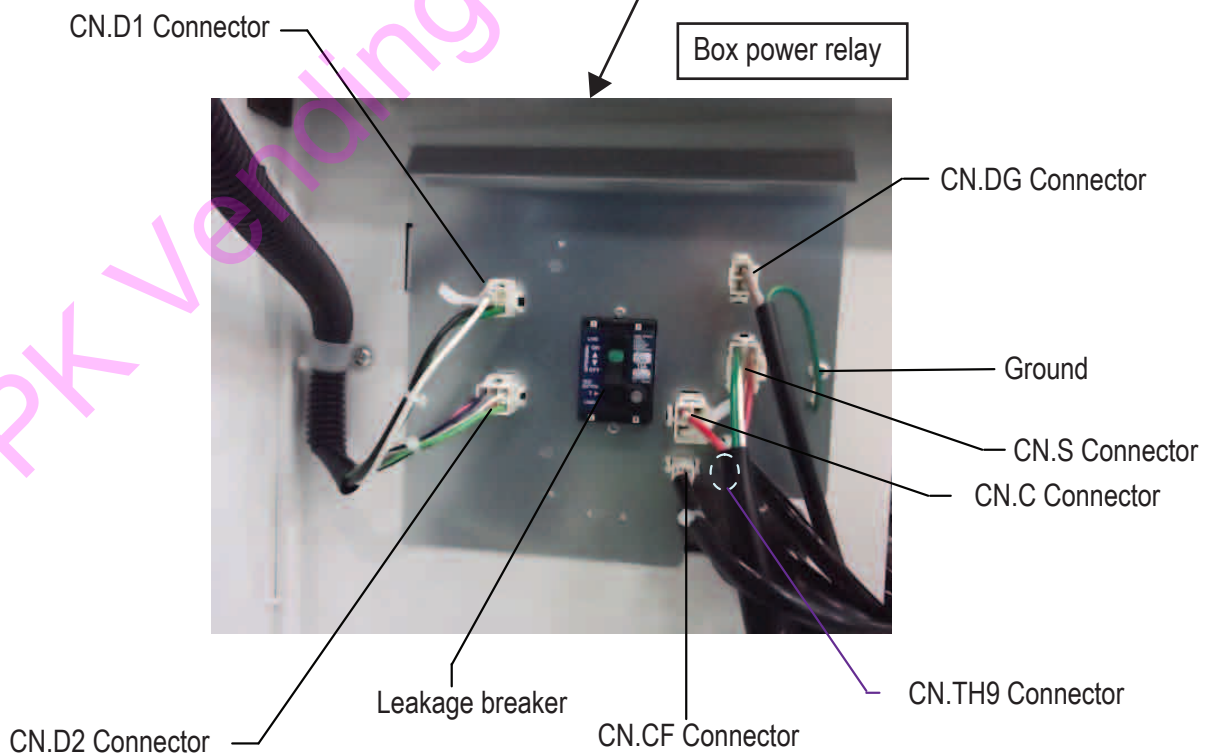
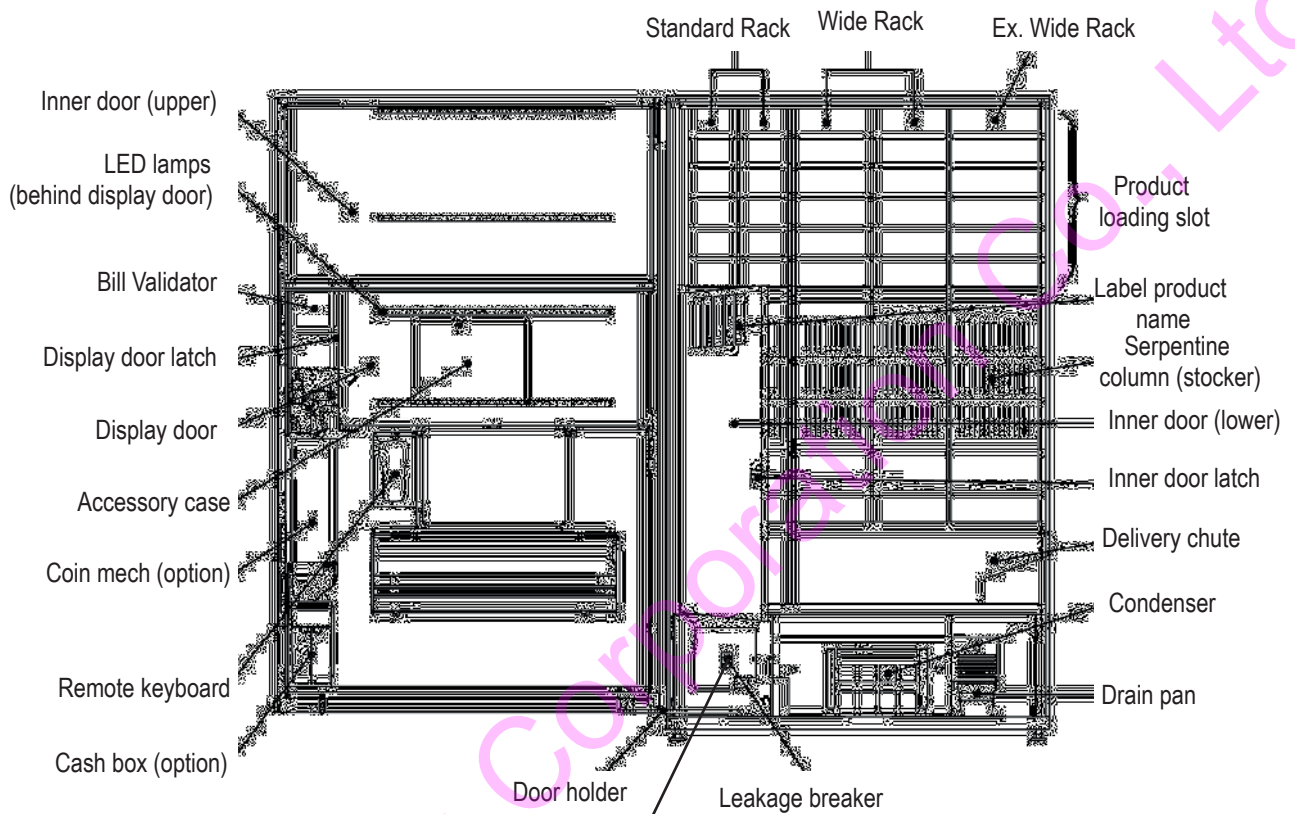
KB-GS20-S



2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

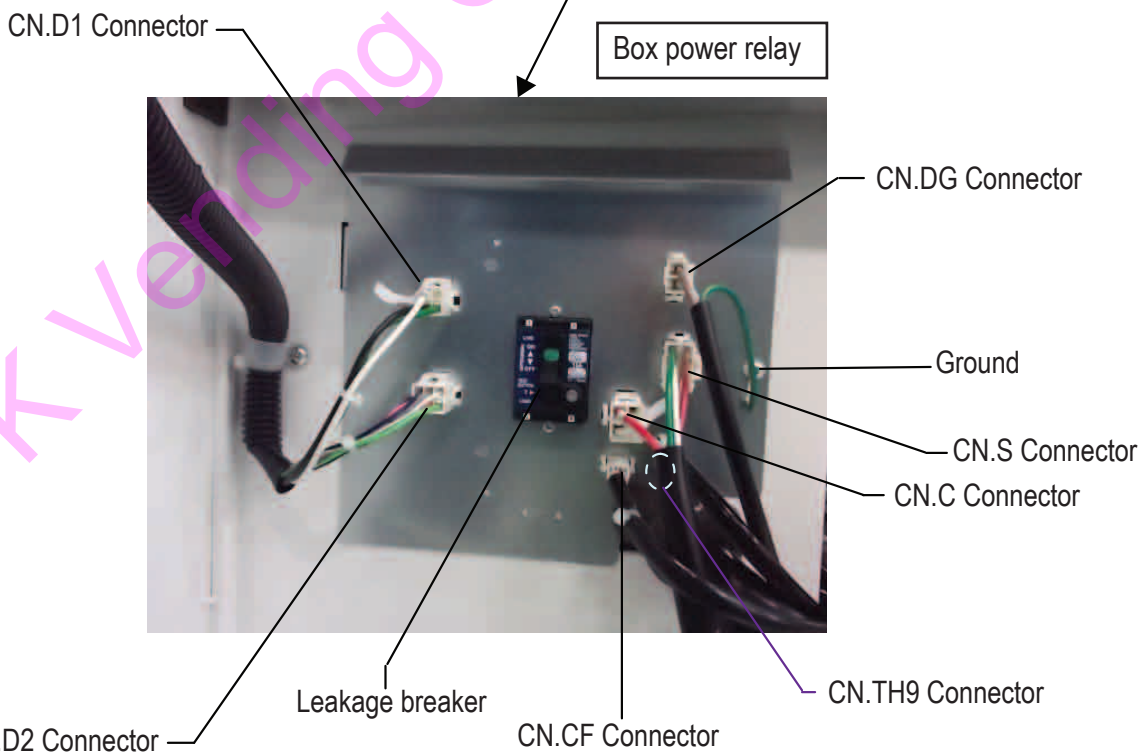
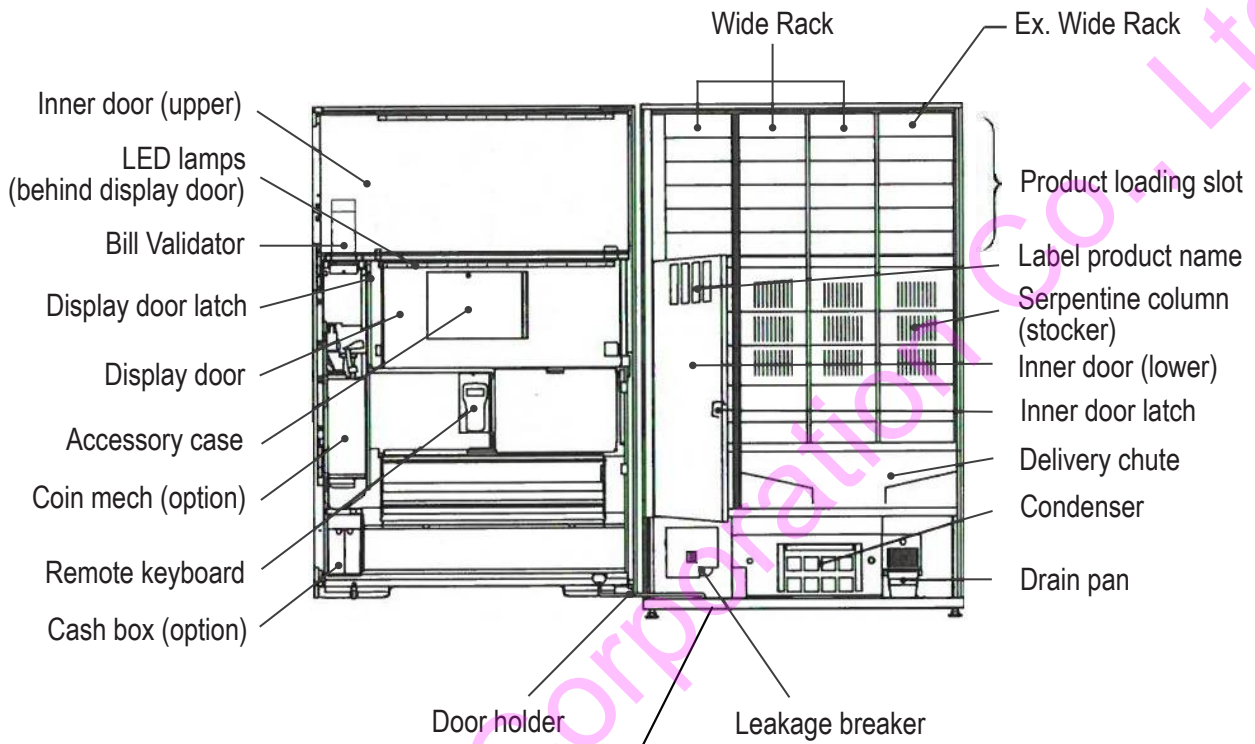
KB-GS30-S



2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

KB-GS24-S



2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

KB-GS20-S / KB-GS30-S



Back View of Main controller
Main controller
(Digital indicator)



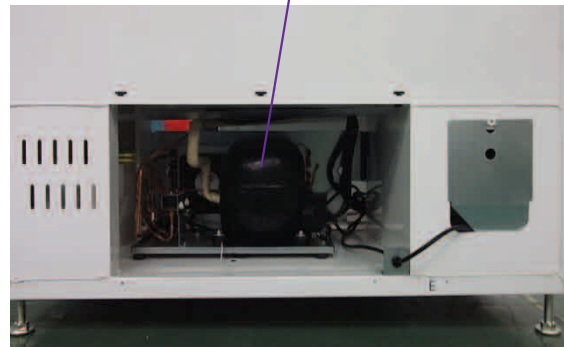
Back cover

Cover cord cabinet



【Back cover remove】

Cooling unit
(compressor)



2 SPECIFICATIONS

2-1 UNIT SPECIFICATIONS

KB-GS24-S



Back View of Main controller
(Digital indicator)



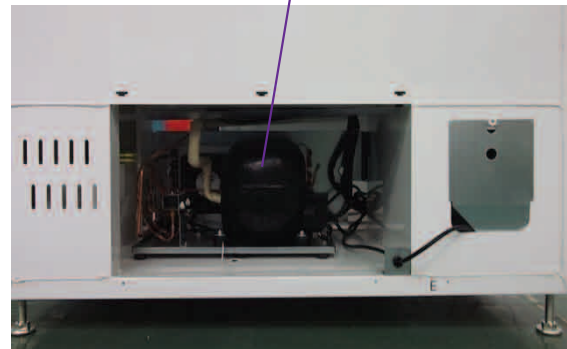
Back cover

Cover cord cabinet



【Back cover remove】

Cooling unit
(compressor)

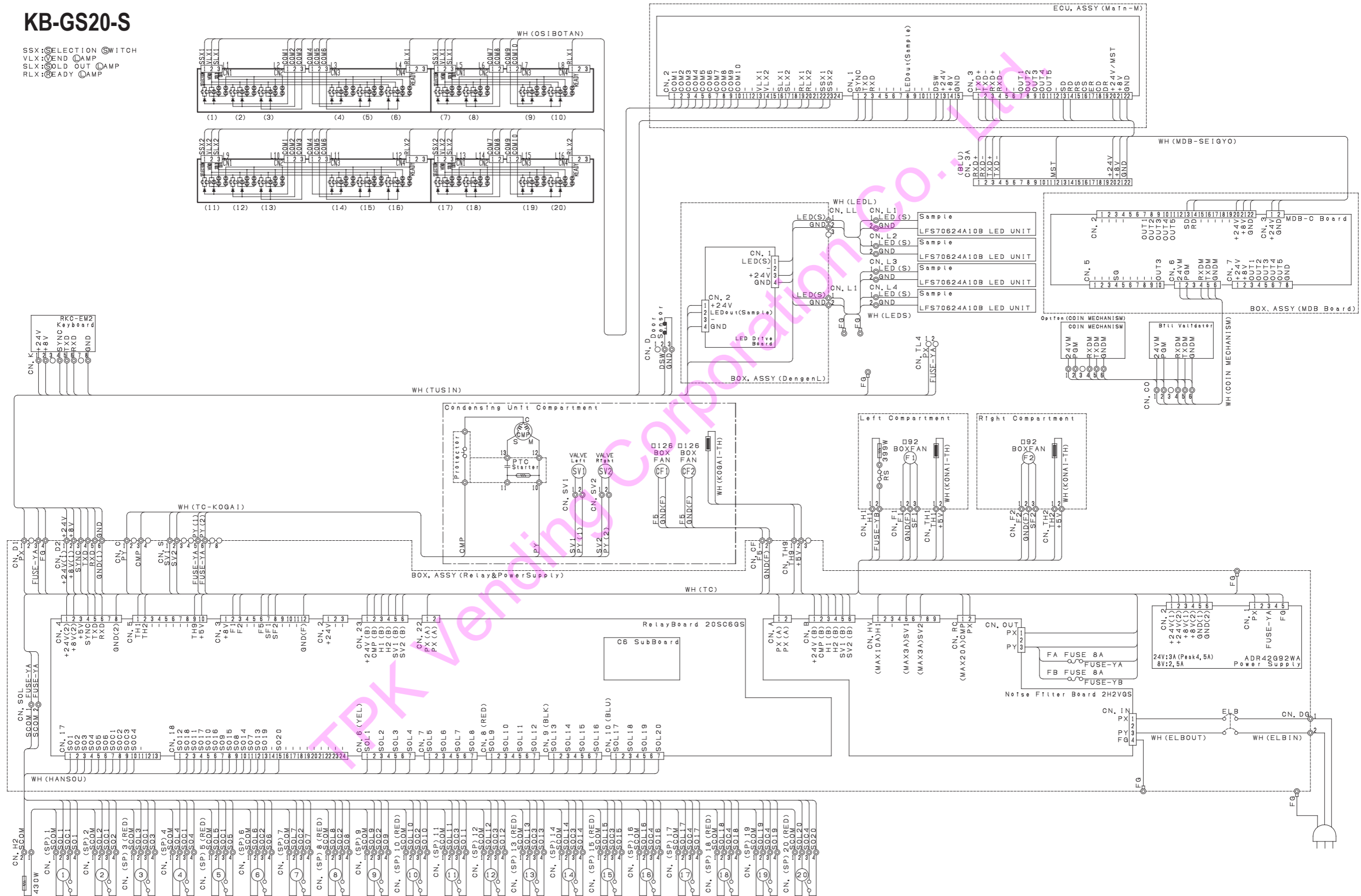


2 SPECIFICATIONS

2-2 WIRING DIAGRAM

KB-GS20-S

SSX: SELECTION SWITCH
 VLX: VENDOR CAMP
 SLX: SOLD OUT CAMP
 RLX: READY CAMP

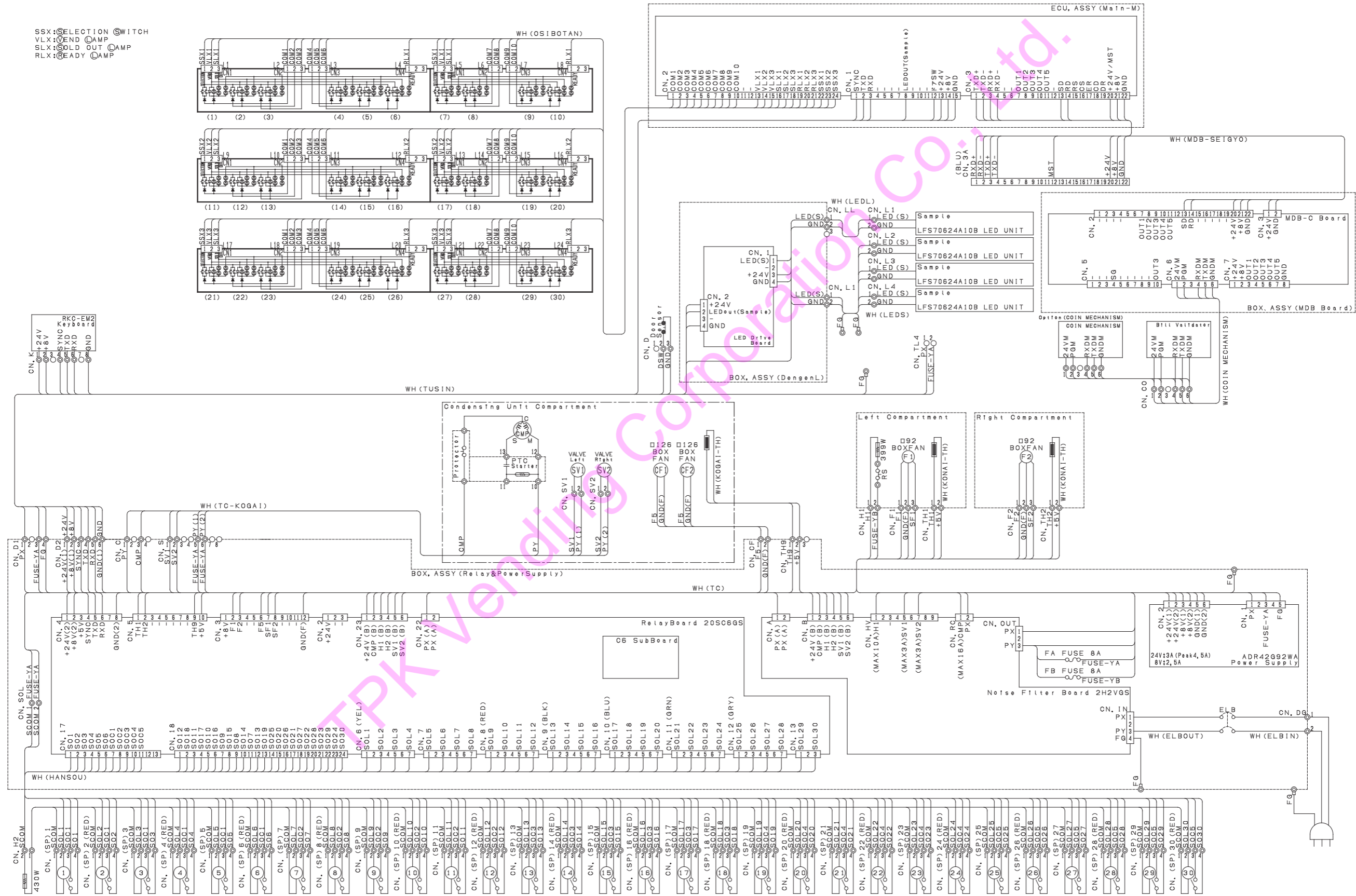


2 SPECIFICATIONS

2-2 WIRING DIAGRAM

KB-GS30-S

SSX: SELECTION SWITCH
 VLX: VENDOR CAMP
 SLX: SOLD OUT CAMP
 RLX: READY CAMP

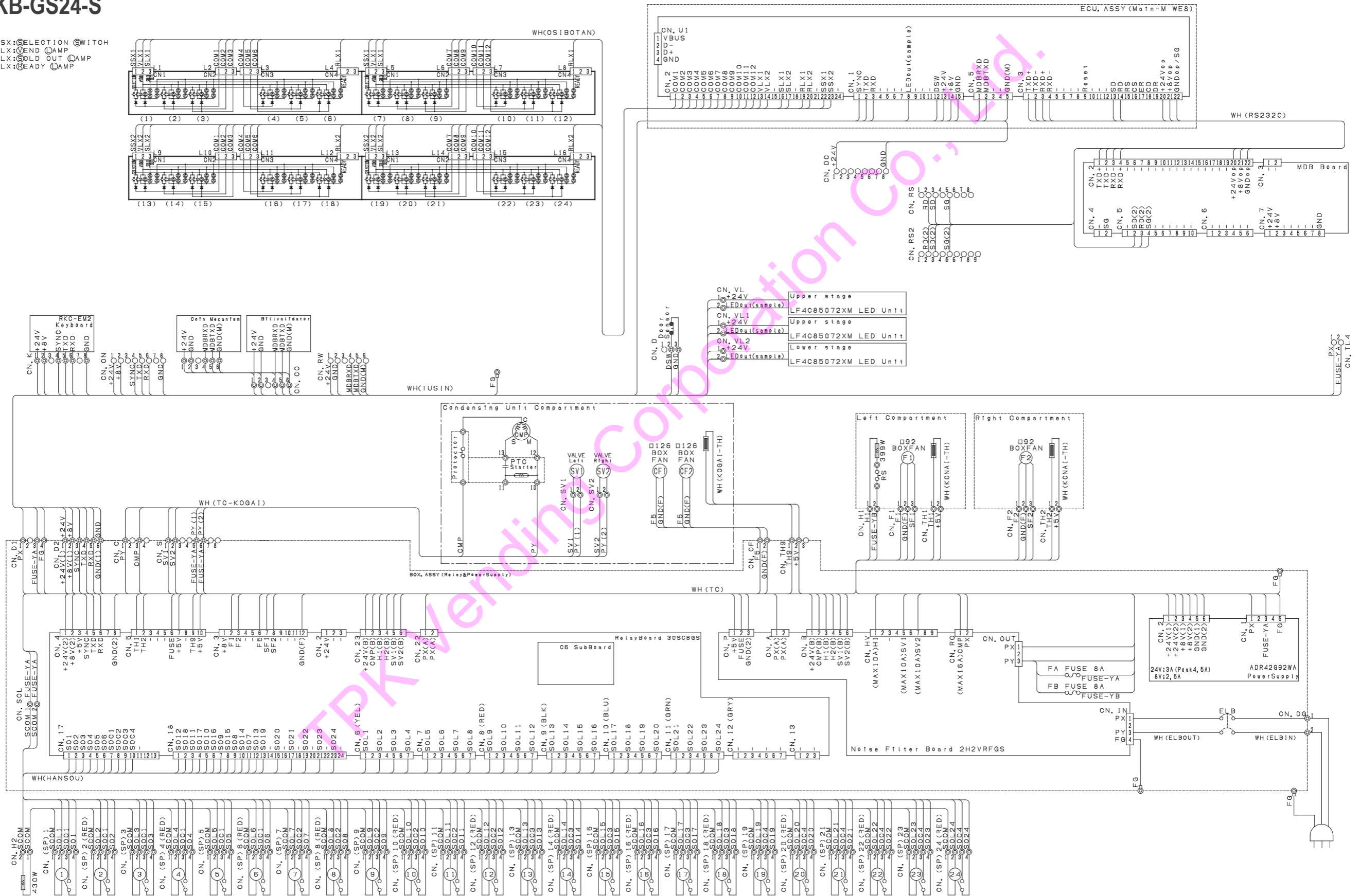


2 SPECIFICATIONS

2-2 WIRING DIAGRAM

KB-GS24-S

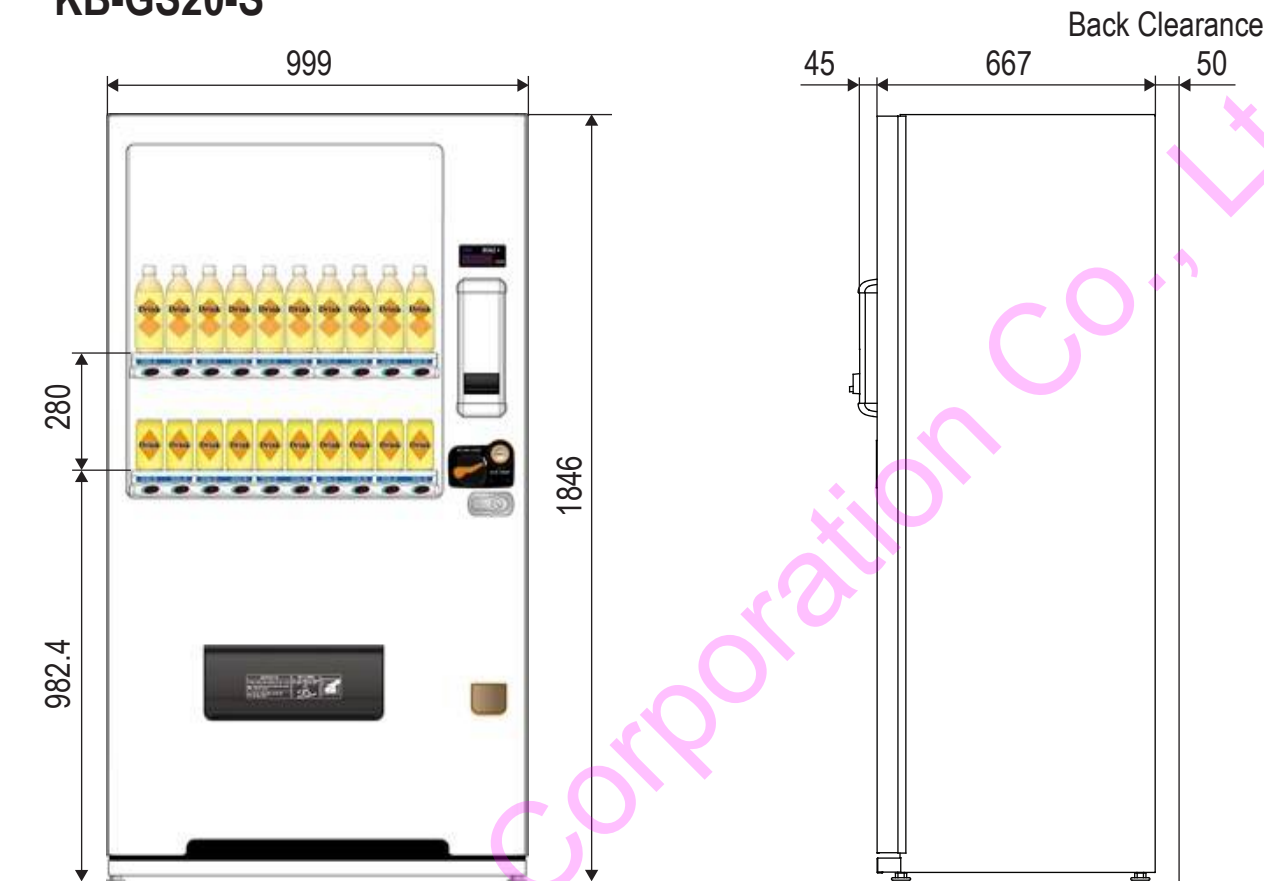
SSX: SELECTION SWITCH
 VLX: VENDOR AMP
 SLX: SOLDER AMP
 RLX: READY AMP



3 INSTALLATION

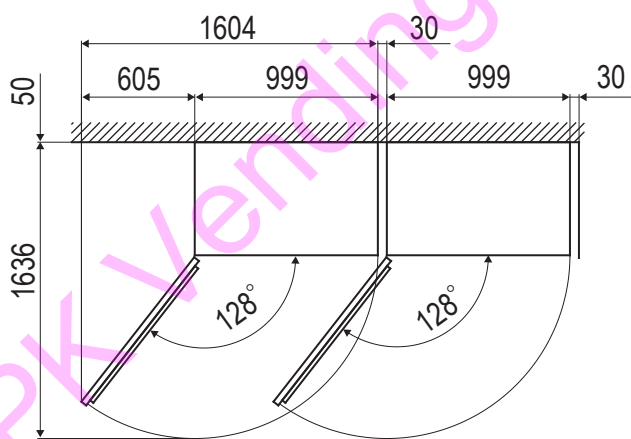
3-1 SPACE INSTALLATIONS

KB-GS20-S

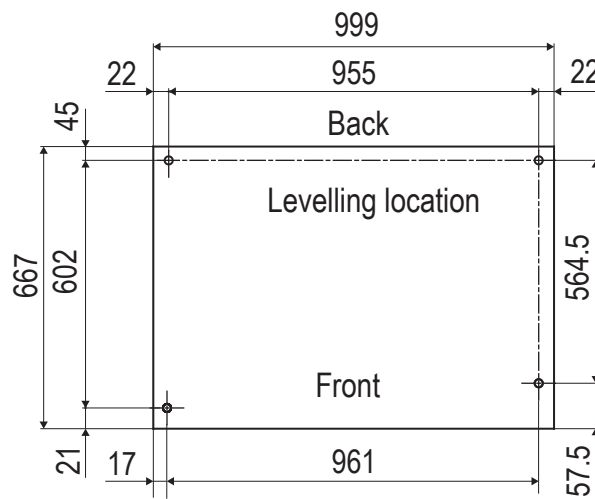


Front view

Side view

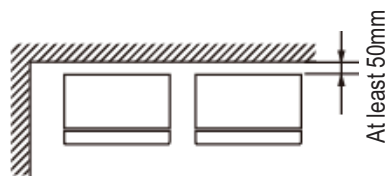


Picture installation size
※ Dimension with mm



Required space

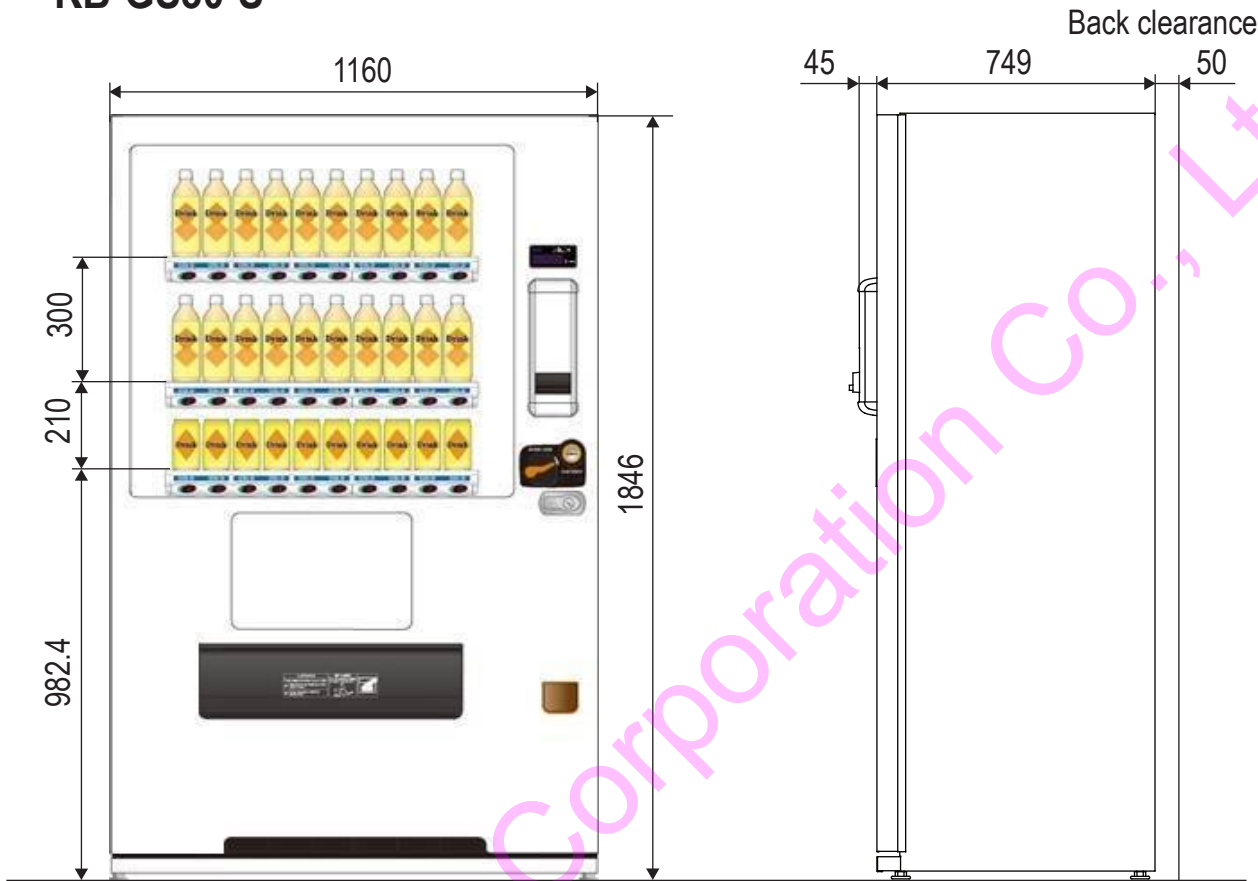
Make sure there is enough space to open the front door for loading. Vending machine also needs clearance for adequate air flow for the condensing unit in order to perform effectively.



3 INSTALLATION

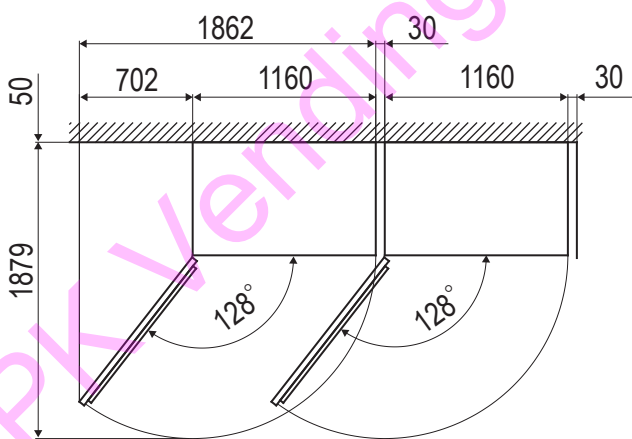
3-1 SPACE INSTALLATIONS

KB-GS30-S

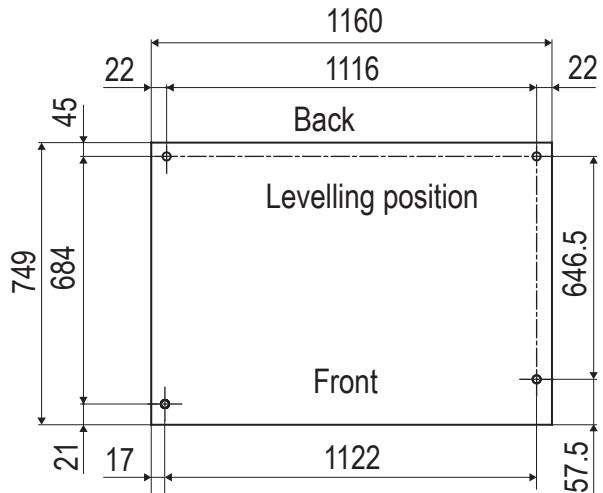


Front view

Side view

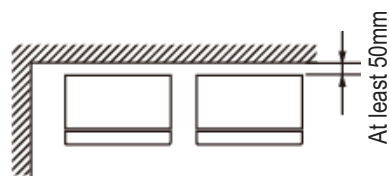


Picture installation size
※ Dimension with mm



Required space

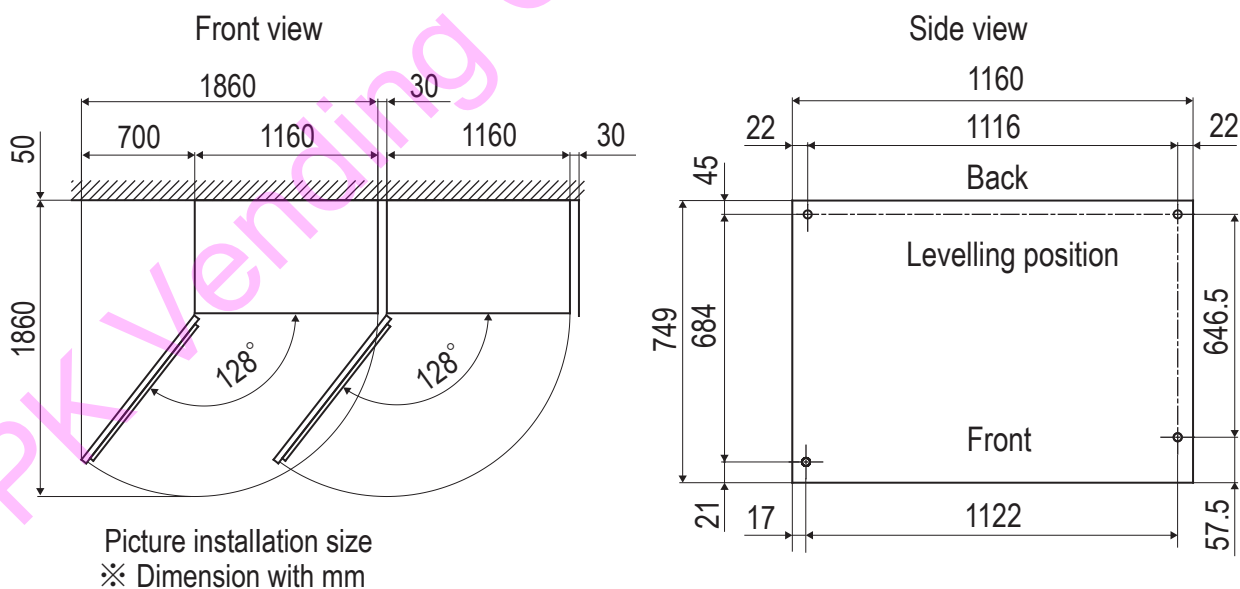
Make sure there is enough space to open the front door for loading. Vending machine also needs clearance for adequate air flow for the condensing unit in order to perform effectively.



3 INSTALLATION

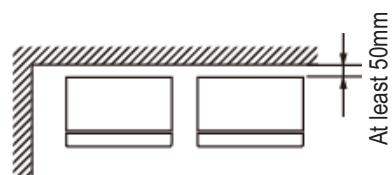
3-1 SPACE INSTALLATIONS

KB-GS24-S



Required space

Make sure there is enough space to open the front door for loading. Vending machine also needs clearance for adequate air flow for the condensing unit in order to perform effectively.



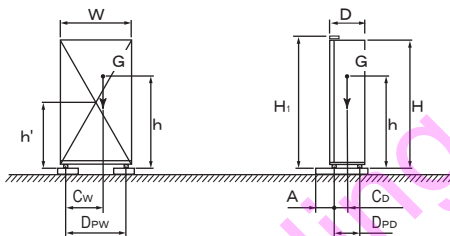
3 INSTALLATION

3-2 INSTALLATION SPECIFICATIONS

Terms of Installation

	Unit	KB-GS20-S		KB-GS30-S		KB-GS24-S	
		Empty	Full	Empty	Full	Empty	Full
G : Weight	kg	235	405	290	525	285	
h : Height of the center of gravity	mm	932	1080	952	1104	952	1104
CD : Distance from the center of gravity to center of the front legs	mm	278	300	311	339	311	339
CW : Distance from the center of gravity to center of the left side leg	mm	494	500	569	573	569	573
DPD : Distance between front and rear legs	mm	602		684		684	
DPW : Distance between left and right legs	mm	961		1122		1122	
h' : Height of the center	mm	925		925		925	
H x W x D : Exterior dimension	mm	1846 x 999 x 712		1846 x 1160 x 794		1846 x 1160 x 794	
H1 : Height including projections	mm	1846		1846		1846	

* Below specifications are of fully loaded condition as in chart above



- "A", "h", "h'" is based on when maximum weight H=1896mm. Weight when fully loaded is that of when loaded with product of maximum mass. When leveling screws are lowered or utilization of anchoring plate (counter mass) will improve the center of gravity height, therefore requires recalculation
- If in case when improving the "A" length by placing a counter weight inside the vending machine, beware of tipping forward when the door is open.

	KB-GS20-S		KB-GS30-S		KB-GS24-S	
	Length "A"	Type Anchor	Length "A"	Type Anchor	Length "A"	Type Anchor
Ground floor $A1=0.5h-C$	240	900	213	1050	213	1050
Floor 1 and above $A2=0.86h-C$	629	1300	610	1300	610	1300
Upper floor from roof $AU=2h-C$	1861		1868		1868	
<ul style="list-style-type: none"> • C is distance when it is reversed forward, backward and sideward. Other calculation of A distance separately or contact the maker • Please refer to preference of terms of installation manual for symbols of anchor plate model 						

3 INSTALLATION

3-2 INSTALLATION SPECIFICATIONS

Terms of Installation

Required fixation (estimated pulling force on the ground surface which may apply on the legs during an earthquake)

KB-GS20

- Rear legs (measure for tipping forward)
- fixing clamp : type E two pieces (pulling strength → single piece : 1267 [N], two pieces 633 [N])
 - M10 anchor : two pieces → minimum rim clearance 40mm
 - M12 anchor : two pieces → minimum rim clearance 50mm
(pulling strength → single piece : 2534 [N], two pieces : 1267 [N])
- Front legs (measure for tipping backward)
- fixing clamp : type E two pieces (pulling strength → single piece : 1255 [N], two pieces 628 [N])
 - M10 anchor : two pieces → minimum rim clearance 40mm
 - M12 anchor : two pieces → minimum rim clearance 50mm
(pulling strength → single piece : 2511 [N], two pieces : 1255 [N])

KB-GS30

- Rear legs (measure for tipping forward)
- fixing clamp : type E two pieces (pulling strength → single piece : 1279 [N], two pieces 640 [N])
 - M10 anchor : two pieces → minimum rim clearance 40mm
 - M12 anchor : two pieces → minimum rim clearance 50mm
(pulling strength → single piece : 2558 [N], two pieces : 1279 [N])
- Front legs (measure for tipping backward)
- fixing clamp : type E two pieces (pulling strength → single piece : 1246 [N], two pieces 623 [N])
 - M10 anchor : two pieces → minimum rim clearance 40mm
 - M12 anchor : two pieces → minimum rim clearance 50mm
(pulling strength → single piece : 2492 [N], two pieces : 1246 [N])

KB-GS24-S

- For back feet (holding from falling forward)
- fixing clamp : type E 2 pcs (pulling strenght→1 pcs:1279[N], 2 pcs: 640[N])
 - M10 anchor : 2 pcs →minimum edge distance: min 40mm
 - M12 anchor : 2 pcs →minimum edge distance: min 50mm
(pulling strength →1pcs:2558[N], 2 pcs: 1279[N])
- For front feet (holding from falling backward)
- fixing clamp : type E 2 pcs (puling strenght→1pcs:1246[N], 2 pcs: 623[N])
 - M10 anchor : 2 pcs →minimum edge distance: min 40mm
 - M12 anchor : 2 pcs →minimum edge distance: min 50mm
(pulling strenght →1pcs:2492[N], 2 pcs: 1246[N])

3 INSTALLATION

3-2 INSTALLATION SPECIFICATIONS

Location

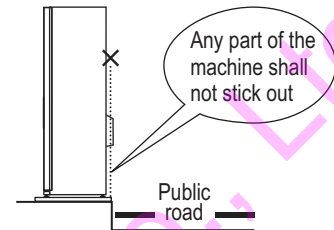
Please be aware of following:

• Any part of the machine shall not stick out on the public road.
Please consult the dealer if locating the vending machine in following locations.

- High exposure to salt breeze or corrosive gas.
- Great amount of shakes and vibrations.

Please consult the local fire department if locating the vending machine in following locations.

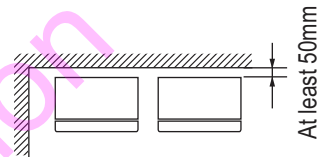
- Near a fire protective device.
- Places which use flammable substances or gas.
- Petrol station.
- Evacuation routes or equipment.



Required space

Make sure there is enough space to open the front door for loading.

Vending machine also needs clearance for adequate air flow for the condensing unit in order to perform effectively.

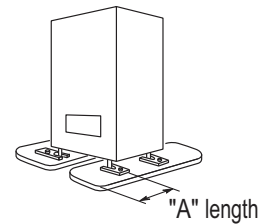


Indoor locations

Please use anchoring plate in locations where anchoring is not possible.

Refer to the Installment requirements for anchoring plate models and "A" length.

If it is impossible to secure enough "A" length, please apply additional fixation.



Outdoor locations

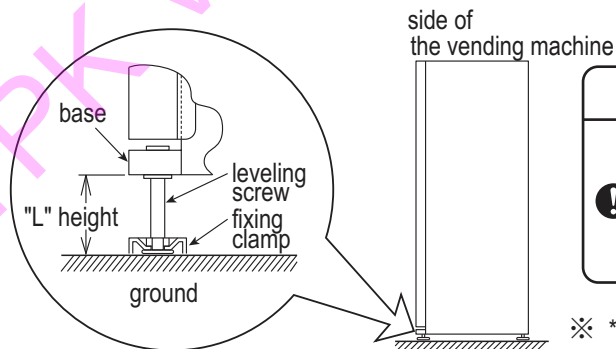
Vending machine must be secured on **all four corners** by an anchor or cramps to avoid tipping over.



Installing the vending machine

Leveling adjustment

Turn the leveling screw to adjust the tilt of the vending machine to within 1 degrees for both lateral and horizontal direction.

Also, the "L" height must be **within 86 mm** for safety.



 CAUTION	
	Inspect brackets periodically for proper installation. Please contact the service technician or your dealer if there is any thing wrong. Operation under improper installation may result in fall over accident.

※ "L" height is the gap between the base of the vending to the ground.

3 INSTALLATION

3-3 ABOUT TRANSPORTATION

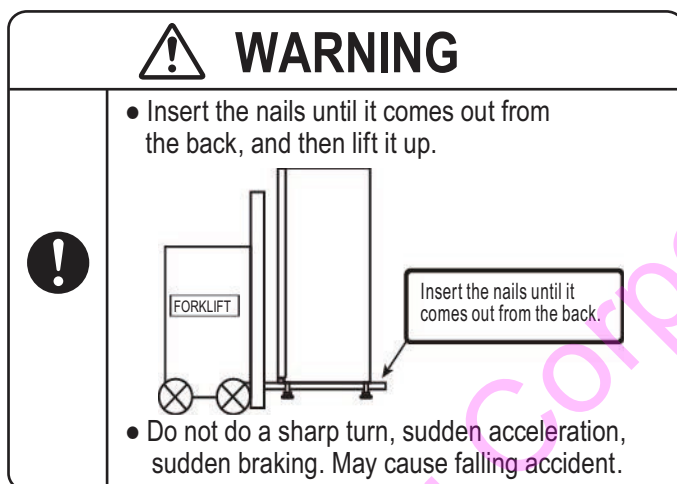
ATTENTION WHEN STOCKING AND SHIPPING

For stable machine, please follow provisions below:

- Do not laid horizontally.
- Beware of fall and unstable (adjust the iclination within15°).
- Do not shaken.
- Caution wet, as rain.

ABOUT HANDLING WITH FORKLIFT

When transporting a vending machine by forklift or handlift, follow the instruction below to avoid falling accident.



3-4 INSTALLATION GROUNDING



Grounding is necessary to prevent electric shock in case of electric leakage.

Always ground the vending machine properly.

The vending machine use voltage 230V and frequency of 50 Hz.

4 LOADING PRODUCT

4-1 TYPE SPECIFICATION AND LOADING CAPACITY

KB-GS20-S

Selection Button No. (Factory Default)	<p><Selection Button No></p> <table border="1"> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> </table>	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	7	8	9	10	<p><Hot/Cold Display Pattern></p> <p>Top 2H/C : 2H/C : 2H/C : 2H/C : 2H/C</p> <p>Bottom 2H/C : 2H/C : 2H/C : 2H/C : 2H/C</p>
11	12	13	14	15	16	17	18	19	20													
1	2	3	4	5	6	7	8	9	10													
Column Structure	<p>Row 1 Row 2 Row 3 Row 4</p> <table border="1"> <tr><td>1</td><td>6</td><td>11</td><td>16</td></tr> <tr><td>2</td><td>7</td><td>12</td><td>17</td></tr> <tr><td>3</td><td>8</td><td>13</td><td>18</td></tr> <tr><td>4</td><td>9</td><td>14</td><td>19</td></tr> <tr><td>5</td><td>10</td><td>15</td><td>20</td></tr> </table> <p>(Room 1) (Room 2)</p>	1	6	11	16	2	7	12	17	3	8	13	18	4	9	14	19	5	10	15	20	
1	6	11	16																			
2	7	12	17																			
3	8	13	18																			
4	9	14	19																			
5	10	15	20																			
Column Configuration																						
Rack Type	<table border="1"> <tr><td>N</td><td>P</td><td>P</td><td>Y</td></tr> </table>	N	P	P	Y																	
N	P	P	Y																			
Hot/Cold Patterns	<table border="1"> <tr><td>COLD</td><td>COLD</td></tr> <tr><td>HOT</td><td>COLD</td></tr> </table> <p>(Room 1) (Room 2)</p>	COLD	COLD	HOT	COLD																	
COLD	COLD																					
HOT	COLD																					

【Capacity by Column】

Type of product	Diameter mm	Volume ml	Column number																	Total			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		18	19	20
Slim Can	53	190	25	23	20	18	15	25	23	20	18	15	25	23	20	18	15	—	—	—	—	303	
		250	25	23	20	18	15	25	23	20	18	15	25	23	20	18	15	—	—	—	—	303	
Wide Can	66	280	19	18	16	14	12	19	18	16	14	12	19	18	16	14	12	—	—	—	—	237	
		350	19	18	16	14	12	19	18	16	14	12	19	18	16	14	12	19	18	16	14	12	316
		500	—	—	—	—	—	19	18	16	14	12	19	18	16	14	12	19	18	16	14	12	237
PET Bottle	69	280	20	18	16	14	12	20	18	16	14	12	20	18	16	14	12	—	—	—	—	240	
		500	—	—	—	—	—	18	17	15	13	11	18	17	15	13	11	18	17	15	13	11	222
	69.1~73	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	16	14	12	10	69

Notes:

- Above "Capacity by Column" table is based on Japanese standard packaging.
Capacity may vary depending on the stockpile condition inside the rack.
- Depending on the packaging size and hardness, some merchandise may not be suitable for sale.
- 600mlPET Bottle is max H259.2mm, φ73mm.

4 LOADING PRODUCT

4-1 TYPE SPECIFICATION AND LOADING CAPACITY

KB-GS30-S

Selection Button No. (Factory Default)	<p><Selection Button No></p> <table border="1"> <tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> </table>	21	22	23	24	25	26	27	28	29	30	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	7	8	9	10	<p><Hot/Cold Display Pattern></p> <p>Top 2H/C : 2H/C : 2H/C : 2H/C : 2H/C Middle 2H/C : 2H/C : 2H/C : 2H/C : 2H/C Bottom 2H/C : 2H/C : 2H/C : 2H/C : 2H/C</p>
21	22	23	24	25	26	27	28	29	30																							
11	12	13	14	15	16	17	18	19	20																							
1	2	3	4	5	6	7	8	9	10																							
Column Structure	<p>Row 1 Row 2 Row 3 Row 4 Row 5</p> <table border="1"> <tr><td>1</td><td>7</td><td>13</td><td>19</td><td>25</td></tr> <tr><td>2</td><td>8</td><td>14</td><td>20</td><td>26</td></tr> <tr><td>3</td><td>9</td><td>15</td><td>21</td><td>27</td></tr> <tr><td>4</td><td>10</td><td>16</td><td>22</td><td>28</td></tr> <tr><td>5</td><td>11</td><td>17</td><td>23</td><td>29</td></tr> <tr><td>6</td><td>12</td><td>18</td><td>24</td><td>30</td></tr> </table> <p>(Room 1) (Room 2)</p>	1	7	13	19	25	2	8	14	20	26	3	9	15	21	27	4	10	16	22	28	5	11	17	23	29	6	12	18	24	30	
1	7	13	19	25																												
2	8	14	20	26																												
3	9	15	21	27																												
4	10	16	22	28																												
5	11	17	23	29																												
6	12	18	24	30																												
Column Configuration																																
Rack Type	<table border="1"> <tr><td>N</td><td>N</td><td>P</td><td>P</td><td>Y</td></tr> </table>	N	N	P	P	Y																										
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Hot/Cold Patterns	<table border="1"> <tr><td>COLD</td><td>COLD</td></tr> <tr><td>HOT</td><td>COLD</td></tr> </table> <p>(Room 1) (Room 2)</p>	COLD	COLD	HOT	COLD																											
COLD	COLD																															
HOT	COLD																															

【Capacity by Column】

Type of product	Diameter mm	Volume ml	Column number																														Total	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Slim Can	53	190	27	24	22	19	17	14	27	24	22	19	17	14	27	24	22	19	17	14	27	24	22	19	17	14	—	—	—	—	—	—	492	
		250	27	24	22	19	17	14	27	24	22	19	17	14	27	24	22	19	17	14	27	24	22	19	17	14	—	—	—	—	—	—	492	
Wide Can	66	280	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	—	—	—	—	—	—	380	
		350	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	475	
		500	—	—	—	—	—	—	—	—	—	—	—	—	—	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	285
PET Bottle	69	280	21	19	17	15	13	11	21	19	17	15	13	11	21	19	17	15	13	11	21	19	17	15	13	11	—	—	—	—	—	—	384	
		500	—	—	—	—	—	—	—	—	—	—	—	—	—	20	17	16	14	12	10	20	17	16	14	12	10	20	17	16	14	12	10	267
		600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	82
	69.1~73		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Notes:

- Above "Capacity by Column" table is based on Japanese standard packaging.
Capacity may vary depending on the stockpile condition inside the rack.
- Depending on the packaging size and hardness, some merchandise may not be suitable for sale.
- 600mlPET Bottle is max H259.2mm, φ73mm.

4 LOADING PRODUCT

4-1 TYPE SPECIFICATION AND LOADING CAPACITY

KB-GS24-S

Selection Button No. (Factory Setting)	<Selection Button No>	<Hot/Cold Display Pattern>																												
	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Top 2H/C : 2H/C : 2H/C : 2H/C : 2H/C Middle 2H/C : 2H/C : 2H/C : 2H/C : 2H/C Bottom 2H/C : 2H/C : 2H/C : 2H/C : 2H/C				
1	2	3	4	5	6	7	8	9	10	11	12																			
13	14	15	16	17	18	19	20	21	22	23	24																			
Column Structure	<table border="1"> <tr><td>Row 1</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>Row 2</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr> <tr><td>Row 3</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td></tr> <tr><td>Row 4</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> </table>	Row 1	1	2	3	4	5	6	Row 2	7	8	9	10	11	12	Row 3	13	14	15	16	17	18	Row 4	19	20	21	22	23	24	
Row 1	1	2	3	4	5	6																								
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1	2	3	4	5	6																									
7	8	9	10	11	12																									
13	14	15	16	17	18																									
19	20	21	22	23	24																									
Type Rack	<table border="1"> <tr><td>P</td><td>P</td><td>P</td><td>Y</td></tr> </table>	P	P	P	Y																									
P	P	P	Y																											
Temperature Indication	<table border="1"> <tr><td>COLD</td><td>COLD</td></tr> <tr><td>HOT</td><td>COLD</td></tr> </table>	COLD	COLD	HOT	COLD																									
COLD	COLD																													
HOT	COLD																													

【Types and Number of Column Load Capacity】

Type of product	Diameter m m	Volume m L	Column number																								Total
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Slim Can	53	190	27	24	22	19	17	14	27	24	22	19	17	14	27	24	22	19	17	14	-	-	-	-	-	-	369
		250	27	24	22	19	17	14	27	24	22	19	17	14	27	24	22	19	17	14	-	-	-	-	-	-	369
Sleek Can	58	325	24	20	19	17	15	12	24	20	19	17	15	12	24	20	19	17	15	12	24	20	19	17	15	12	428
Wide Can	66	280	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	-	-	-	-	-	-	285
		350	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	380
		500	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	21	18	17	15	13	11	380
PET Bottle	69	280	21	19	17	15	13	11	21	19	17	15	13	11	21	19	17	15	13	11	-	-	-	-	-	-	288
		500	20	17	16	14	12	10	20	17	16	14	12	10	20	17	16	14	12	10	20	17	16	14	12	10	356
		600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	16	15	13	11	9

Note :

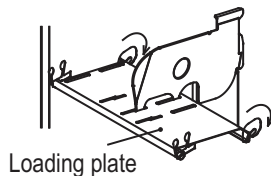
1. The table "Types and Number of Column Load Capacity" above is based on Japanese packing standard. Capacity is subject to change, depending on reserve condition within rack.
2. Depending on packaging size and hardness, other than types of products above, there are some products inappropriate to sell.
3. Maximum height of 600 ml PET bottle is 259.2 mm and diameter 73 mm.

4 LOADING PRODUCT

4-2 HOW TO SET UP THE STOCKER

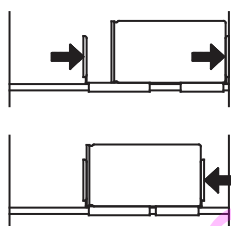
1. Verify the product for sales suitability.
Please refer to the sales suitability labeling for verification.

2. Adjust the loading slot.
【Adjust the height.】
Second row only. (Except Ex.Wide racks)
Adjust the loading plate by repositioning deeper when loading small products.(under $\phi 50\text{mm}$)



Other products do not require adjustment.

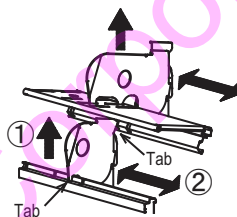
- 【Adjust the width.】
- ① Place the product on the right corner of the slot.
 - ② Adjust the left loading guide to suit the length of the product.
 - ③ If there still is a gap, move the right loading guide to left.



Adjustment is unnecessary for stockers without loading guide.
If there is no loading guide on the right, procedure ③ is unnecessary.

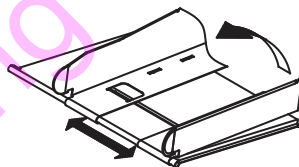
【How to move the loading guide.】
Front and second rows

- ① Lift the guide to release the tabs.
 - ② Adjust to product length.
- Make sure to mate both tabs in the correct slot.



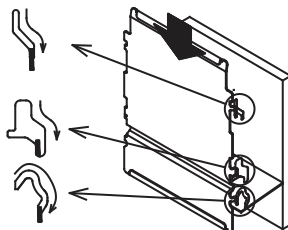
other rows

- ① Lift the inner side of the guide to release the tabs.
- ② Adjust to product length.



3. Adjust the ejection guide.
Only front and second rows are adjustable.
(Except Ex.Wide racks)
Adjust the ejection guide to lower position when loading small products.(under $\phi 50\text{mm}$)

Other products do not require adjustment.



4. Install the product one by one, horizontally.
Product with a cap must be installed with the cap facing left.
5. Make sure that the first product installed has settled horizontally at the bottom of the stocker.

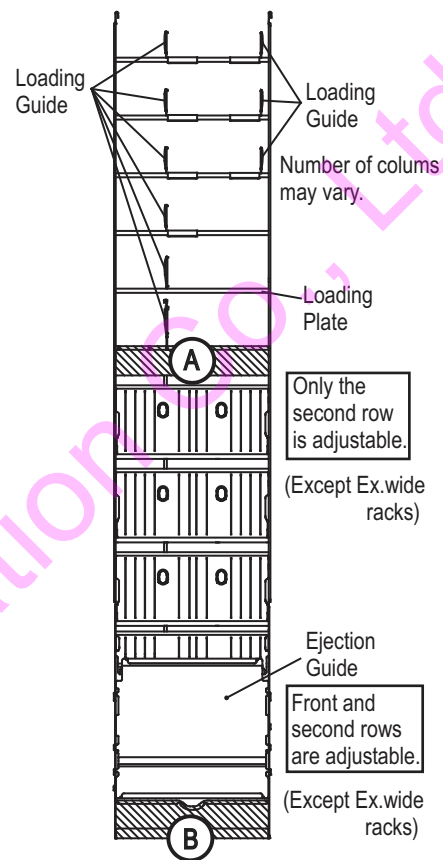


Fig.1 Stocker overview

CAUTION	
	Grab positions labeled (A)(B) in fig.1 when handling the stocker. The stocker may deform or break when hold at different positions.
	Beware not to deform the flap located behind position(A) when handling the stocker.
	Leave at least 15 minutes between each session when performing Consecutive Test Vends or Rapid Consecutive Test Vends in similar column.

5 CONTROLLER

5-1 KEYBOARD DESCRIPTIONS AND FUNCTION

Use to switch temperature setting for each compartment.
(Press continuously for more than 2 seconds.)

Press to select test mode

Press to stop vending

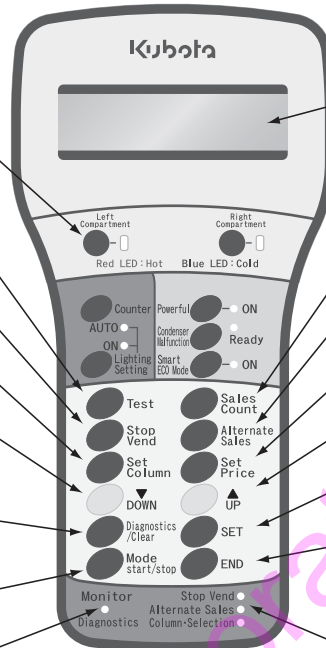
Press for column setting mode

Modify settings and data

1. Press to perform diagnostics
2. Press continuously for more than 2 seconds to clear data

1. Select mode function
2. Start/Stop test vend

Flashes in case of malfunction



1. Date, hour, and total sales count will displayed during idling.
2. Failure type and number of failures will be displayed in case of malfunction occurrence

Press to select sales count mode

Press to select alternative sales

Press for price setting mode

Modify settings and data

Press to confirm

End key board operation

LED indicate the activated function

- Stop vend
- alternative sales
- column-selection

Switching HOT/COLD temperature setting

HOT/COLD temperature setting of each compartment is selected using the temperature selection keys.

1. Press left compartment or right compartment key continuously for more than 2 seconds, and the LED next to the key will flash in either red or blue colour.

Keyboard display will indicate the current temperature setting.

2. Press the temperature selection key of the corresponding compartment to confirm the setting.
3. By not pressing any key for more than 5 seconds, or pressing "End" key, the keyboard will return to idle, and LED will stop flashing.

NOTE: Temperature setting is only available when the door is open.

(HOT : Red LED, displayed HOT)

(COLD : Blue LED, displayed COLD)

※ Depending on the model, there may be compartment not suitable for HOT setting.

Powerful Press to switch on/off powerful operation.
LED will turn on while powerful operation is activated.
Powerful operation will be cancelled in 2 hours from activation.

Lighting Setting Press to select lighting settings from "ON", "AUTO", or "OFF".
LED for corresponding setting will indicate the setting. Both LEDs will turn on when it is set in "OFF".

Smart ECO Mode Press to switch on/off smart ECO Mode setting.
LED will turn on while ECO Mode is active.

Condenser Malfunction LED will turn on, when condenser malfunction is detected.
Please check and clean the condenser, and then press the key after it is done.
Condenser is normal when the LED is not on.

Counter Total amount for each counter from G1 to G10 could be viewed by pressing the key.

View Counter

Press "Counter" key to view counters for each grouping..

1. Counter will indicate total amount at first.
Press "Counter" key to show count by grouping.
2. Next counter will be displayed by pressing the key again.
3. Indicated counter will return to that of total after the final counter.

G1	345678
----	--------

Example: G1 counter

5 CONTROLLER

5-2 SPECIFIED KEY FUNCTION LIST

Key	Operation	Indicator	Function	Note
● Test	press once	<i>r s r 1</i>	Single Test Vend Coin Test Vend (option)	
	press twice	<i>r s r 2</i>	Consecutive Test Vend (Selection button) Consecutive Test Vend (Keyboard operated)	columns selectable
	press 3 times	<i>r s r 3</i>	Rapid Consecutive Test Vend (Selection button) Rapid Consecutive Test Vend (Keyboard operated)	columns selectable
	press 4 times	<i>r s r 4</i>	Sequential Test Vend	
● Sales Count	press once		View/Clear Total Vend Count and Vend Count per Column	0 – 999999
	press twice		View/Clear Total Sales and Sales per Column	0 – 99999900
	press 3 times		View/Clear Group Vend Count	0 – 999999
	press 4 times		View/Clear Group Sales Value	0 – 99999900
	press 5 times		View/Clear Vend Count per Pricing	0 – 999999
	press 6 times		View/Clear Sales Value per Pricing	0 – 99999900
	press 7 times		View/Clear Count of Test Vends	0 – 999999
	press 12 times		View Lifetime Vend Count	0 – 999999
	press 13 times		View Lifetime Vend Count for Purchase by Cash	0 – 999999
	press 14 times		View Lifetime Vend Count for Purchase by Other Payments	0 – 999999
	press 15 times		View Lifetime Sales Value	0 – 99999900
	press 16 times		View Lifetime Sales by Cash	0 – 99999900
	press 17 times		View Lifetime Sales by Other Payments	0 – 99999900
● Stop Vend	press once	<i>H</i>	Set/View Suspend Vending Hours/Column	0 - 24hours (desired column)
	press twice		Set/View Set Suspend Vending Mode	0-1
● Alternate Sales	press once	<i>C r</i>	Set/View Set Alternate Sales	desired columns (30 Groups)
● Set Column	press once, then press (Check / Clear)	<i>C L</i>	Set/View Space to Sales	desired column
		<i>C L</i>	Preset Factory Setting	
● Set Price	press once		Set/View Product Pricing	0 – 999.9 (by 100)
	press twice		Set/View Product Pricing by Cards	0 – 999.9 (by 100)
● Diagnostics / Clear	press once		View/Clear Occurring Error Code	refer to Error Code List

Basics of the Specified Key Operations

- "Specified Keys" include : (Test), (Sales Count), (Stop Vend), (Alternate Sales), (Set Column), (Set Price), (Diagnostics / Clear) keys
- Specified Keys may have single or multiple functions.
- In multi function keys, functions are selected by number of times the key is pressed.
- When Specified Key is pressed again while operating one function, it will move on to next function. It will return to the first function when the key is pressed while in the last function.
- Before moving on to next Specified Key operation, complete current operation by pressing (END) key..

5 CONTROLLER

5-3 MODE KEY FUNCTION LIST

Operation	Indicator	Function	Data
 MODE Start Stop ↓  UP  DOWN ↓  SET ↓  UP  DOWN	1 - 0 1	Batch Mode (Space to Sales Pattern) Setting	1-3 = available patterns 99 = Factory setup
	1 - 0 2	Group Count Setting	1 - 15 groups
	1 - 0 3	Multiple Purchase Setting	0 - 9 (0 = infinite)
	1 - 0 4	Set Maximum Loading Capacity	0 - 99
	1 - 0 9	Automatic Change Release Time	0-30 secs (0 = infinite)
	1 - 1 0	All Columns Free-vend	0 = No, 1 = Yes
	1 - 1 1	View / Clear Error History	
	1 - 1 2	Enter Refill Quantity	0 - 99
	1 - 1 3	Set Consume-by Date	0 - 98 days 99 = simultaneous
	1 - 1 4	Check for Columns with Expired Consume-by Date	
	1 - 1 5	Free Column Setting	
	1 - 1 6	Suspend Session While Loading (or Door Open) (SSL)	0 = No, 1 = Yes
	1 - 2 6	Vend Restriction on Columns with Expired Consume-by Date	0 = No, 1 = Yes
	1 - 6 1	Show Reason of "Sold-out"	0 = hide, 1 = show
	2 - 0 1	School Timer Hours Setting	7 hours for each pattern A, B, and C
	2 - 0 2	Select School Timer Operation Pattern	0, A, B, C
	2 - 0 3	Lighting Saving Hours	Hours between 0-24
	2 - 0 4	Refrigeration Unit Power Saving Hours	Hours between 0-24
	2 - 0 5	Set Clock	00:00 - 23:59
	2 - 0 6	Set Month and Date	1/1 - 12/31
	2 - 0 7	Set Year	Four digits
	2 - 1 0	Bill Validator Blocking Hours	Hours between 0-24
	2 - 1 1	Fake "No Change" Lamp During Night Time	Hours between 0-24
	2 - 1 3	Light Saving by Days	1 = Sunday, 2 = Monday, 3 = Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 = Saturday, - = none
	3 - 0 1	Lighting Management Mode Setting	0 = Turning off priority 1 = Lighting priority 2 = Only the timer control 3 = Only the sensor control 4 = Timer control priority
	3 - 0 2	Daylight Sensor Sensitivity Setting	1 = Latest 2 = Late 3 = Intermediate 4 = Early 5 = Earliest
	3 - 0 3	Set Counter per Groups	Desired counter
	3 - 0 4	Set Compartment Temperature Level	0 - 10
	3 - 0 5	Lighting Failure Check	0 = No, 1 = Yes
	3 - 1 1	Mute Digital Display Beeper	0 = on, 1 = off, 2 = on (low volume)
	3 - 3 0	Selection Button Illumination Pattern	0 - 6
3 - 3 1	Selection Button Illumination Hours	Hours between 0-24	

5 CONTROLLER

5-4 SPECIFIED KEY OPERATIONS

Single Test Vend

Procedure	Key	Indication	Operation
1	Test	Single Test Test 1	Press Test Key.
2		Single Test Test 1	Press selection button, selected product will be vended.
3	UP DOWN	Single Test Column 8	Press UP or DOWN Key to select column number.
4	Mode start/stop	Single Test Column 8	Press Mode Key, a product from selected column will be vended.
5	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Procedures 3 and 4 are unnecessary when test vending by selection buttons.
- Test vending by selection button will become unavailable when procedure 3 is performed.
- Test vending may be suspended for about 7-10 minutes to avoid overheating the solenoid.
- The sign (" ") means flickering.

Coin Test Vend (Option)

Procedure	Key	Indication	Operation
1	Test	Single Test Test 1	Press Test Key.
2	Insert Coin	Single Test Test 1	Insert coin.
3		Single Test Test 1	Product could be test vended.
4	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Coin test vend will not be included in the count.
- The sign (" ") means flickering.

Consecutive Test Vend

(Select column using selection button)

Procedure	Key	Indication	Operation
1	Test Press x 2	Consecutive Test Test 2	Press Test Key twice.
2	(No. 7 selection button) (No. 12 selection button)	Consecutive Test Test 2	Press selection button to select test column. Multiple columns could be selected. Press selection button again to cancel selection.
3	Mode start/stop	Consecutive Test Column 7	Press Mode Key to begin testing.
4	Mode start/stop	Consecutive Test Column 7	Press Mode Key to cease testing. Press Mode Key again to resume.
5		Consecutive Test Column 7 ↓ Selected Column Consecutive Test Column 12	Test session will be ended in 3 vend operations after sold out. Return to procedure 2 to continue testing other columns. If multiple columns had been selected during procedure 2, proceed on from procedure 3.
6	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Column selection by UP / DOWN Keys will become unavailable once column is selected by selection buttons.
- Test vending may be suspended for 3 minutes to avoid overheating the solenoid.
- The sign (" ") means flickering.

Consecutive Test Vend

(Select column using remote keyboard)

Procedure	Key	Indication	Operation
1	Test Press x 2	Consecutive Test Test 2	Press Test Key twice.
2	UP DOWN	Consecutive Test Column 3	Press UP or DOWN key to select test column. Only one column could be selected.
3	Mode start/stop	Consecutive Test Column 3	Press Mode Key to begin testing.
4	Mode start/stop	Consecutive Test Column 3	Press Mode Key to cease testing. Press Mode Key again to resume.
5		Consecutive Test Column 3	Test session will be ended in 3 vend operations after sold out.
6	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Column selection by UP / DOWN Keys will become unavailable once column is selected by selection buttons.
- Test vending may be suspended for 3 minutes to avoid overheating the solenoid.
- The sign (" ") means flickering.

Rapid Consecutive Test Vend

(Select column using selection button)

Procedure	Key	Indication	Operation
1	Test Press x 3	Rapid Test Test 3	Press Test Key three times.
2	(No. 7 selection button) (No. 12 selection button)	Rapid Test Test 3	Press selection button to select test column. Multiple columns could be selected. Press selection button again to cancel selection.
3	Mode start/stop	Rapid Test Column 7	Press Mode Key to begin testing.
4	Mode start/stop	Rapid Test Column 7	Press Mode Key to cease testing. Press Mode Key again to resume.
5		Rapid Test Column 7 ↓ Selected Column Rapid Test Column 12	Test session will be ended in 3 vend operations after sold out. Return to procedure 2 to continue testing other columns. If multiple columns had been selected during procedure 2, proceed on from procedure 3.
6	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Column selection by UP / DOWN Keys will become unavailable once column is selected by selection buttons.
- Test vending may be suspended for 3 minutes to avoid overheating the solenoid.
- The sign (" ") means flickering.

5 CONTROLLER

5-4 SPECIFIED KEY OPERATIONS

Rapid Consecutive Test Vend (Select column using remote keyboard)

Procedure	Key	Indication	Operation
1	Test Press x 3	Rapid Test Test 3	Press Test Key three times.
2	UP DOWN	Rapid Test Column 3	Press UP or DOWN key to select test column. Only one column could be selected.
3	Mode start/stop	Rapid Test Column 3	Press Mode Key to begin testing.
4	Mode start/stop	Rapid Test Column 3	Press Mode Key to cease testing. Press Mode Key again to resume.
5		Rapid Test Column 3	Test session will be ended in 3 vend operations after sold out.
6	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Column selection by UP / DOWN Keys will become unavailable once column is selected by selection buttons.
- Test vending may be suspended for 3 minutes to avoid overheating the solenoid.
- The sign (" ") means flickering.

Sequential Test Vend

Procedure	Key	Indication	Operation
1	Test Press x 4	Sequential Test Test 4	Press Test Key four times.
2	Mode start/stop	Sequential Test Column 1	Press Mode Key to begin testing.
3	Mode start/stop	Sequential Test Column 3	Press Mode Key to cease testing. Press Mode Key again to resume.
4	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- The sign (" ") means flickering.

View/Clear Total Vend Count and Count per Column

Procedure	Key	Indication	Operation
1	Sales Count	01 Count TC 345678	Press Sales Count Key. Total number of vends from product purchase will be displayed.
2	(No. 7 selection button)	01 Count-Column CL 7 123456	Press selection button to select column. Vend Count for the selected column will be displayed.
3	UP DOWN	01 Count-Column CL 8 123456	Press UP or DOWN Key to select column number.
4	Diagnostics /Clear	CLR 0	Press Diagnostics/Clear Key to clear Total Vend Count and Vend Count for all columns.
5	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Skip procedure 4 if not clearing data.
- "End" will appear on the display after shown data for the final column.
- By clearing total vend count, count for total sales value and sales value per column will be cleared at the same time.
- If total vends exceed 6 digits, only the lower 6 digits will be displayed.
- The sign (" ") means flickering.

View/Clear Group Vend Count

Procedure	Key	Indication	Operation
1	Sales Count Press x 3	03 Count-Group GC 1 123456	Press Sales Count Key three times. Count of vends from product purchase for the selected group will be displayed.
2	UP DOWN	03 Count-Group GC 2 123456	Press UP or DOWN Key to select group number.
3	Diagnostics /Clear	CLR 0	Long press Diagnostics/Clear Key to clear Vend Count for all groups.
4	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Skip procedure 3 if not clearing data.
- "End" will appear on the display after shown data for the final group.
- By clearing Group Vend Count, Group Sales Value will also be cleared at the same time.
- If total vends exceed 6 digits, only the lower 6 digits will be displayed.
- The sign (" ") means flickering.

View Lifetime Vend Count

Procedure	Key	Indication	Operation
1	Sales Count Press x 12	12 Count-Total rC 901234	Press Sales Count Key twelve times. Lifetime count of vends from product purchase will be displayed.
2	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- If total count exceeds 6 digits, only the lower 6 digits will be displayed.
- The sign (" ") means flickering.

Set/View Suspend Vending Hours/Column

Procedure	Key	Indication	Operation
1	Stop Vend	Suspend Column Hour 0	Press Stop Vend Key.
2	UP DOWN	Suspend Column Hour "1"	Press UP or DOWN Keys to select hours.
3	SET	Suspend Column Hour 1	Press SET Key to confirm hours.
4	Selection button	Suspend Column Hour 1	Press Selection button to select columns subject to this setting, Lamps of the selected columns will illuminate.
5	END	31/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- To only view current setting, skip procedures 2-4 and press END Key.
- Suspend timer will not be enabled until procedure 5 is completed.
- Hours on the display is total length of the suspending period; not remaining hours.
- Set up both, hours and columns completely.
- When either hour is set to 0 or column is not selected, this function will not be enabled.
- The sign (" ") means flickering.

5 CONTROLLER

5-4 SPECIFIED KEY OPERATIONS

Set/View Suspend Vending Mode

Proce-dure	Key	Indication	Operation
1	Stop Vend Press*2	Suspend Mode Auto Set OFF 1	Press Stop Vend Key twice.
2	UP DOWN	Auto Set ON *0*	Press UP or DOWN Key to select mode.
3	SET	Suspend Mode Auto Set ON 0	Press SET Key to confirm setting.
4	END	31/10/2012 12*:34 T 567890	Press END Key to return to normal operation.

- Available settings:
0 : Enable automatic intervention
1 : Disable automatic intervention
- Skip procedures 2 and 3 when only viewing current setting.
- * When this function is set to 0 (Enable automatic intervention), whenever a column is refilled and recovers from sold-out condition, vending will automatically suspend vend according to "Set Suspend Vending Hours/Columns" setting.
- The sign (" ") means flickering.

Set/View Alternate Sales

Proce-dure	Key	Indication	Operation
1	Alternate Sales	Alternate Sales Group 1	Press Alternate Sales Key.
2	Add Remove	Alternate Sales Group 1	Press Selection button of the desired column to add or remove to the selected alternate sales group.
3	UP DOWN	Alternate Sales Group 2	Press UP or DOWN Key to select group.
4	Diagnostics /Clear	Alternate Sales Group 1	Long Press Diagnostics / Clear Key for more than 2 seconds to clear all alternate sales settings.
5	END	31/10/2012 12*:34 T 567890	Press END Key to return to normal operation.

- "End" will appear on the display after reached the final group.
Press UP or DOWN Key to return to the beginning.
- Single column cannot be assigned to multiple alternate sales groups.
- Columns with different pricing can not be assigned to similar alternate sales group.
- Skip procedure 2 when only viewing setting.
- Perform procedure 4 only when clearing all alternate grup settings.
- The sign (" ") means flickering.

Set/View Space to Sales

Proce-dure	Key	Indication	Operation
1	Set Column	Column-Selection Column 1	Press Set Column Key. Vend lamps of all selection buttons connected to Column 1 will illuminate.
2	Add Remove	Column-Selection Column 1	Press desired selection button to add or remove from connection. Sold-out lamp will illuminate when a button is removed from the column.
3	UP DOWN	Column-Selection Column 2	Press UP or DOWN Key to change column number.
4	END	31/10/2012 12*:34 T 567890	Press END Key to return to normal operation.

- Selection button with Sold-out lamps turned on indicates that it is not connected to any column.
- "End" will appear on the display after reached the final column.
- Skip procedure 2 if only viewing the setting.
- The sign (" ") means flickering.

Set/View Product Pricing

Proce-dure	Key	Indication	Operation
1	Set Price	Set Price 0.5	Press Set Price Key.
2	UP DOWN	Set Price 0.6	Press UP or DOWN Key to select pricing.
3	(No.7 selection button)	Set Price 0.6	Press Selection button of the corresponding product to adopt the pricing. Multiple columns could be selected at once.
4	END	31/10/2012 12*:34 T 567890	Press END Key to return to normal operation.

- Pricing Range RM 0–999900
- Skip procedure 3 if only viewing the setting.
- Repeat procedures 2 and 3 to continuously set up other pricings.
- If the machine is capable of cashless payment, press "Set Price" Key twice during procedure 1 to adjust price setting for purchase by cards.
- The sign (" ") means flickering.

View/Clear Occuring Error Code




Proce-dure	Key	Indication	Operation
1	Diagnostics /Clear	Bill COM err 71	Press Diagnostics/Clear Key. "End" will be displayed if there is no error.
2	UP DOWN		Press UP key to view next error code.
3	END	31/10/2012 12*:34 T 567890	Press END Key to return to normal operation

- Error code will automatically clear when the error is repaired.
- If Diagnostics/Clear Key is long-pressed for more than 2 seconds while in procedure 2, all error codes will be cleared. However, errors that are not repaired shall reappear.
- The sign (" ") means flickering.

5 CONTROLLER

5-5 MODE KEY OPERATIONS



Group Count Setting (1 – 02)

Procedure	Key	Indication	Operation
1	Mode start/sto	"1-01"	Press Mode Key.
2	SET	Selection Mode 1-01"	Press Set Key.
3	UP DOWN	Group Counts 1-02"	Press UP or DOWN Key to select function number 2.
4	SET	Group Counts Group 1"	Press Set Key. Group number will appear on the display.
5	UP DOWN	Group 5"	Press UP or DOWN Key to select group number.
6	SET	Group Counts Group 5	Press Set Key. Selection button of the columns assigned to the selected group will illuminate. 
7	Add Remove	Group Counts Group 5	Add or Remove column from the group using the selection buttons.  
⋮	⋮		Repeat procedures 5-7 to complete set up for all groups.
8	END	31/10/2012 12:34 T 5 6 7 8 9 0	Press END Key to return to normal operation.

• The sign (" ") means flickering.

Free Column Setting (1 – 15)

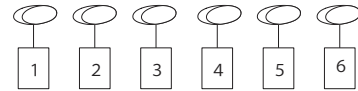
This function allows the operator to connect multiple columns to single selection button.

Procedure	Key	Indication	Operation
1	Mode start/sto	"1-01"	Press Mode Key.
2	SET	Selection Mode 1-01"	Press Set Key.
3	UP DOWN	Free-column 1-15"	Press UP or DOWN Key to select function number 15.
4	SET	Free-column column 2	Press SET Key. Column number of the unassigned column will be appear on the remote display.
5		Free-column column 2	Press desired selection button to connect to the column.
6		Free-column column 2	Press the selection button again to cancel connection.
7	SET	Free-column column 3	Press SET Key. Next unassigned column will appear on the display.
Repeat procedures 5, 6, and 7 to complete set up.			
8	SET	Free-column End	"End" will be displayed after setting the last column.
9	END	31/10/2012 12:34 T 5 6 7 8 9 0	Press END Key to return to normal operation.

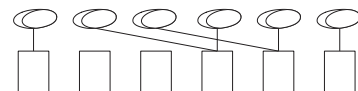
• The sign (" ") means flickering.

[Flow of the free column setting]

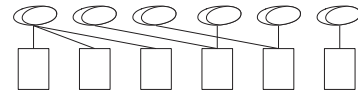
1. Default connection.



2. Create unassigned columns. (Space to Sales function.)



3. Reconnect unassigned columns to other selection button. (Free Column function)



(NOTES)

- Unassigned columns must be created beforehand in Space to Sales operation. (Please refer to Specified Keys operation manual.)
- Free column setting is available up to 10 groups.
- Columns with different pricing can not be grouped together.
- Columns in different compartment can not be grouped together.
- When Free Column operation is set, all Alternative Sales settings will be canceled.
- In order to just view current Free Column settings, skip procedures 6 to 9.
- If Space to Sales setting is changed after Free Column setting, all Free Column settings will be canceled.

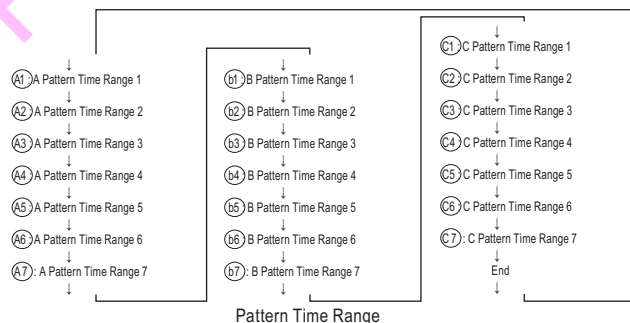
5 CONTROLLER

5-5 MODE KEY OPERATIONS

School Timer Hours Setting (2-01)

Procedure	Key	Indication	Operation
1	Mode start/sto	Selection Mode '1'-01	Press Mode Key.
2	UP DOWN	'2'-01	Press UP or DOWN Key to select mode number 2.
3	SET	School Timer 2-'01'	Press Set Key.
4	SET	School Timer 'A1'	Press Set Key again.
5	UP DOWN	School Timer 'b3'	Press UP or DOWN Key to select setting.
6	SET	b3 Begin '00'00	Press Set Key.
7	UP DOWN	b3 Begin '08'00	Press UP or DOWN Key to set start time. (Hours)
8	SET	b3 Begin 08'00'	Press Set Key to confirm setting.
9	UP DOWN	b3 Begin 08'15'	Press UP or DOWN Key to set start time. (Minutes)
10	SET	b3 End '00'00	Press Set Key.
11	UP DOWN	b3 End '08'00	Press UP or DOWN Key to set end time. (Hours)
12	SET	School Timer b3 End 08'00'	Press Set Key.
13	UP DOWN	b3 End 08'45'	Press UP or DOWN Key to set end time. (Minutes)
14	SET	'b4'	Press Set Key.
Repeat procedures 5 - 14 to complete set up.			
15	Diagnostics/Clear	'b1'	All time range settings in current pattern will be cleared when Clear Key is long-pressed during time range setting.*Press Set Key to confirm setting.
16	END	31/10/2012 12:'34 T 567890	Press END Key to return to normal operation.

- There are 3 available settings, A - C. Each setting could have 7 sales time range.
- Setting range is between 00:00 - 23:59.
- Setting pattern could be selected for each day in a week in "Select School Timer Operation Pattern" function.
- Beyond procedure 4, selection button of the columns subject to School Timer function will illuminate. Press selection button to add or remove selection.
- Sales of selections not subject to School Timer will not be blocked at all times.
- The sign (" ") means flickering.
- Prosedur Pengaturan:



- "End" will appear on the display after reached the final time range. Press UP or DOWN Key to return to the beginning or the last.

Select School Timer Operation Pattern (2-02)

Procedure	Key	Indication	Operation
1	Mode start/sto	'1'-01	Press Mode Key.
2	UP DOWN	'2'-01	Press UP or DOWN Key to select mode number 2.
3	SET	School Timer 2-'01'	Press Set Key.
4	UP DOWN	School Timer DAY 2-'02'	Press UP or DOWN Key to select function number 2.
5	SET	Not Set '0'	Press Set Key.
6	UP DOWN	Pattern 'A'	Press UP or DOWN Key to select setting.
7	SET	Not Set '0'	Press SET Key. Next day will appear on the display.
Repeat procedures 6 and 7 to complete set up.			
8	END	31/10/2012 12:'34 T 567890	Press END Key to return to normal operation.

- The sign (" ") means flickering.
- Denotation:
Days
1 = Sunday, 2 = Monday, 3 = Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 = Saturday, End
Pattern
0 = No vend restriction, A = A Pattern Time Range, b = b Pattern Time Range, C = C Pattern Time Range
- Time range setting must be set in "School Timer Hours Setting" function when either operation pattern is selected.
- Example of set up: = Selling Hours

Day	Pattern	Hours				
		0:00	6:00	12:00	18:00	24:00
Sunday	O	[Hatched bar from 0:00 to 24:00]				
Monday	A	[Hatched]	[Hatched]	[Hatched]	[Hatched]	[Hatched]
Tuesday	A	[Hatched]	[Hatched]	[Hatched]	[Hatched]	[Hatched]
Wednesday	A	[Hatched]	[Hatched]	[Hatched]	[Hatched]	[Hatched]
Thursday	A	[Hatched]	[Hatched]	[Hatched]	[Hatched]	[Hatched]
Friday	b	[Hatched]	[Hatched]	[Hatched]	[Hatched]	[Hatched]
Saturday	C	[Hatched]	[Hatched]	[Hatched]	[Hatched]	[Hatched]

- (A1) : 01:00 ~ 04:00 (B1) : 06:00 ~ 08:00 (C1) : 06:00 ~ 18:00
- (A2) : 05:00 ~ 07:00 (B2) : 09:00 ~ 14:00 (C2) : Not Set
- (A3) : 08:00 ~ 10:00 (B3) : 15:00 ~ 18:00 (C3) : Not Set
- (A4) : 11:00 ~ 13:00 (B4) : Not Set (C4) : Not Set
- (A5) : 15:00 ~ 16:00 (B5) : Not Set (C5) : Not Set
- (A6) : 17:00 ~ 19:00 (B6) : Not Set (C6) : Not Set
- (A7) : 20:00 ~ 21:00 (B7) : Not Set (C7) : Not Set

5 CONTROLLER

5-5 MODE KEY OPERATIONS

Lighting Saving Hours (2 – 03)

Procedure	Key	Indication	Operation
1		Selection Mode "1"-01	Press Mode Key.
2		"2"-01	Press UP or DOWN Key to select mode number 2.
3		School Timer 2-"01"	Press Set Key.
4		Light Save Hours 2-"03"	Press UP or DOWN Key to select function number 3.
5		Light Save Hours "00"00	Press Set Key.
6		Light Save Hours "07"00	Press UP or DOWN Key to set start time.
7		Light Save Hours 07"00"	Press Set Key to confirm setting.
8		Light Save Hours 07"17"	Press UP or DOWN Key to set end time.
9		Light Save Hours 0717	Press Set Key.
10		31/10/2012 12:"34 T 567890	Press END Key to return to normal operation.

- System uses 24 hour clock.
- Setting range is 0 - 24.
- * Light saving will be disabled when set to 0000.
- NOTE: Set "Lighting Setting" switch to "AUTO".
- The sign (" ") means flickering.

Refrigeration Unit Power Saving Hours (2 – 04)

Procedure	Key	Indication	Operation
1		"1"-01	Press Mode Key.
2		"2"-01	Press UP or DOWN Key to select mode number 2.
3		School Timer 2-"01"	Press Set Key.
4		Unit Save Hours 2-"04"	Press UP or DOWN Key to select function number 4.
5		Unit Save Hours "00"00	Press Set Key.
6		Unit Save Hours "02"00	Press UP or DOWN Key to set start time.
7		Unit Save Hours 02"00"	Press Set Key.
8		Unit Save Hours 02"08"	Press UP or DOWN Key to set end time.
9		Unit Save Hours 0208	Press Set Key.
10		31/10/2012 12:"34 T 567890	Press END Key to return to normal operation.

- System uses 24 hour clock.
- Selectable hours are from 0-24.
- * Power Saving will be disabled when set to 0000.
- The sign (" ") means flickering.

Set Clock (2 – 05)

Procedure	Key	Indication	Operation
1		"1"-01	Press Mode Key.
2		School Timer "2"-01	Press UP or DOWN Key to select mode number 2.
3		School Timer 2-"01"	Press Set Key.
4		Clock NOW 2-"05"	Press UP or DOWN Key to select function number 5.
5		Clock NOW "00"00	Press Set Key.
6		Clock NOW "12"00	Press UP or DOWN Key to set clock hour.
7		Clock NOW 12"00"	Press Set Key.
8		Clock NOW 12"34"	Press UP or DOWN Key to set clock minute.
9		Clock NOW 1234	Press Set Key, and current time will be displayed.
10		31/10/2012 12:"34 T 567890	Press END Key to return to normal operation.

- System uses 24 hour clock.
- The sign (" ") means flickering.

Set Month and Date (2 – 06)

Procedure	Key	Indication	Operation
1		"1"-01	Press Mode Key.
2		"2"-01	Press UP or DOWN Key to select mode number 2.
3		School Timer 2-"01"	Press Set Key.
4		Month/Date NOW 2-"06"	Press UP or DOWN Key to select function number 6.
5		Month/Date NOW "01"01	Press Set Key.
6		Month/Date NOW "10"01	Press UP or DOWN Key to set Month.
7		Month/Date NOW 10"01"	Press Set Key.
8		Month/Date NOW 10"23"	Press UP or DOWN Keys to set Day.
9		Month/Date NOW 1023	Press Set Key, and current date will be displayed.
10		31/10/2012 12:"34 T 567890	Press END Key to return to normal operation.

- The sign (" ") means flickering.

5 CONTROLLER

5-5 MODE KEY OPERATIONS

Set Year (2 – 07)

Procedure	Key	Indication	Operation
1		Selection Mode "1"-01	Press Mode Key.
2		School Timer "2"-01	Press UP or DOWN Key to select mode number 2.
3		School Timer 2"-01"	Press Set Key.
4		Year NOW 2"-07"	Press UP or DOWN Key to select function number 7.
5		Year NOW "2011"	Press Set Key.
6		Year NOW "2012"	Press UP or DOWN Key to set Year.
7		Year NOW 2012	Press Set Key, and current year will be displayed.
8		31/10/2012 12:"34 T 567890	Press END Key to return to normal operation.

• The sign (" ") means flickering.

Lighting Management Mode Setting (3 – 01)

Procedure	Key	Indication	Operation
1		Selection Mode "1"-01	Press Mode Key.
2		Light Management "3"-01	Press UP or DOWN Key to select mode number 3.
3		Light Management 3"-01"	Press Set Key.
4		Light Management Lighting PRI "1"	Press Set Key again.
5		Light Management Off PRI "0"	Press UP or DOWN Key to select setting. (See denotation below.)
6		Light Management Off PRI 0	Press Set Key.
7		31/10/2012 12:"34 T 567890	Press END Key to return to normal operation.

• Available settings:

0: Off PRI = Lights will stay off during light saving hours regardless of darkness.

1: Lighting PRI = Lights will turn on even during light saving hours when it gets dark.

2: Only Timer = Disables daylight sensor, and controls the lighting only by timer.

3: Only Sensor = Disables timer, and controls the lighting only by daylight sensor.

4: Timer PRI = Lights will be turned off only during light saving hours.

However, daylight sensor will be enabled when start time and end

time of light saving hour is set to same time.

NOTE: Set "Lighting Setting" switch to "AUTO".

• The sign (" ") means flickering.

Daylight Sensor Sensitivity Setting (3 – 02)

Procedure	Key	Indication	Operation
1		Selection Mode "1"-01	Press Mode Key.
2		Light Management "3"-01	Press UP or DOWN Key to select mode number 3.
3		Light Management 3"-01"	Press Set Key.
4		Daylight Sensor 3"-02"	Press UP or DOWN Key to select function number 2.
5		Daylight Sensor Early "4"	Press Set Key.
6		Daylight Sensor Latest "1"	Press UP or DOWN Key to select setting.
7		Daylight Sensor Latest 1	Press Set Key to confirm setting.
8		31/10/2012 12:"34 T 567890	Press END Key to return to normal operation.

• The sign (" ") means flickering.

• Available settings

1= Latest

2= Late

3= Intermediate

4= Early

5= Earliest

Set Counter per Groups (3 – 03)

(This function may not be available depending on the model.)

Procedure	Key	Indication	Operation
1		Selection Mode "1"-01	Press Mode Key.
2		Light Management "3"-01	Press UP or DOWN Key to select mode number 3.
3		Light Management 3"-01"	Press Set Key.
4		Count per Group 3"-03"	Press UP or DOWN Key to select function number 3.
5		Count per Group Group "1"	Press Set Key.
6		Count per Group Group "2"	Press UP or DOWN Key to select group.
7		Count per Group Group "2"	Selection button of the columns belonging to this group will illuminate. Add or remove from the group by pressing the selection button.
8		Count per Group Group "3"	Press UP or DOWN Key to move on to next group.
9		31/10/2012 12:"34 T 567890	Press END Key to return to normal operation.

• Counter per pricings will be disabled when counter per groups is set.









• Up to 10 counters could be set up.

• The sign (" ") means flickering.

5 CONTROLLER











5-5 MODE KEY OPERATIONS

Selection Button Illumination Pattern (3 – 30)

Procedure	Key	Indication	Operation
1		Selection Mode *1*-01	Press Mode Key.
2		Light Management *3*-01	Press UP or DOWN Key to select mode number 3.
3		Light Management 3-01	Press Set Key.
4		Illumination MD 3-30	Press UP or DOWN Key to select function number 30.
5		Illumination MD OFF 0	Press Set Key.
6		Illumination MD Pattern 1	Press UP or DOWN Key to select desired setting.
7		Illumination MD Pattern 1	Press Set Key to confirm setting.
8		10/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Illumination will be enabled under following conditions:
 - Selection button illumination pattern is set to "0".
 - Selection button illumination hours are set to "0000" or hours out of preset illumination hours.
 - Out of service.
 - Door opened.
- The sign (" ") means flickering.

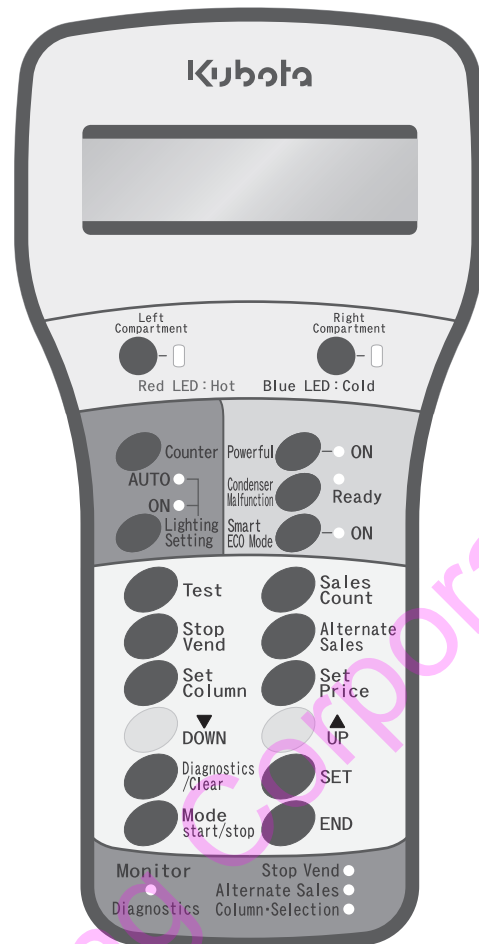
Selection Button Illumination Hours (3 – 31)

Procedure	Key	Indication	Operation
1		Selection Mode *1*-01	Press Mode Key.
2		Light Management *3*-01	Press UP or DOWN Key to select mode number 3.
3		Light Management 3-01	Press Set Key.
4		Illumination TM 3-31	Press UP or DOWN Key to select function number 31.
5		Illumination TM *00*00	Press Set Key.
6		Illumination TM *08*00	Press UP or DOWN Key to select illumination beginning hour. (Upper 2 digits are the beginning hour.)
7		Illumination TM 08*00	Press Set Key to confirm setting.
8		Illumination TM 08*17	Press UP or DOWN Key to select illumination ending hour. (Lower 2 digits are the ending hour.)
9		Illumination TM 0817	Press Set Key to confirm setting.
10		10/10/2012 12:34 T 567890	Press END Key to return to normal operation.

- Selectable hours are from 0 – 24.
- When beginning and ending hours are set at similar time (e.g. 0024) illumination will be consistently turned on.
- Illumination will not turn on at following conditions:
 - Selection button illumination setting is set in "0".
 - Selection button illumination hours are set in "0000" or hours out of preset illumination hours.
 - Out of service.
 - Door opened.
- The sign (" ") means flickering.

5 CONTROLLER

5-6 RAM CLEAR • ADJUST MACHINE CODE



1. 『 Test 』 Press the button 'Test' 5 times, it will be displayed 99 on the digital display.
 2. 『 SET 』 Press the button 'SET'.
 3. 『▲ UP』 『▼ DOWN』 Press the button 'UP' 'DOWN', it will be displayed Machine Code on the digital display.
 - Machine code is Serial Production Number (9 digits) of the 4 digit.
 - KB-GS20-S-NE machine code 9633.
 - KB-GS30-S-NE machine code 9838.
 - KB-GS24-S-NE machine code 6394.
 4. 『 Diagnostics / Clear 』 Press the button 'Diagnostic/Clear' continuously (more than 2 minutes).
 - Reset Vending Machine will operate.
 5. Manufacture setting will be re-setting.
- <ATTENTION>
 Control Setting Price, Set Time, and other will reset.
 Count Total Vend will be reset.
 Set Selection Button of Goods Products cleared.
 Reset current Hour, Day, Month, Year

5 CONTROLLER

5-7 LIST OF ERRORS CODE

When Error or Disturbance occurs, error code will be indicated on digital display.

Related	Error codes	Meaning
Coin Mechanism (Option)	10	Coin-mech communication error
	11	Acceptor jammed error
	15	Return switch error
	16	Coin payout failure
	17	Safety switch error
	18	Pulse switch error
	19	Acceptor error
	20	Tube sensor error
	25	Coin sensor error
	26	Sensor A error
	27	Sensor B error
Vending system	28	Sensor C error
	34	Selection switch error
	38	Vending management error
Memory	41	Dispensing motor failure
	50	Clock data error
	51	Memory data error
	53	Invalid model assignment
Communications	54	Selection button settings error
	61	Selection indicator communication error
	62	Product delivery unit communication error
	64	Printer communication error
	67	Keyboard unit communication error
	71	Bill validator communication error
Bill Validator	73	Card unit communication error
	80	Jammed notes
	81	Bill dispensing error
	82	Cashbox full
	83	Stacker error
	84	Identifier error
	85	Safety switch error
	86	Cashbox unlocked
Cooling and heating system	87	Bill extracted
	90	Cooling unit failure
	91	Heating unit failure
	96	Door switch error
	500	Clogged condenser warning
	501	HOT / COLD setting error
	502	Compartment 1 fan failure
	503	Compartment 2 fan failure
	504	Compartment 3 fan failure
	505	Compartment 4 fan failure
	506	Condenser Fan Failure
	550	Condenser thermistor error
	552	External thermistor error
	555	Compartment 1 evaporator thermistor error
	560	Compartment 2 evaporator thermistor error
	565	Compartment 3 evaporator thermistor error
	559	Compartment 1 thermistor error
	564	Compartment 2 thermistor error
	569	Compartment 3 thermistor error
	574	Compartment 4 thermistor error
557	Compartment 1 delivery thermistor error	
562	Compartment 2 delivery thermistor error	
567	Compartment 3 delivery thermistor error	
572	Compartment 4 delivery thermistor error	

【ATTENTION IF PROBLEM OCCUR】

- Please read this manual to fix any trouble or damage
- Turn power off while inspection or replacing place
- There are codes unused in certain models

6 ERROR CODE AND CORRECTIVE ACTIONS

Related	Error codes	Occurring Error	Check point	Action	Recovery verification	Sold-out columns
Coin Mechanism (Option)	10	Coin-mech communication error	Check harness and connectors for disconnection.	Reconnect harness. If there seems to be no problem, replace the coin mech.	Insert coin of all types, check for correct reading. Insert coin of all types, operate coin return lever, check correct payout.	All Columns
	11	Acceptor jammed error	Check coin selector for jammed coin.	Remove jammed coin. If there seems to be no problem, replace the selector or coin mech.		
	15	Return switch error	Coin return lever stuck.	If there seems to be no problem, replace the coin mech.		
	16	Coin payout failure	Check payout area for jammed coin.	Remove jammed coin. If there seems to be no jam, replace the coin mech.		
	17	Safety switch error	Check that coin tube cassette is installed correctly.	Reinstall coin tube cassette in correct position. If there seems to be no problem, replace the coin mech.		
	18	Pulse switch error	Check payout area for jammed coin.	Remove jammed coin. If there seems to be no jam, replace the coin mech.		
	19	Acceptor error	Check that coin selector is in correct position.	Secure coin selector in correct position. If there seems to be no problem, replace the coin mech.		
	20	Tube sensor error	Check coin tube sensor.	If there seems to be no problem, replace the coin mech.		
	25	Coin sensor error	Check coin selector for jammed coin. Inspect coin selector.	If there seems to be no problem, replace the selector or coin mech.		
	26	Sensor A error				
27	Sensor B error					
28	Sensor C error					
Vending system	34	Selection switch error	Check for stuck selection button with sold-out.	If there seems to be no problem, replace the selection button.	Similar error shall not occur within 1 minute after correction.	Corresponding Column
	38	Vending management error	Check delivery and vend mechanism.	If there seems to be no problem, replace the component.	Conduct test vend.	
	41	Dispensing motor failure				
Memory	50	Clock data error	Check current time setting on the keyboard.	Reset current time setting.	Check current time setting on the keyboard.	-
	51	Memory data error	Check data on the keyboard.	Reset all data.	Check all data on the keyboard.	All Columns
	53	Invalid model assignment	Check model code setting.	Set correct model code.	Check space to sales setting by test vending.	-
	54	Selection button settings error	Check for column not assigned to any selection button.	Redo space to sales setting.		

6 ERROR CODES AND CORRECTIVE ACTIONS

Related	Error codes	Occurring Error	Check point	Action	Recovery verification	Sold-out columns
Communications	61	Selection indicator communication error	Check slave control board. Check harness and connectors for disconnection.	If there seems to be no problem, replace the slave control board.	Test vend by coins.	All Columns
	62	Product delivery unit communication error				
	64	Printer communication error	Check printer connector for disconnection.	If there seems to be no problem, replace the printer.	Operate printer.	-
	67	Keyboard unit communication error	Check keyboard connector for disconnection.	If there seems to be no problem, replace the keyboard.	Check keyboard function and display.	
	71	Bill validator communication error	Check harness and connectors for disconnection.	Reconnect harness. If there seems to be no problem, replace the bill validator or card unit.	Test if the bill or card could be properly accepted, returned and vend.	
	73	Card unit communication error				
Bill Validator	80	Jammed bill	Check for jammed bill.	Remove jammed bill.	Check if the bill could be properly accepted and returned. Error code cleared.	-
	81	Bill dispensing error				
	82	Cashbox full	Empty the cashbox.	Collect bill.		
	83	Stacker error	Check that stacker lid is closed correctly.	Close the lid.		
	84	Identifier error	Check for jammed bill.	Remove jammed bill.		
	85	Safety switch error	Check condition of the identifier.	Close back lid of the identifier.		
	86	Cashbox unlocked	Check that cashbox lid is closed correctly.	Close the lid.		
	87	Bill extracted	Detected bill extraction, check for jammed bill.	Leave it for 30 minutes, or open and shut the lid.		
Cooling and heating system	90	Cooling unit failure	Check slave control board connector for disconnection. Check refrigeration unit.	If there seems to be no problem, replace the slave control board or refrigeration unit.	Similar error shall not occur within two days after correction.	Corresponding Column
	91	Heating unit failure	Check slave control board connector for disconnection. Check heating unit.	If there seems to be no problem, replace the slave control board or heating unit.	Similar error shall not occur within a day after correction.	
	96	Door switch error	Check main door switch.	If there seems to be no problem, replace the main door switch.	Error code shall respond to opening and closing of the door.	-
	500	Clogged condenser warning	Check condition of the condenser.	Clean the condenser.	Clear error code by pressing Diagnostics/Clear key on the keyboard, or press Condenser Malfunction key.	

6 ERROR CODE AND CORRECTIVE ACTIONS

Related	Error codes	Occurring Error	Check point	Action	Recovery verification	Sold-out columns
Cooling and heating system	501	HOT / COLD setting error	Check HOT/COLD selection switch. Check harness and connectors for disconnection.	Redo setting correctly. Reconnect harness.	Error code cleared.	-
	502	Compartment 1 fan failure	Check compartment 1 fan motor.	Reconnect harness.		
	503	Compartment 2 fan failure	Check compartment 2 fan motor.	If there seems to be no problem, replace fan motor.		
	504	Compartment 3 fan failure	Check compartment 3 fan motor.	(CAUTION: Always reset the machine by switching the power ON/OFF after corrective action.)		
	505	Compartment 4 fan failure	Check compartment 4 fan motor.			
	506	Condenser Fan Failure	Check condenser fan motor.			
	550	Condenser thermistor error	Check condenser thermistor connector for disconnection.			
	552	External thermistor error	Check condenser external thermistor connector for disconnection.			
	555	Compartment 1 evaporator thermistor error	Check compartment 1 evaporator thermistor connector for disconnection.	Reconnect harness.		
	560	Compartment 2 evaporator thermistor error	Check compartment 2 evaporator thermistor connector for disconnection.	If there seems to be no problem, replace the thermistor.		
	565	Compartment 3 evaporator thermistor error	Check compartment 3 evaporator thermistor connector for disconnection.	(CAUTION: Always reset the machine by switching the power ON/OFF after corrective action.)		
	559	Compartment 1 thermistor error	Check compartment 1 thermistor connector for disconnection.			
	564	Compartment 2 thermistor error	Check compartment 2 thermistor connector for disconnection.			
	569	Compartment 3 thermistor error	Check compartment 3 thermistor connector for disconnection.			
	574	Compartment 4 thermistor error	Check compartment 4 thermistor connector for disconnection.			
	557	Compartment 1 delivery thermistor error	Check compartment 1 delivery thermistor connector for disconnection.	Reconnect harness.		
	562	Compartment 2 delivery thermistor error	Check compartment 2 delivery thermistor connector for disconnection.	If there seems to be no problem, replace the thermistor.		
	567	Compartment 3 delivery thermistor error	Check compartment 3 delivery thermistor connector for disconnection.	(CAUTION: Always reset the machine by switching the power ON/OFF after corrective action.)		
572	Compartment 4 delivery thermistor error	Check compartment 4 delivery thermistor connector for disconnection.				

7 HOW TO REMOVE UNIT

7-2 TO REMOVE RACK UNIT

Attention when removing unit on machine.

To avoid machine tip over when opening door, set pads on bottom of the door. (See Fig.)



ATTENTION!
Set pads to avoid machine tip over.

Some steps to remove rack unit, as follow:

1. Open inner door



Fig 1. Open inner door
To open inner door, lift and slide lever
(inner door lock)



Fig 2. Remove inner door
To remove inner door, lift inner door up
to hinge dislodge (inner door)

2. Remove bracket rack unit

Step to remove bracket rack unit left and right compartment, as follow:

- A. Remove bracket right compartment (KR535)

1. Remove each screw on right bracket (see Fig. 3a)
2. Remove each screw on left bracket (see Fig. 3b)
3. Draw out and remove bracket hook (see Fig. 3c)



Fig 3a. Remove bracket screw KR535



Fig 3b. Remove bracket screw KR535

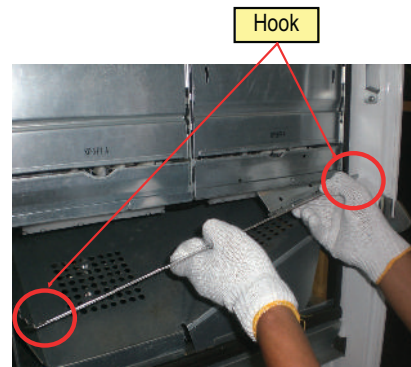


Fig 3c. Remove bracket KR535

7 HOW TO REMOVE UNIT

7-2 TO REMOVE RACK UNIT

B. Remove bracket left compartment (KL407)

1. Remove each screw on right compartment (see Fig. 4a)
2. Remove each screw on left compartment (see Fig. 4b)
3. Draw out and remove bracket hook (see Fig. 4c)



Fig 4a. Remove bracket screw KL407



Fig 4b. Remove bracket screw KL407

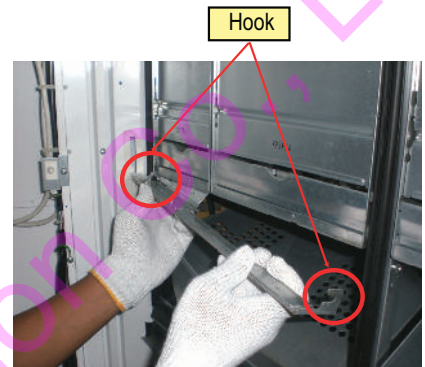


Fig 4c. Remove bracket KL407

3. Remove rack harness cable

Remove red connector (right side) and white connector (left side), see Fig. 5a and 5b.
Make sure every connectors rack harness on each unit rack unconnected.

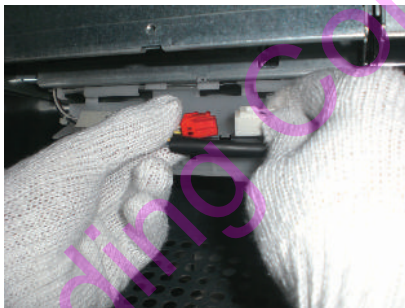


Fig 5a. Remove rack harness cable



Fig 5b. Remove rack harness cable

4. Remove loading guide

Next step is to remove every loading guide which installed on rack unit.
How to remove see Fig. 6a and 6b



Fig 6a. Remove left loading guide



Fig 6b. Remove right loading guide

7 HOW TO REMOVE UNIT

7-2 TO REMOVE RACK UNIT

5. Remove rack unit

To avoid work accident, always use prescribed safety equipment standards, may cause scratch. When removing rack unit, please note the part that must be held (see Fig. 7a).



Fig 7a. Remove rack unit (lift and draw out rack unit from rack rail).

CONDITION OF COMPARTMENT AFTER RACK UNIT REMOVED



Fig 7b. Condition of compartment after rack unit removed.

7 HOW TO REMOVE UNIT

7-3 TO REMOVE VEND MECH

Some steps to remove vend mech, as below

1. Remove harness cover

To remove vend mech, settle rack unit horizontally on flat spaces. Remove harness cover by draw lock (see Fig. 8a). Then, slide to left side and draw out until harness cover removed (see Fig. 8b).



Fig 8a. Remove lock of harness cover

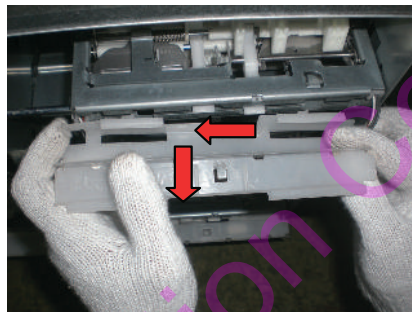


Fig 8b. Remove harness cover

2. Remove vend mech

To remove vend mech, push lock vend mech till vend mech removed from outer shaft (see Fig. 9a). Then, draw out vend mech (see Fig. 9b).

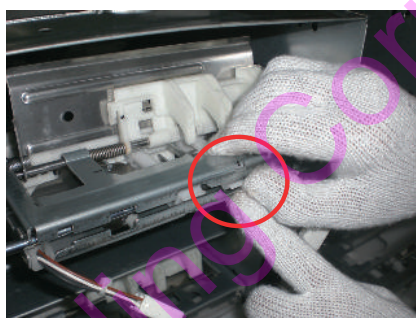


Fig 9a. Remove vend mech



Fig 9b. Remove vend mech

3. Replace vend mech

To replace vend mech, insert vend mech and make sure it in right position (see Fig. 10a).

Make sure forepart of vend mech locked with inner shaft (see Fig. 10b).

Push vend mech in order to lock with outer shaft (see Fig. 10c).

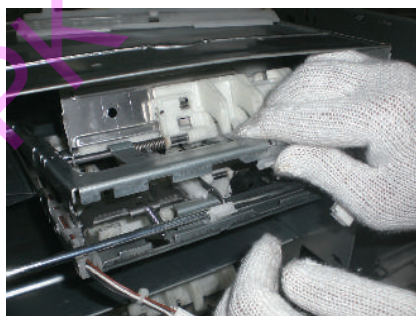


Fig 10a. set vend mech

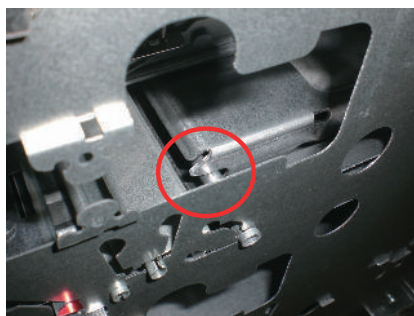


Fig 10b. set vend mech

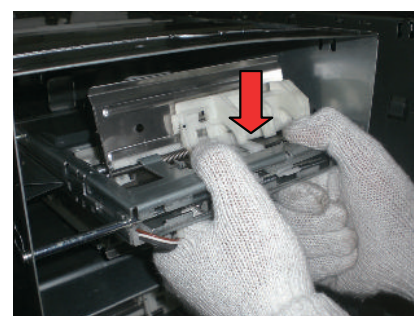


Fig 10c. set vend mech

7 HOW TO REMOVE UNIT

7-5 TO REMOVE REFRIGERATION UNIT

Some steps to remove refrigeration unit, as below

1. Remove chute

A. Right side chute

Before remove refrigeration unit, first step is remove chute.

To remove chute, remove lock chute screw (see Fig. 11a). Then, lift and draw out chute (see Fig. 11b).



Fig 11a. Remove right side chute

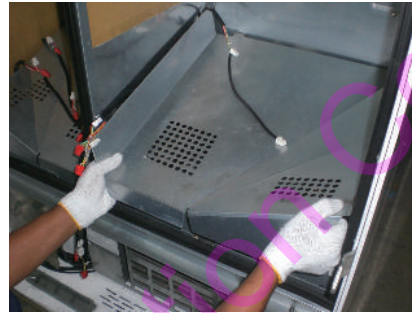


Fig 11b. Remove right side chute

B. Left side chute

Same with right side chute, to remove left side chute, remove lock chute screw first (see Fig. 12a).

Then, lift and draw out chute (see Fig. 12b).



Fig 12a. Remove left side chute



Fig 12b. Remove left side chute

2. Compartment condition

After chute removed, compartment condition as shown as below



Fig 13a. Compartment condition after chute removed.



Fig 13b. Overall compartment condition after chute removed.

7 HOW TO REMOVE UNIT

7-5 TO REMOVE REFRIGERATION UNIT

3. Remove connector fan and connector heater

In fan parts, there are two connectors have to be removed, such as fan connector (see Fig. 14a) and sensor temperature connector (see Fig. 14b). Then, remove clip harness cable (see Fig. 14c) and heater connector (see Fig. 14d).

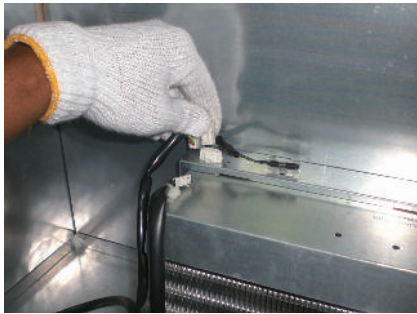


Fig 14a. Remove fan connector.



Fig 14b. Remove sensor temperature connector.

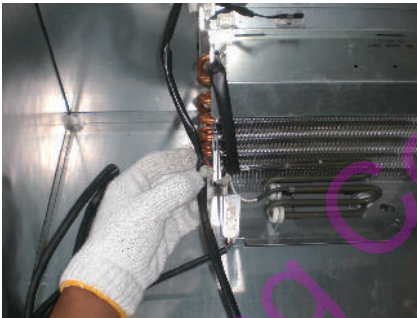


Fig 14c. Remove clip harness cable.



Fig 14d. Remove heater connector.

4. Remove drain tower trim

Remove three lock screws of drain tower trim (see Fig. 15a)
Then, draw out drain lower trim for removing (see Fig. 15b).



Fig 15a. Remove drain lower trim



Fig 15b. Remove drain lower trim

7 HOW TO REMOVE UNIT

7-5 TO REMOVE REFRIGERATION UNIT

5. Remove harness connector condenser

Remove harness connector condenser which connected with power relay (see Fig. 16a and 16b).



Fig 16a. Remove harness condenser



Fig 16b. Remove harness condenser

6. Remove heater bracket and evaporator

Remove lock screws of heater bracket (see Fig. 17a).

After removed, slide to left side evaporator then draw out till evaporator removed from fan cover (see Fig. 17b).
By same step, do it to left side.

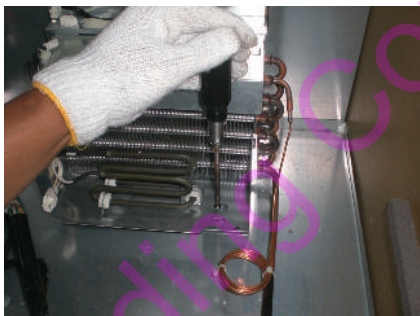


Fig 17a. Remove heater bracket

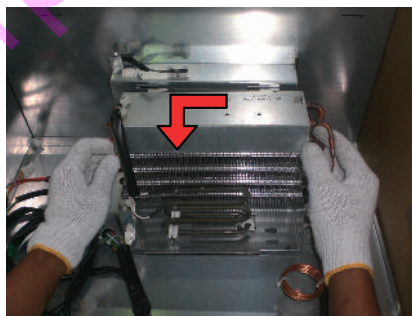


Fig 17b. Remove evaporator

7. Remove sponge and plate condenser guard

After evaporator removed, then remove sponge (pipe pads) and plate condenser guard.



Fig 18a. Remove sponge and plate condenser guard

7 HOW TO REMOVE UNIT

7-5 TO REMOVE REFRIGERATION UNIT

8. Remove refrigeration unit

Remove two screws on refrigeration unit (see Fig. 19a).



Fig 19a. Remove screws of refrigeration unit

Then, after screw removed, draw out refrigeration unit.

Be careful when transporting due to weight, need two persons to do this work (see Fig. 20a).



Fig 20a. Remove and take refrigeration unit

9. Settle refrigeration unit

For avoid damage, set refrigeration unit as shown as below

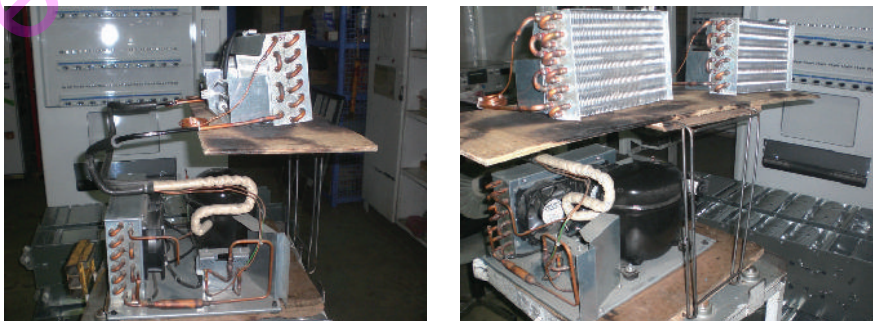


Fig 21a. Place to set refrigeration unit

7 HOW TO REMOVE UNIT

7-7 TO REMOVE POWER RELAY UNIT

Remove all connected connector; remove lock screw on box comp power relay. Then, draw out power relay for removing.

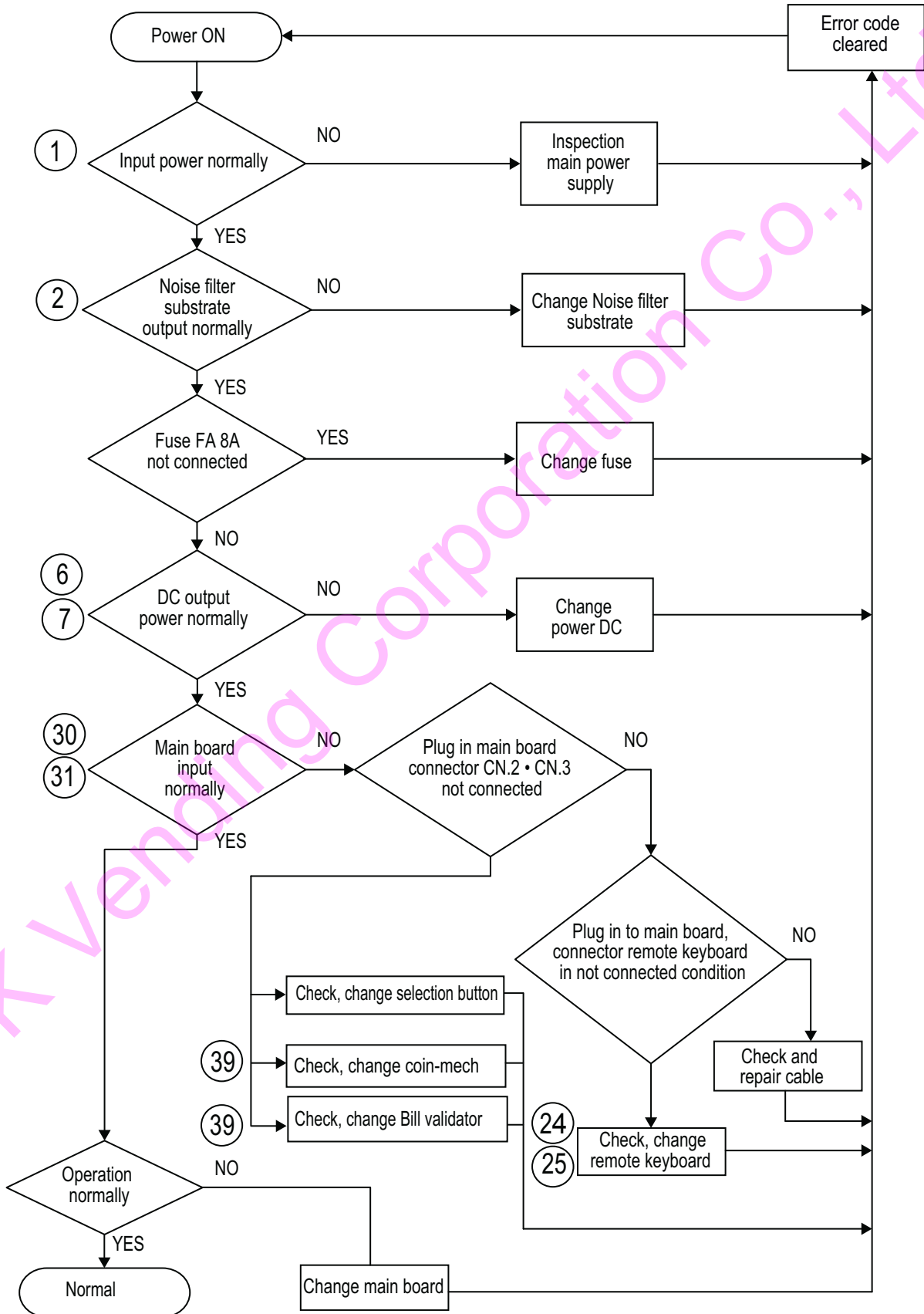


Fig 22a. Remove power relay unit

8 ERROR DIAGNOSE

8-1 SALES CONDITION STAND BY CONFIRMATION

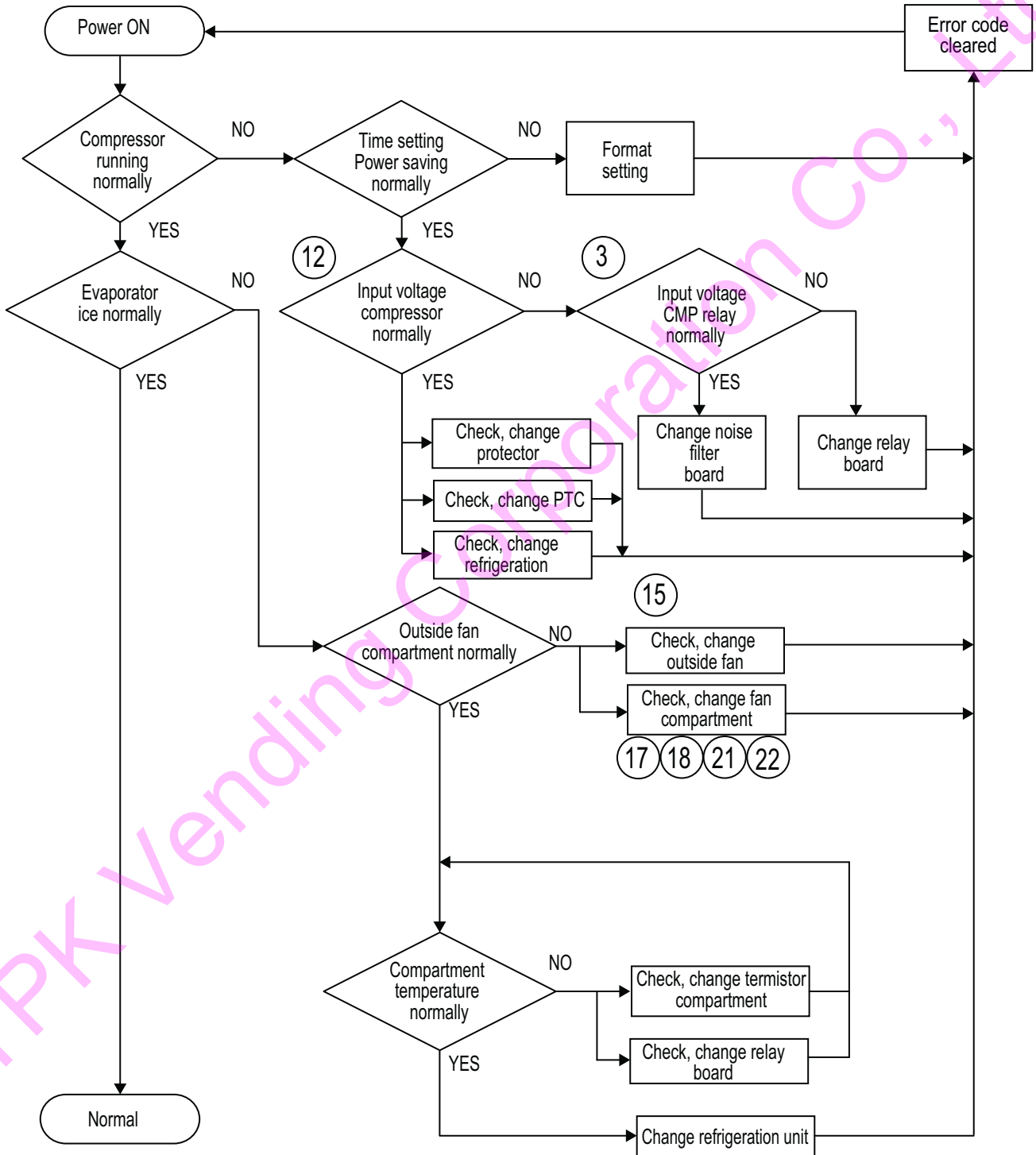
Instruction for trouble-shooting related on vending system.



8 ERROR DIAGNOSE

8-2 DIAGNOSE COOLING FUNCTION

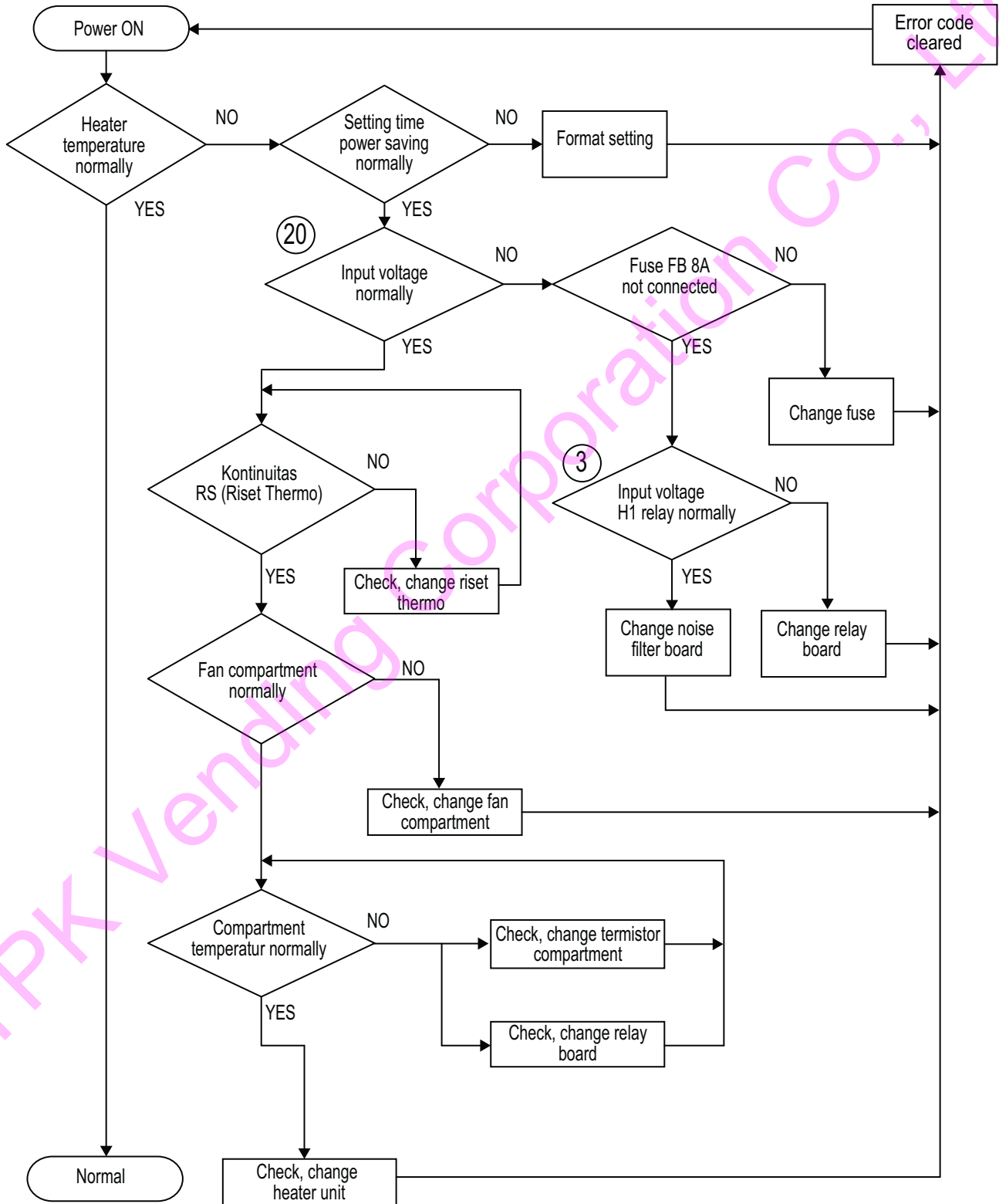
Instruction for trouble-shooting related on cooling unit.



8 ERROR DIAGNOSE

8-3 DIAGNOSE HEATING FUNCTION

Instruction for trouble-shooting related on heating unit.



8 ERROR DIAGNOSE

8-4 DIAGNOSE POINT

Instruction for trouble-shooting related on vending system, cooling unit and heating unit.

Flow No.	Description	Connector No.	Test Lead (+)	Test Lead (-)	Determination (Normal value)	Explanation (Destination)
①	Box Power Relay	CN. DG	1	2	AC220~240V	Noise filter board input (CN. IN)
②	Power (noise filter board)	CN. OUT	1	3	AC220~240V	Noise filter board output
③	Power (noise filter board)	CN.B	1	2	DC21.6~26.4V	CMP relay coil input
④	Power (noise filter board)	CN.B	1	3	DC21.6~26.4V	Heater relay coil input
⑤	DC Power board	CN. 1	1	3	AC220~240V	DC power input
⑥	DC Power board	CN. 2	2	6	DC21.6~26.4V	DC power output (tujuan relay board CN. 4)
⑦	DC Power board	CN. 2	4	6	DC7.6~8.4V	DC power output (tujuan relay board CN. 4)
⑧	Relay board	CN.4	1	8	DC21.6~26.4V	Relay board input
⑨	Relay board	CN.4	2	8	DC7.6~8.4V	Relay board input
⑩	Box Power Relay	CN. D2	1	6	DC21.6~26.4V	DC power output (tujuan keyboard•main board)
⑪	Box Power Relay	CN. D2	2	6	DC7.6~8.4V	DC power output (tujuan keyboard•main board)
⑫	Box Power Relay	CN. C	3	1	AC220~240V	Compressor (Refrigeration Unit)
⑬	Box Power Relay	CN. S	1	5	AC220~240V	Left compartment solenoid valve (Refrigeration unit)
⑭	Box Power Relay	CN. S	2	6	AC220~240V	Right compartment solenoid valve (Refrigeration unit)
⑮	Box Power Relay	CN. CF	1	2	DC21.6~26.4V	Condenser (Refrigeration unit)
⑯	Box Power Relay	CN. TH9	1	2	DC0~5.25V	Outside Thermistor (Refrigeration unit)
⑰	Left Compartment Fan Motor	CN. F1	1	2	DC21.6~26.4V	Left compartment fan motor output (Refrigeration unit)
⑱	Left Compartment Fan Motor	CN. F1	3	2	DC0~0.5V	Rotation signal (Operating)
⑲	Left Compartment Thermistor	CN. TH1	1	2	DC0~5.25V	Left compartment fan motor output (Refrigeration unit)
⑳	Left Compartment Heater	CN. H1	1	2	AC220~240V	Left compartment heating heater
㉑	Right Compartment Fan Motor	CN. F2	1	2	DC21.6~26.4V	Right compartment fan motor output (Refrigeration unit)
㉒	Right Compartment Fan Motor	CN. F2	3	2	DC0~0.5V	Rotation signal (Operating)
㉓	Right Compartment Thermistor	CN. TH2	1	2	DC0~5.25V	Right compartment thermistor output (Refrigeration unit)
㉔	Remote keyboard	CN. K	1	8	DC21.6~26.4V	Remote keyboard input
㉕	Remote keyboard	CN. K	2	8	DC7.6~8.4V	Remote keyboard input
㉖	LED Drive board	CN. 2	1	4	DC21.6~26.4V	LED drive board input (for signal)
㉗	LED Drive board	CN. 2	2	4	DC0~0.5V	LED output (waktu menyala OV)
㉘	LED Drive board	CN. 1	1	4	DC21.6~26.4V	LED drive board output
㉙	LED Drive board	CN. 1	3	4	DC21.6~26.4V	LED drive board input (LED power supply for driving)
㉚	Main board	CN. 1	13	15	DC21.6~26.4V	Main board input
㉛	Main board	CN. 1	14	15	DC7.6~8.4V	Main board input
㉜	Main board	CN. 1	8	15	DC0~0.5V	LED Drive board CN. 2 (waktu menyala OV)
㉝	Main board	CN. 3	20	22	DC21.6~26.4V	Main board output (tujuan MDB board CN.2•CN.3)
㉞	Main board	CN. 3	21	22	DC7.6~8.4V	Main board output (tujuan MDB board CN.2)
㉟	MDB-C board	CN. 2	20	22	DC21.6~26.4V	MDB board input (pemakaian nanti)
㊱	MDB-C board	CN. 2	21	22	DC7.6~8.4V	MDB board input
㊲	MDB-C board	CN. 3	1	2	DC21.6~26.4V	MDB board input (Coin-mech•Bill validator (power yang digunakan))
㊳	MDB-C board	CN. 6	1	2	DC21.6~26.4V	MDB board output (Coin-mech•Bill validator)
㊴	Coin-mech	CN. CO	1	2	DC21.6~26.4V	Coin-mech (Bill validator) input

9 CLEANING AND MAINTENANCE

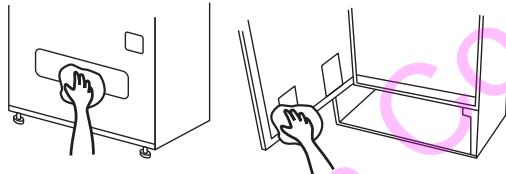
To keep machine life longer and clean, do maintenance properly.

■ Clean the case and door

- Please wipe with a soft cloth.
- If particularly dirty, use mild detergent or warm water, then wipe with a dry cloth.
- Do not use scouring powders, paint thinner, or any cleaning agent other than neutral detergent.
Use of unspecified detergent may cause damage on the painted surface or brake plastic parts.
- Do not apply water directly by hose or bucket. May cause failure.

■ Clean the delivery port

Keep clean, since it is where products come out.



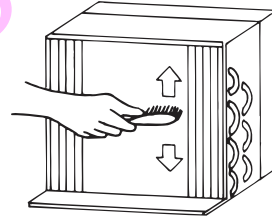
■ Clean the delivery chute

Clean up delivery chute periodically (once a month) using a wet cloth.



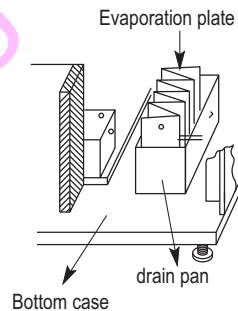
■ Cleaning the condenser

Dust and dirt on condenser worsens the ventilation and decrease the cooling performance.
Remove the dust periodically (once a month) using a brush or vacuum cleaner.



■ Cleaning the pan

Water in the drain pan (drain water) should be evaporated naturally.
Confirm the amount of drain water, and discard the water inside.



※ Replace evaporation plate, because it may become stale and performance may degrade.

■ Make sure remote keyboard in good function condition.

■ Check cooling temperature of goods, make sure cooling temperature of goods in accordance with arrangements.

■ Check Evaporator fan is running normally.

■ Check if there are strange voices unordinary. (example : condenser fan caught something, refrigeration unit appear strange noise)

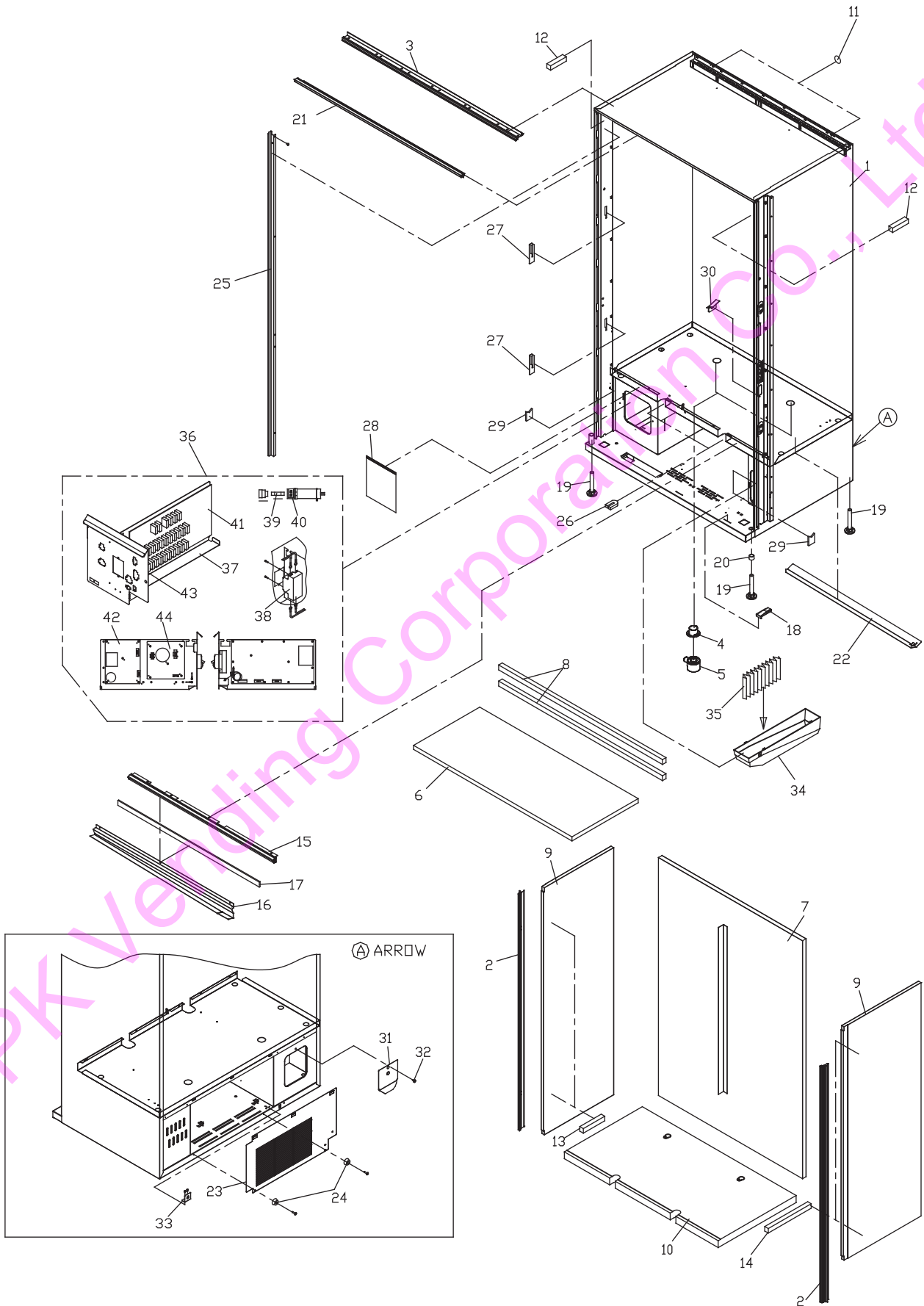
■ Clean bill validator.

■ After collected banknotes, check operation system bill validator in good function condition.

■ Perform test on machine and note every problems occurred.

10 PICTURE AND PART LIST

1. CASE PART



10 PICTURE AND PART LIST

1. CASE PART

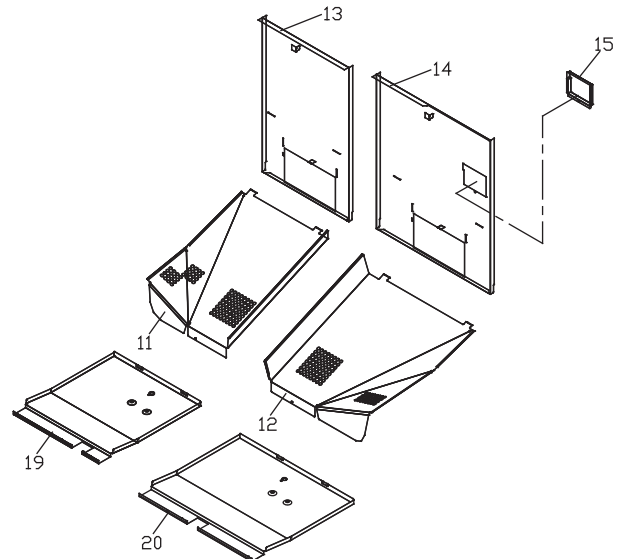
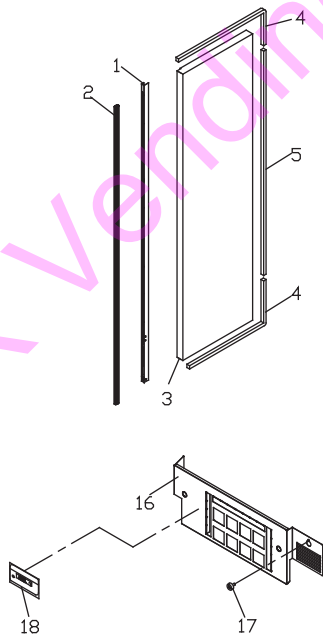
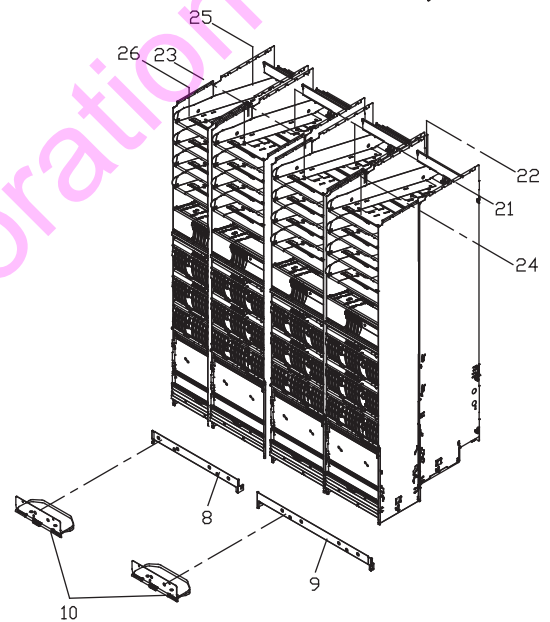
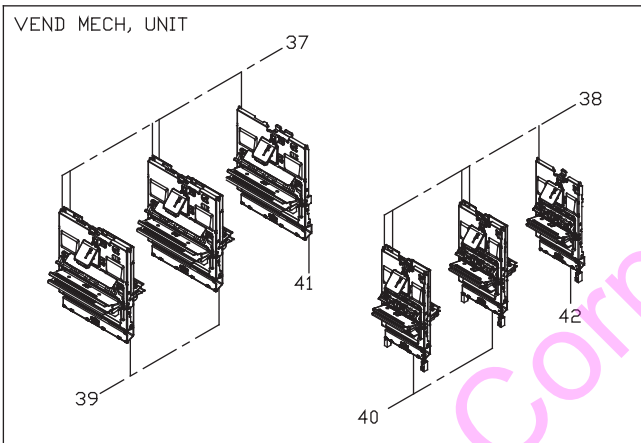
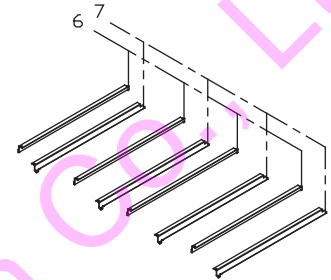
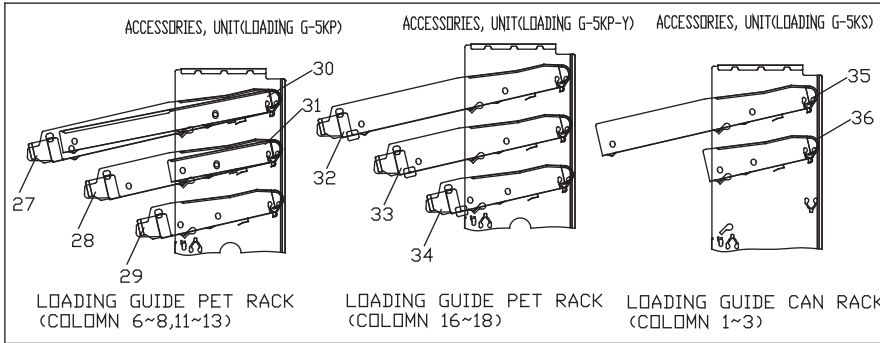
No.	PARTS NUMBER	KB-GS20-S	KB-GS30-S	KB-GS24-S	PARTS NAME
1	3B82-70447-00	1	-	-	PAINTED CASE
	3B82-71487-00	-	1	-	PAINTED CASE
	3B82-74265-00	-	-	1	PAINTED CASE
2	3092-27818-00	2	2	2	TRIM(AA SIDE INNER BOX 1413.5)
3	3092-37429-00	1	-	-	TRIM(AB UP INNER BOX 955)
	3092-38298-00	-	1	-	TRIM(AB UP INNER BOX 1116)
	3092-51793-00	-	-	1	TRIM(AB UP INNER BOX 1116)
4	3093-19089-00	2	2	2	PAN(DRAIN)
5	3093-32849-00	2	2	2	COVER(DRAIN PAN)
6	3092-37350-00	1	-	-	INSULATION(TOP PANEL)
	3092-38119-00	-	1	1	INSULATION(TOP PANEL)
7	3092-37349-01	1	-	-	INSULATION, COMP(BACK PANEL)
	3092-38121-00	-	1	1	INSULATION, COMP(BACK PANEL)
8	3093-30958-00	2	-	-	INSULATION(UP BACK PANEL)
	3093-32193-00	-	2	2	INSULATION(UP BACK PANEL)
9	3092-37352-01	2	-	-	INSULATION(SIDE PANEL)
	3092-38122-00	-	2	2	INSULATION(SIDE PANEL)
10	3092-37400-00	1	-	-	INSULATION, COMP(BOTTOM PANEL)
	3092-38302-00	-	1	1	INSULATION, COMP(BOTTOM PANEL)
11	3043-29223-00	2	2	2	SCREW HOLE SEAL
12	3092-32641-00	2	2	2	SPONGE(12*12*25)
13	3092-39090-00	1	NOT USED	NOT USED	SPONGE(15*15*100)
14	3092-39091-00	1	NOT USED	NOT USED	SPONGE(15*15*200)
15	3092-37364-00	1	-	-	TRIM(P LOWER INNER BOX 961)
	3092-38314-00	-	1	1	TRIM(P LOWER INNER BOX 1122)
16	3093-32219-00	1	-	-	DRAIN(LOWER TRIM)
	3093-32388-00	-	1	1	DRAIN(LOWER TRIM)
17	3092-22717-00	0.95	1.15	1.15	SPONGE(6*30*1000)
18	3043-78448-03	1	1	1	DROP GUARD GUIDE
19	3093-40928-00	4	4	4	LEVELING SCREW(100)
20	3093-41097-00	1	1	1	SPACER(16*16)
21	3092-18320-00	1	-	-	PACKING(M UPPER CASE1002)
	3092-23330-00	-	1	1	PACKING(M UPPER CASE1163)
22	3093-32591-00	1	1	1	DRAIN(LOWER DRAIN PAN)
23	3093-37203-00	1	1	1	COVER(BACK)
24	3533-10422-00	2	2	2	C-30-RK-24 RUBBER LEG
25	3081-68543-00	1	1	NOT USED	PAINTED COVER(CASE PROTECTION -00419)
26	3092-32847-00	3	2	2	SPONGE(20*50*220)
27	3093-32850-00	2	2	2	SHEET(SCRATCH PROTECTION)
28	3093-39961-00	1	1	1	SHEET(WATER PROOF 260*250)
29	3092-32848-00	2	2	2	SPONGE(5*30V*40)
30	3093-32921-01	1	1	1	SUPPORT(INNER DOOR LEVER)
31	3093-32217-00	1	1	1	COVER(CORD CABINET)
32	3593-12047-00	1	1	1	PLASTIC POINT(TAPPING) M4*10
33	3093-37132-01	1	1	1	BRACKET(POWER CORD BUSH)
34	3093-17768-00	1	1	1	DRAIN PAN
35	3093-22165-00	1	1	1	EVAPORATION PLATE
36	3062-70377-01	1	-	-	BOX, SUB ASSY(POWER RELAY)
	3062-71140-01	-	1	-	BOX, SUB ASSY(POWER RELAY)
	3062-73405-01	-	-	1	BOX, SUB ASSY(POWER RELAY)
37	3062-70161-00	1	1	1	BOX,COMP(POWER RELAY)
38	3623-03036-00	1	1	1	NVL22MC ELB
39	3613-02384-00	2	2	2	FSL250V8 FUSE
40	3023-70386-00	2	2	2	FUSE LABEL(8A)
41	3513-11352-01	1	-	-	RELAY PCB20SC6GS
	3513-11367-01	-	1	1	RELAY PCB30SC6GS
42	3513-11351-00	1	1	1	ADR42G92WA POWER
43	3092-33235-00	1	1	1	SPONGE(20*50*130)
44	3513-11353-00	1	1	-	NOISE FILTER 2H2VGS
	3513-11553-00	-	-	1	NOISE FILTER 2H2VRFGS

10 PICTURE AND PART LIST

2. CASE·RACK PARTS KB-GS20-S

1	6	11	16
KSSR1A	KPSR1A	KP5R1A	KY5R1A
2	7	12	17
3	8	13	18
4	9	14	19
5	10	15	20
KSSF1A	KPSF1A	KP5F1A	KY5F1A

(Numbers indicate columns number)



10 PICTURE AND PART LIST

2. CASE·RACK PARTS KB-GS20-S

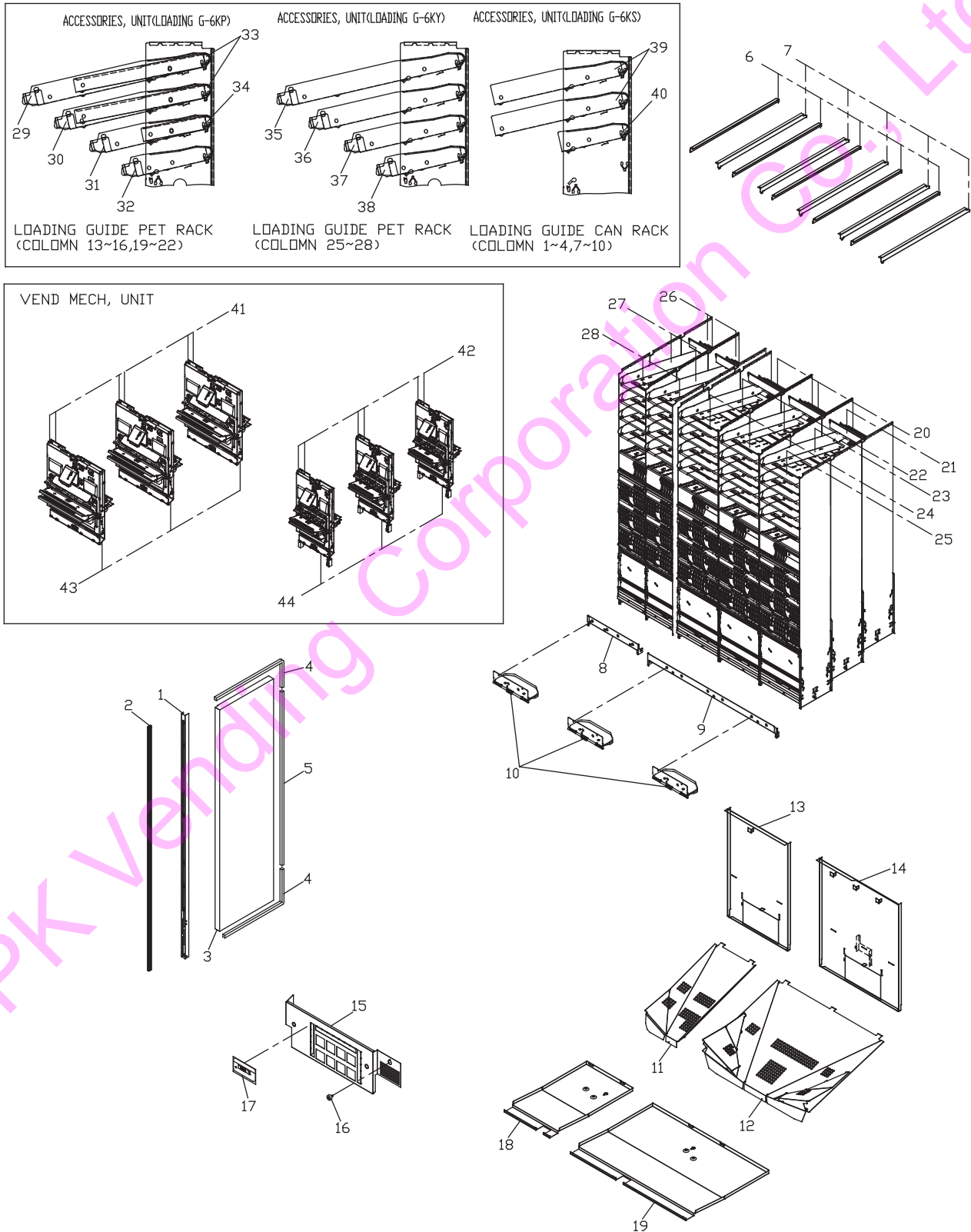
No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3093-32037-01	STAY(FRONT PLATE19)	1
2	3093-29686-00	GASKET(Y P-BOARD1413)	1
3	3092-38010-00	INSULATION, COMP(P-BOARD19)	1
4	3092-14368-00	SPONGE(12*12*2000)	1
5	3092-29865-00	SPONGE(12*10*1000)	1
6	3033-70458-00	RAIL(RACK5KL-G)	4
7	3033-70459-00	RAIL(RACK5KR-G)	4
8	3033-70460-00	BRACKET(KL407)	1
9	3033-70461-00	BRACKET(KR535)	1
10	3032-69097-02	RACK, ASSY(190FLAPPER)	2
11	3033-70463-00	CHUTE(5KL407)	1
12	3033-70464-01	CHUTE(5KR535)	1
13	3093-37594-00	DUCT(BACK PLATE405UG)	1
14	3093-37595-00	DUCT(BACK PLATE533GS)	1
15	3093-32369-00	COVER(DUCT VMP)	1
16	3093-37730-03	PLATE(CONDENSER GUARD)	1
17	3593-12047-00	PLASTIC POINT(TAPPING)M4*10	1
18	3023-69549-00	LABEL(CONDENSER GUARD HK)	1
19	3093-37347-00	INNER BOX(BOTTOM PLATE L)	1
20	3093-37348-00	INNER BOX(BOTTOM PLATE R)	1
21	3031-69887-00	RACK, UNIT(KP5R1A)	2
22	3031-70424-00	RACK, UNIT(KY5R1A)	1
23	3031-69888-00	RACK, UNIT(KP5F1A)	2
24	3031-70452-00	RACK, UNIT(KY5F1A)	1
25	3031-69893-00	RACK, UNIT(KS5R1A)	1
26	3031-69894-00	RACK, UNIT(KS5F1A)	1
27	3033-69569-02	RACK(LOADING GUIDE KEL)	2
28	3033-69570-02	RACK(LOADING GUIDE KDL)	2
29	3033-69571-03	RACK(LOADING GUIDE KCL)	2
30	3033-69574-03	RACK(LOADING GUIDE KER)	2
31	3033-69575-03	RACK(LOADING GUIDE KCR)	2
32	3033-69569-02	RACK(LOADING GUIDE KEL)	1
33	3033-69570-02	RACK(LOADING GUIDE KDL)	1
34	3033-69571-03	RACK(LOADING GUIDE KCL)	1
35	3033-69572-01	RACK(LOADING GUIDE KELN)	1
36	3033-69573-01	RACK(LOADING GUIDE KCLN)	1
37	3031-68466-00	VEND MECH, UNIT(KLP-C)	15
38	3031-68392-00	VEND MECH, UNIT(KLS3)	5
39	3033-66510-01	RACK(HARNESS COVER KLP)	6
40	3033-66511-01	RACK(HARNESS COVER KLS)	2
41	3033-64153-00	RACK(HARNESS COVER KQR)	3
42	3033-64154-00	RACK(HARNESS COVER KSR)	1

10 PICTURE AND PART LIST

2. CASE·RACK PARTS KB-GS30-S

KS6RIA-1	2	KS6RIA-7	8	KP6RIA-13	14	KP6RIA-19	20	KY6RIA-25	26
KS6MIA-3	4	KS6MIA-9	10	KP6MIA-15	16	KP6MIA-21	22	KY6MIA-27	28
KS6FIA-5	6	KS6FIA-11	12	KP6FIA-17	18	KP6FIA-23	24	KY6FIA-29	30

(Numbers indicate columns number)



10 PICTURE AND PART LIST

2. CASE·RACK PARTS KB-GS30-S

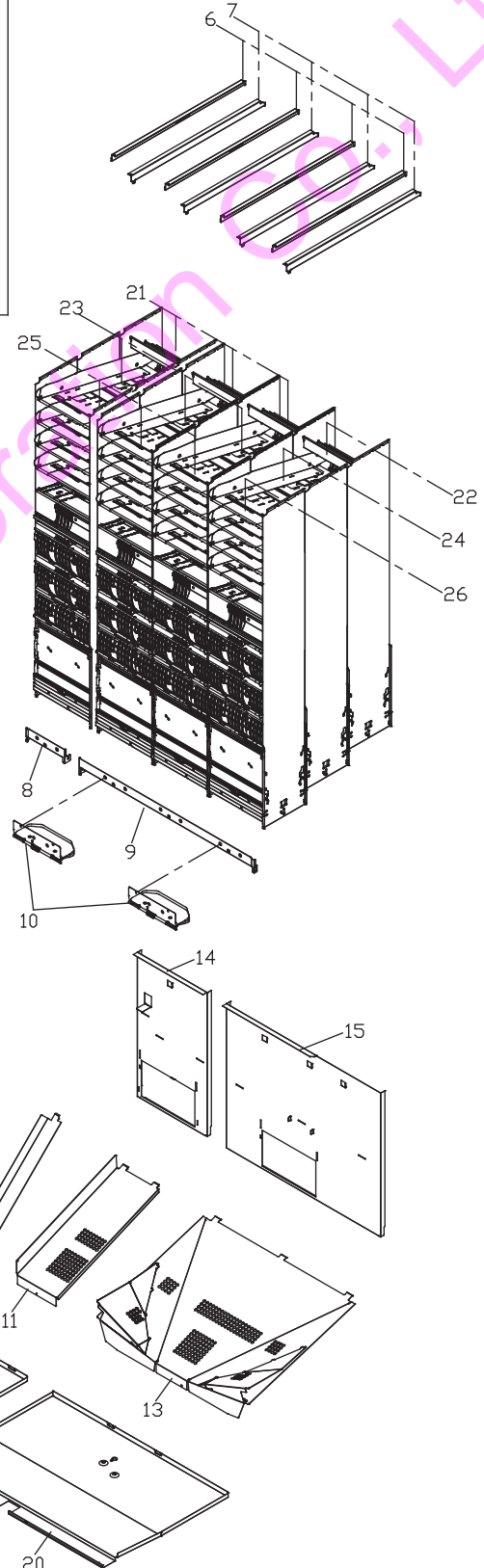
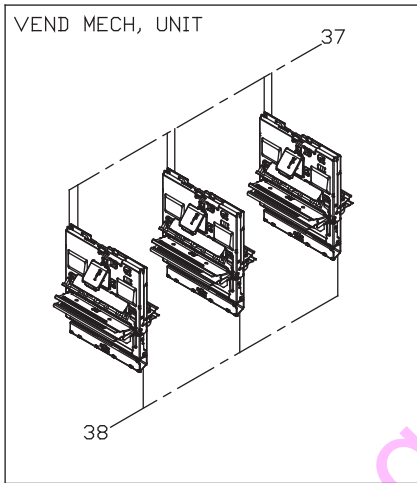
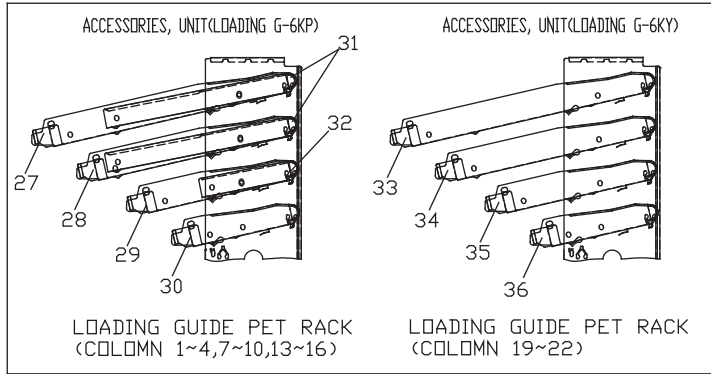
No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3093-32258-01	STAY(FRONT PLATE25)	1
2	3093-29686-00	GASKET(Y P-BOARD1413)	1
3	3092-38304-00	INSULATION, COMP(P-BOARD25)	1
4	3092-14368-00	SPONGE(12*12*2000)	1
5	3092-29865-00	SPONGE(12*10*1000)	1
6	3032-71117-00	RAIL, COMP(RACK6KL-G)	5
7	3032-71115-00	RAIL, COMP(RACK6KR-G)	5
8	3033-69675-00	BRACKET(KL311)	1
9	3033-70543-00	BRACKET(KR783)	1
10	3032-69097-02	RACK, ASSY(190FLAPPER)	3
11	3033-70545-00	CHUTE(6KL311)	1
12	3032-72119-00	CHUTE, ASSY(6KR783)	1
13	3093-38814-00	DUCT(BACK PLATE311GS)	1
14	3092-38815-00	DUCT, ASSY(BACK PLATE781GS)	1
15	3093-37730-03	PLATE(CONDENSER GUARD)	1
16	3593-12047-00	PLASTIC POINT(TAPPING)M4*10	1
17	3023-69549-00	LABEL(CONDENSER GUARD HK)	1
18	3093-38296-00	INNER BOX(BOTTOM PLATE L)	1
19	3093-38297-00	INNER BOX(BOTTOM PLATE R)	1
20	3031-69878-00	RACK, UNIT(KP6R1A)	2
21	3031-70590-00	RACK, UNIT(KY6R1A)	1
22	3031-69879-00	RACK, UNIT(KP6M1A)	2
23	3031-70591-00	RACK, UNIT(KY6M1A)	1
24	3031-69880-00	RACK, UNIT(KP6F1A)	2
25	3031-70592-00	RACK, UNIT(KY6F1A)	1
26	3031-69744-00	RACK, UNIT(KS6R1A)	2
27	3031-69745-00	RACK, UNIT(KS6M1A)	2
28	3031-69746-00	RACK, UNIT(KS6F1A)	2
29	3033-69568-02	RACK(LOADING GUIDE KFL)	2
30	3033-69569-02	RACK(LOADING GUIDE KEL)	2
31	3033-69570-02	RACK(LOADING GUIDE KDL)	2
32	3033-69571-03	RACK(LOADING GUIDE KCL)	2
33	3033-69574-03	RACK(LOADING GUIDE KER)	4
34	3033-69575-03	RACK(LOADING GUIDE KCR)	2
35	3033-69568-02	RACK(LOADING GUIDE KFL)	1
36	3033-69569-02	RACK(LOADING GUIDE KEL)	1
37	3033-69570-02	RACK(LOADING GUIDE KDL)	1
38	3033-69571-03	RACK(LOADING GUIDE KCL)	1
39	3033-69572-01	RACK(LOADING GUIDE KELN)	4
40	3033-69573-01	RACK(LOADING GUIDE KCLN)	2
41	3031-68466-00	VEND MECH, UNIT(KLP-C)	18
42	3031-68392-00	VEND MECH, UNIT(KLS3)	12
43	3033-66510-01	RACK(HARNESS COVER KLP)	9
44	3033-66511-01	RACK(HARNESS COVER KLS)	6

10 PICTURE AND PART LIST

2. CASE·RACK PARTS KB-GS24-S

KP6R1A	1	KP6R1A	7	KP6R1A	13	KY6R1A	19
	2		8		14		20
KP6M1A	3	KP6M1A	9	KP6M1A	15	KY6M1A	21
	4		10		16		22
KP6F1A	5	KP6F1A	11	KP6F1A	17	KY6F1A	23
	6		12		18		24

(Numbers indicate columns number)



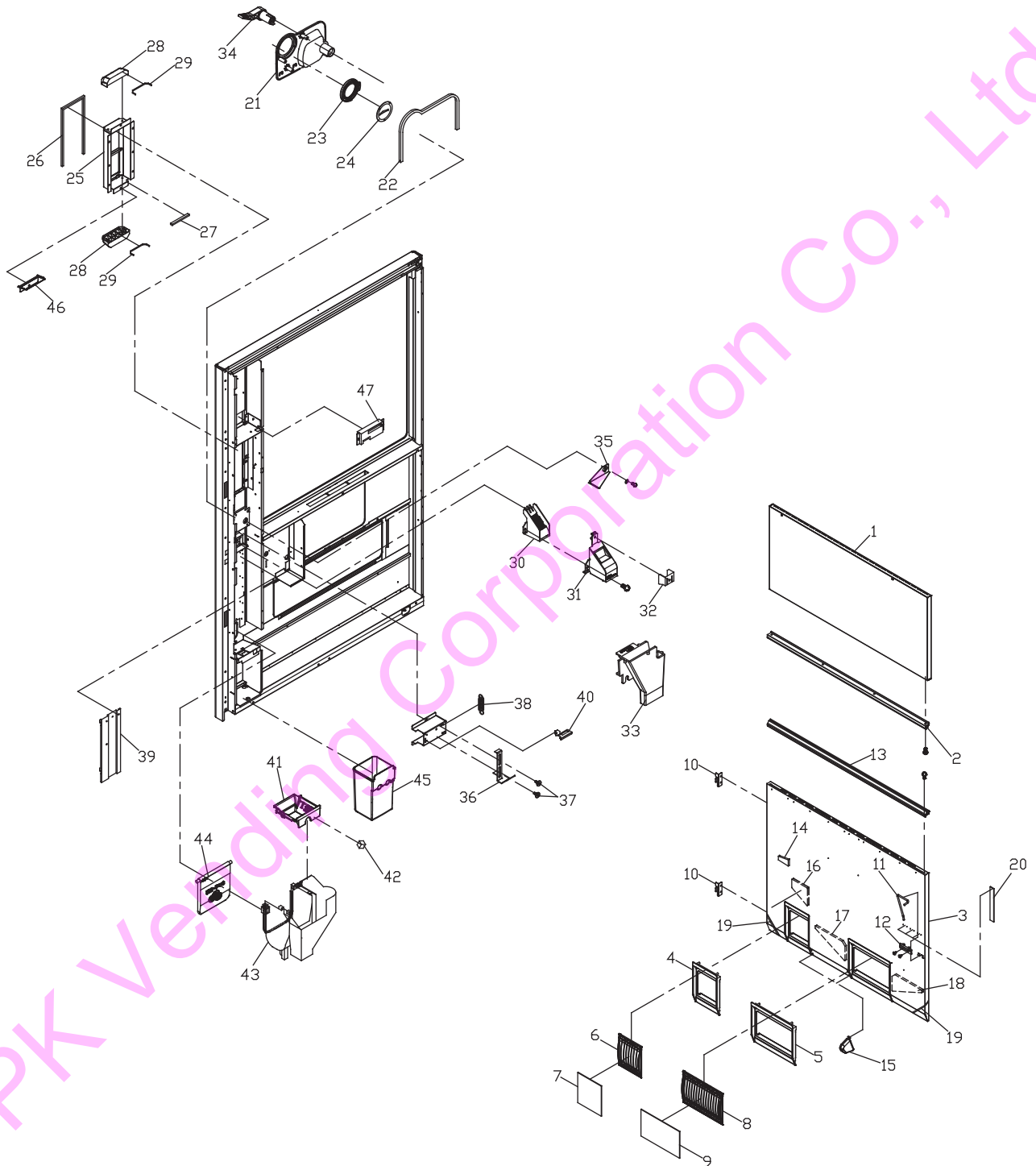
10 PICTURE AND PART LIST

2. CASE•RACK PARTS KB-GS24-S

No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3093-32258-01	STAY(FRONT PLATE25)	1
2	3093-29686-00	GASKET(Y P-BOARD1413)	1
3	3092-38304-00	INSULATION, COMP(P-BOARD25)	1
4	3092-14368-00	SPONGE(12*12*2000)	1
5	3092-29865-00	SPONGE(12*10*1000)	1
6	3032-71117-00	RAIL, COMP(RACK6KL-G)	4
7	3032-71115-00	RAIL, COMP(RACK6KR-G)	4
8	3033-71675-00	BRACKET(KL313-P1)	1
9	3033-70543-00	BRACKET(KR783)	1
10	3032-69097-02	RACK, ASSY(190FLAPPER)	2
11	3033-71822-00	CHUTE(6KL311-P1)	1
12	3093-51803-00	COVER(HARNESS)	1
13	3032-72119-00	CHUTE, ASSY(6KR783)	1
14	3093-51771-00	DUCT(BACK PLATE311GS)	1
15	3092-38815-00	DUCT, ASSY(BACK PLATE781GS)	1
16	3093-37730-03	PLATE(CONDENSER GUARD)	1
17	3593-12047-00	PLASTIC POINT(TAPPING)M4*10	1
18	3023-69549-00	LABEL(CONDENSER GUARD HK)	1
19	3093-51766-00	INNER BOX(BOTTOM PLATE L)	1
20	3093-38297-00	INNER BOX(BOTTOM PLATE R)	1
21	3031-69878-00	RACK, UNIT(KP6R1A)	3
22	3031-70590-00	RACK, UNIT(KY6R1A)	1
23	3031-69879-00	RACK, UNIT(KP6M1A)	3
24	3031-70591-00	RACK, UNIT(KY6M1A)	1
25	3031-69880-00	RACK, UNIT(KP6F1A)	3
26	3031-70592-00	RACK, UNIT(KY6F1A)	1
27	3033-69568-02	RACK(LOADING GUIDE KFL)	1*3
28	3033-69569-02	RACK(LOADING GUIDE KEL)	1*3
29	3033-69570-02	RACK(LOADING GUIDE KDL)	1*3
30	3033-69571-03	RACK(LOADING GUIDE KCL)	1*3
31	3033-69574-03	RACK(LOADING GUIDE KER)	2*3
32	3033-69575-03	RACK(LOADING GUIDE KCR)	1*3
33	3033-69568-02	RACK(LOADING GUIDE KFL)	1
34	3033-69569-02	RACK(LOADING GUIDE KEL)	1
35	3033-69570-02	RACK(LOADING GUIDE KDL)	1
36	3033-69571-03	RACK(LOADING GUIDE KCL)	1
37	3031-68466-00	VEND MECH, UNIT(KLP-C)	24
38	3033-66510-01	RACK(HARNESS COVER KLP)	3*4

10 PICTURE AND PART LIST

3. INNER DOOR • MONEY INSERT • RETURN SLOT PARTS KB-GS20S AND KB-GS30S



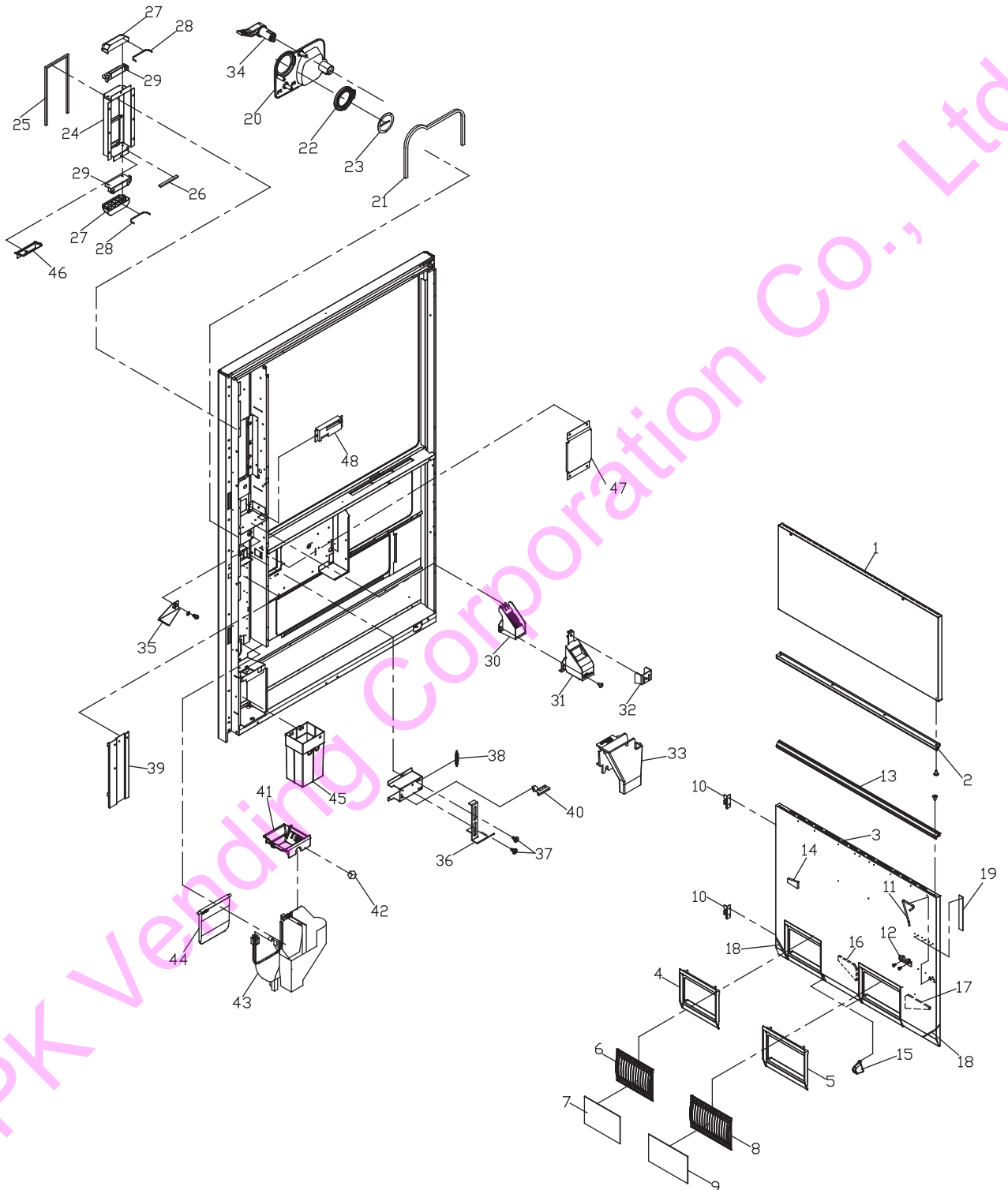
10 PICTURE AND PART LIST

3. INNER DOOR •MONEY INSERT•RETURN SLOT PARTS KB-GS20-S AND KB-GS30-S

No.	PARTS NUMBER	KB-GS20-S	KB-GS30-S	PARTS NAME
1	3092-38249-00	1	-	INNER DOOR, COMP(UP)
	3092-38123-00	-	1	INNER DOOR, COMP(UP)
2	3092-20826-03	1	-	GASKET(C INNER DOOR 952)
	3092-21327-03	-	1	GASKET(C INNER DOOR 1113)
3	3092-37359-01	1	-	INNER DOOR, COMP(LOWER)
	3092-38173-01	-	1	INNER DOOR, COMP(LOWER)
4	3093-31071-00	1	-	FRAME(INNER DOOR FLAPPER 243)
	3093-31069-00	-	1	FRAME(INNER DOOR FLAPPER 152)
5	3093-37631-00	1	1	FRAME(INNER DOOR FLAPPER 273)
6	3093-31693-01	1	-	FLAPPER(INNER DOOR 249)
	3093-17999-01	-	1	FLAPPER(INNER DOOR 158)
7	3092-31789-00	1	-	SPONGE(3*162*241)
	3092-18000-01	-	1	SPONGE(3*162*150)
8	3093-37818-00	1	1	FLAPPER(INNER DOOR 279)
9	3092-37819-00	1	1	SPONGE(3*162*271)
10	3093-21530-01	2	2	HINGE(INNER DOOR)
11	3093-28802-00	1	1	LEVER(INNER DOOR LOCK)
12	3093-28803-00	1	1	HOLDER(INNER DOOR LOCK)
13	3092-20826-03	1	-	GASKET(C INNER DOOR 952)
	3092-21327-03	-	1	GASKET(C INNER DOOR 1113)
14	3092-26515-01	1	1	SPONGE(15*30*70)
15	3093-31800-00	1	2	GUARD(DELIVERY PORT 4)
16	3092-29696-00	1	-	SPONGE(BACK PLATE 155L)
	3092-28972-00	-	1	SPONGE(BACK PLATE 110L)
17	3092-38048-00	NOT USED	1	SPONGE(BACK PLATE 210L)
18	3092-29697-00	1	1	SPONGE(BACK PLATE 210R)
19	3092-16085-00	2	2	SPONGE(2.5*4*100)
20	3092-43721-00	3	3	SPONGE(12*25*200)
21	3093-36700-00	1	1	PANEL(INSERTING DOOR)
22	3092-14378-01	1	1	SPONGE(2.5*4*800)
23	3093-30463-00	1	1	INSERTING DOOR(ORANGE RING)
24	3093-35084-01	1	1	PLATE(COIN INSERT)
25	3082-71428-02	1	1	PAINTED PROTECTOR(BILL VALI -00419)
26	3092-36026-00	1	1	SPONGE(2.5*10.5*665)
27	3092-36827-00	1	1	SPONGE(2.5*10.5*170)
28	3093-35562-03	2	2	PROTECTOR (BILL COVER)
29	3092-36028-00	2	2	SPONGE(2.5*5*182)
30	3043-94742-04	1	1	CHUTE(INSERTING SECTION)
31	3043-94743-04	1	1	COVER(INSERT CHUTE)
32	3093-36338-00	1	1	BOARD(SMALL COIN)
33	3093-36132-00	1	1	CHUTE(INSERT BOTTOM)
34	3093-22849-00	1	1	LEVER(REPAYMENT)
35	3093-22398-00	1	1	PLATE(REPAYMENT)
36	3093-37067-00	1	1	PLATE(REPAYMENT PUSH M)
37	3033-68399-00	2	2	SCREW(STEPED 3)
38	3033-52431-02	1	1	VEND FLAPPER SPRING
39	3093-36770-00	1	1	SPACER(COIN MECH)
40	3093-37723-00	1	1	PLATE(REAR COIN)
41	3093-36133-00	1	1	CHUTE(SWITCHING 3)
42	3092-29578-00	1	1	SPONGE(18*14*14)
43	3093-36134-00	1	1	CHUTE(COIN RETURN)
44	3093-17253-04	1	1	DOOR(COIN RETURN PORT)
45	3043-68976-05	1	1	CASHBOX
46	3093-37794-00	1	1	DRAIN(BILL VALI)
47	3061-70379-00	1	1	CONTROLLER, UNIT(MAIN M)

10 PICTURE AND PART LIST

3. INNER DOOR • MONEY INSERT • RETURN SLOT PARTS KB-GS24-S



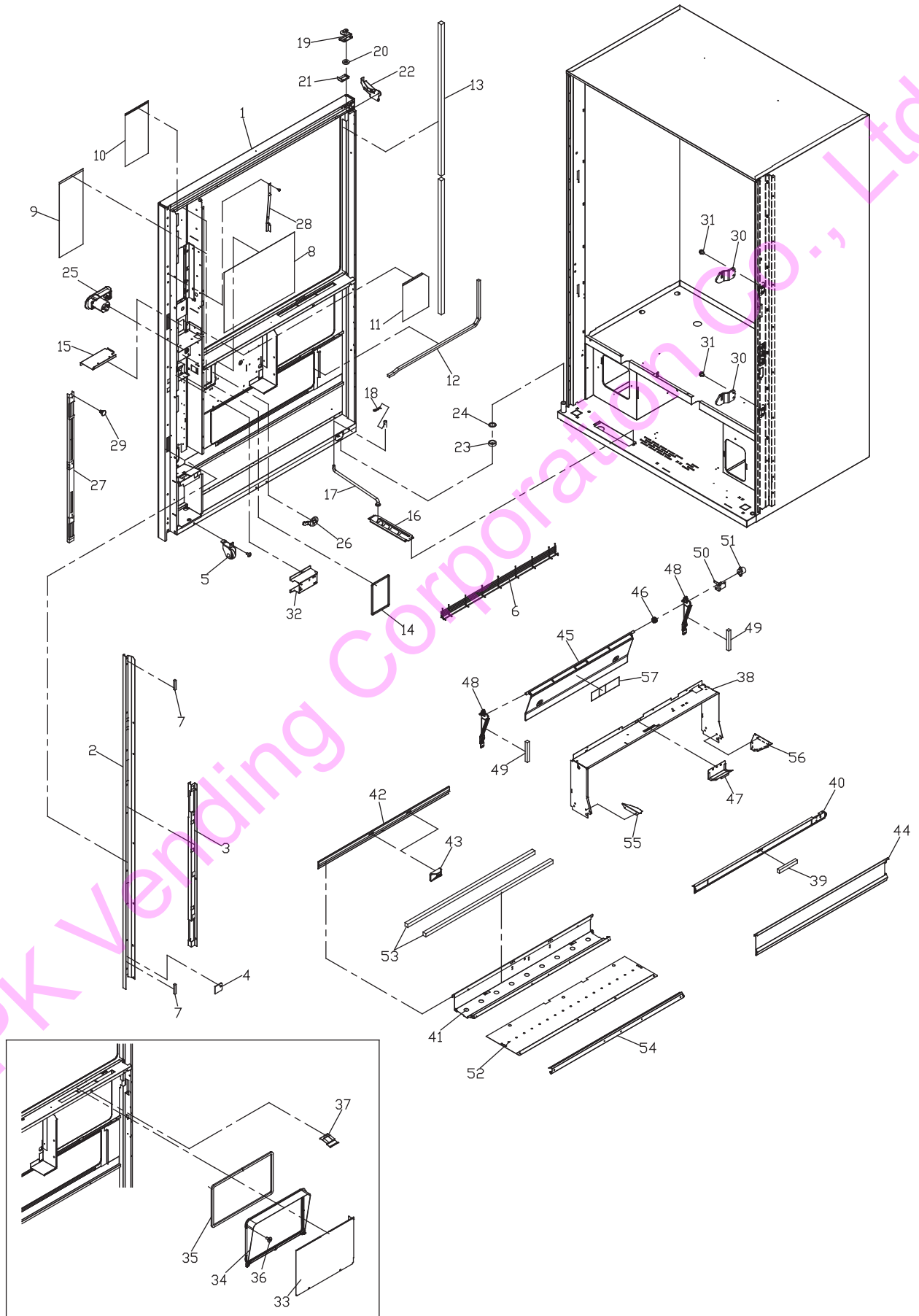
10 PICTURE AND PART LIST

3. INNER DOOR • MONEY INSERT • RETURN SLOT PARTS KB-GS24-S

No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3092-38123-00	INNER DOOR, COMP(UP)	1
2	3092-21327-03	GASKET(C INNER DOOR 1113)	1
3	3092-51788-00	INNER DOOR, COMP(LOWER)	1
4	3093-31071-00	FRAME(INNER DOOR FLAPPER 243)	1
5	3093-37631-00	FRAME(INNER DOOR FLAPPER 273)	1
6	3093-31693-01	FLAPPER(INNER DOOR 249)	1
7	3092-31789-00	SPONGE(3*162*241)	1
8	3093-37818-00	FLAPPER(INNER DOOR 279)	1
9	3092-37819-00	SPONGE(3*162*271)	1
10	3093-21530-01	HINGE(INNER DOOR)	2
11	3093-28802-00	LEVER(INNER DOOR LOCK)	1
12	3093-28803-00	HOLDER(INNER DOOR LOCK)	1
13	3092-21327-03	GASKET(C INNER DOOR 1113)	1
14	3092-26515-01	SPONGE(15*30*70)	1
15	3093-31800-00	GUARD(DELIVERY PORT 4)	2
16	3092-38048-00	SPONGE(BACK PLATE 210L)	1
17	3092-29697-00	SPONGE(BACK PLATE 210R)	1
18	3092-16085-00	SPONGE(2.5*4*100)	2
19	3092-43721-00	SPONGE(12*25*200)	3
20	3093-36700-00	PANEL(INSERTING DOOR)	1
21	3092-14378-01	SPONGE(2.5*4*800)	1
22	3093-30463-00	INSERTING DOOR(ORANGE RING)	1
23	3093-35084-01	PLATE(COIN INSERT)	1
24	3082-74524-00	PAINTED PROTECTOR(BILL VALI-00419)	1
25	3092-36026-00	SPONGE(2.5*10.5*665)	1
26	3092-36827-00	SPONGE(2.5*10.5*170)	1
27	3093-35562-03	PROTECTOR (BILL COVER)	2
28	3092-36028-00	SPONGE(2.5*5*182)	2
29	3082-74525-00	PAINTED SPACER(BILL COVER--00419)	2
30	3043-94742-04	CHUTE(INSERTING SECTION)	1
31	3043-94743-04	COVER(INSERT CHUTE)	1
32	3093-36338-00	BOARD(SMALL COIN)	1
33	3093-36132-00	CHUTE(INSERT BOTTOM)	1
34	3093-22849-00	LEVER(REPAYMENT)	1
35	3093-22398-00	PLATE(REPAYMENT)	1
36	3093-37067-00	PLATE(REPAYMENT PUSH M)	1
37	3033-68399-00	SCREW(STEPPED 3)	2
38	3033-52431-02	VEND FLAPPER SPRING	1
39	3093-36770-00	SPACER(COIN MECH)	1
40	3093-37723-00	PLATE(REAR COIN)	1
41	3093-36133-00	CHUTE(SWITCHING 3)	1
42	3092-29578-00	SPONGE(18*14*14)	1
43	3093-36134-00	CHUTE(COIN RETURN)	1
44	3093-17253-04	DOOR(COIN RETURN PORT)	1
45	3043-68976-05	CASHBOX	1
46	3093-37794-00	DRAIN(BILL VALI)	1
47	3081-72435-00	PANEL(PAINTING DEVICE-00419)	1
48	3061-73400-00	CONTROLLER, UNIT(MAIN)	1

10 PICTURE AND PART LIST

4. DOOR•DELIVERY PORT PARTS



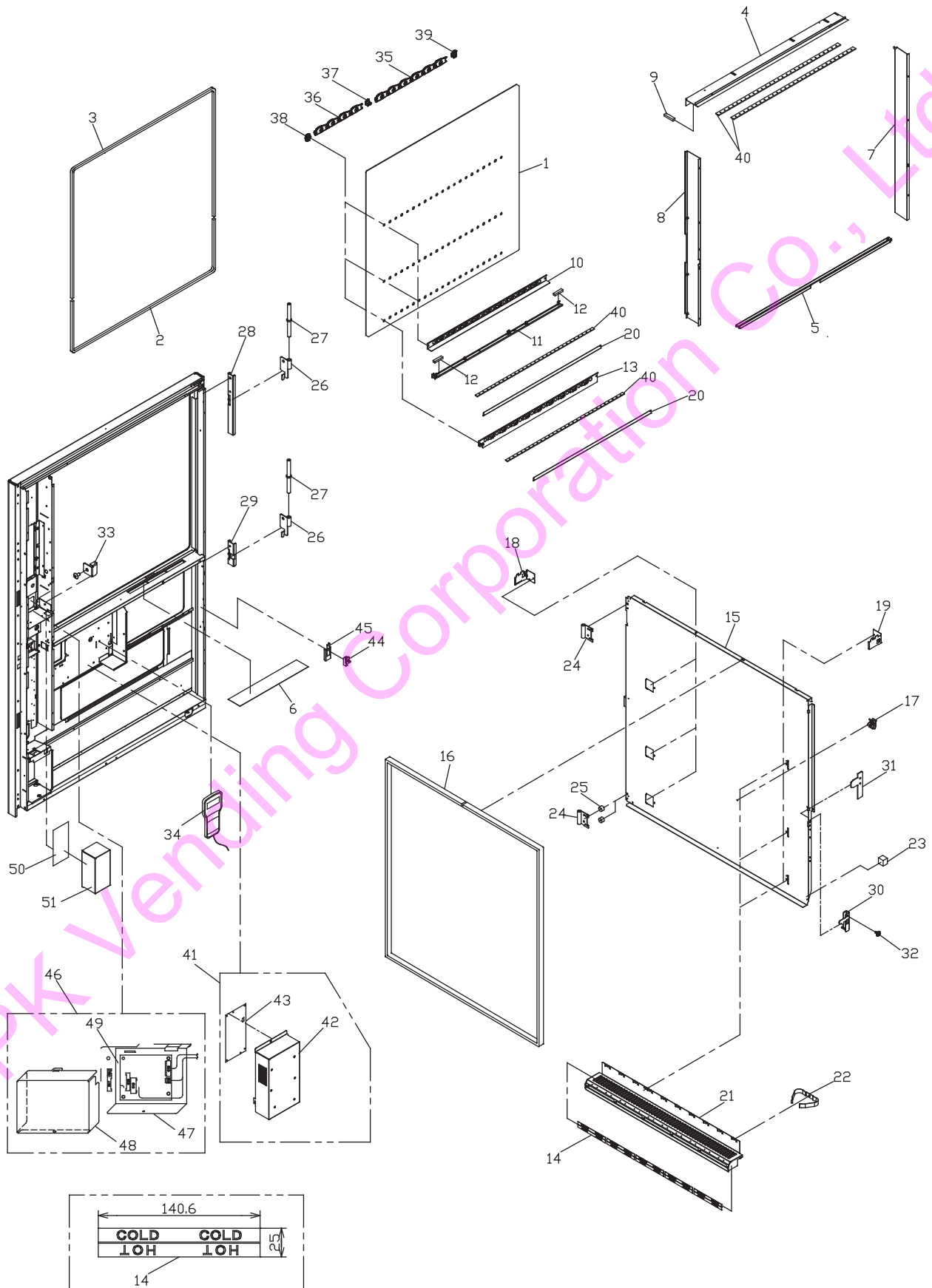
10 PICTURE AND PART LIST

4. DOOR•DELIVERY PORT PARTS

No.	PARTS NUMBER	KB-GS20-S	KB-GS30-S	KB-GS24-S	PARTS NAME
1	3C82-70447-00	1	-	-	PAINTED DOOR
	3C82-71487-00	-	1	-	PAINTED DOOR
	3C82-74265-00	-	-	1	PAINTED DOOR
2	3081-69327-00	1	1	1	PAINTED FRAME(SIDE DOOR -00419)
3	3093-32386-00	1	1	-	STAY(SIDE DOOR)
	3093-50661-00	-	-	1	STAY(SIDE DOOR)
4	3093-34199-00	1	1	1	SPACER(SIDE DOOR)
5	3092-25791-01	1	1	1	ROLLER, COMP
6	3082-69265-01	1	1	1	PAINTED COVER(VENT -05252)
7	3092-24516-00	2	2	2	SPONGE(8*15*50)
8	3093-37912-00	1	-	-	COVER(WATER PROOF 270*320)
	3093-38661-00	-	1	-	COVER(WATER PROOF 225*320)
	3093-37702-00	-	-	1	COVER(WATER PROOF 430*320)
9	3093-36928-00	3	3	2	COVER(WATER PROOF 145*400)
10	3093-45822-00	NOT USED	NOT USED	1	COVER(WATER PROOF 145*285)
11	3093-51162-00	NOT USED	NOT USED	1	COVER(WATER PROOF 140*140)
12	3092-41173-00	1	1	1	SPONGE(12*10*750)
13	3093-44087-00	NOT USED	NOT USED	2	SPONGE(20*20*820)
14	3092-45452-00	NOT USED	NOT USED	1	SPONGE(5*10*425)
15	3093-50652-00	NOT USED	NOT USED	1	COVER(DIGITAL UP)
16	3093-13684-01	1	1	1	RAIL(DOOR STOPPER)
17	3093-25971-01	1	1	1	LOAD(DOOR STOPPER)
18	3593-11433-00	1	1	1	SNAP PIN 10
19	3093-27858-00	1	1	1	PLATE(UPPER DOOR HINGE)
20	3093-27859-01	1	1	1	SPACER(UPPER DOOR HINGE)
21	3093-27860-00	1	1	1	COVER(UPPER DOOR HINGE)
22	3093-31824-01	1	1	1	DRAIN(HINGE)
23	3093-25665-01	1	1	1	SPACER(LOWER HINGE)
24	3043-91818-01	1	1	1	HINGE SPACER
25	3533-11387-00	1	1	1	HANDLE HK355 TZ10 2ALB1B
26	3093-25976-00	1	1	1	PLATE(KEY PLATE)
27	3092-16883-03	1	1	1	LOCK ANGLE, COMP
28	3093-14831-00	1	1	1	STOPPER(LOCK ANGLE)
29	3533-10135-00	1	1	1	74 WHITE CANOE CLIP
30	3093-27925-00	2	2	2	PLATE(LOCK)
31	3533-11368-00	4	4	4	+HEXAGON FIX PACK BOLT M8*9.6
32	3093-37066-00	1	1	1	COVER(LOCK BACK M)
33	3081-68854-00	NOT USED	1	-	PAINTED INNER PANEL(LOWER -00419)
	3081-72436-00	-	-	1	PAINTED INNER PANEL(LOWER -00419)
34	3093-30837-02	NOT USED	1	1	PANEL(LOWER INNER PANEL FRAME)
35	3092-14378-01	NOT USED	2	2	SPONGE(2.5*4*800)
36	3033-68399-00	NOT USED	6	6	SCREW(STEPPED 3)
37	3093-30838-01	NOT USED	1	1	SUPPORT(POSTER FRAME)
38	3093-37963-00	1	-	-	FRAME(DELIVERY T)
	3093-38571-01	-	1	-	FRAME(DELIVERY T)
	3093-51796-00	-	-	1	FRAME(DELIVERY T)
39	3092-14937-00	1	1	-	SPONGE(12*15*100)
40	3093-37964-01	1	-	-	FRAME(DELIVERY T2)
	3093-32437-02	-	1	-	FRAME(DELIVERY T2)
	3093-51797-00	-	-	1	FRAME(DELIVERY T2)
41	3093-37965-00	1	-	-	FRAME(DELIVERY FRONT F)
	3093-38572-01	-	1	-	FRAME(DELIVERY FRONT F)
	3093-51798-00	-	-	1	FRAME(DELIVERY FRONT F)
42	3092-37966-00	1	-	-	CUSHION(AC DELIVERY PORT 609)
	3092-38573-00	-	1	-	CUSHION(AC DELIVERY PORT 799)
	3092-51799-00	-	-	1	CUSHION(AC DELIVERY PORT)
43	3093-15362-01	1	2	2	GUARD(DELIVERY F)
44	3093-31966-00	1	-	-	GUARDING PLATE
	3093-32441-00	-	1	-	GUARDING PLATE
	3093-51800-00	-	-	1	GUARDING PLATE
45	3093-17829-01	1	-	-	DOOR(DELIVERY PORT 06-426)
	3093-15190-03	-	1	1	DOOR(DELIVERY PORT 05)
46	3093-25664-01	1	1	1	SPRING(DOOR DELIVERY DOOR)
47	3093-31497-02	1	1	1	SUPPORT(DOOR DELIVERY DOOR)
48	3093-25552-01	2	2	2	SUPPORT(T DOOR LR)
49	3092-14741-00	2	2	2	SPONGE(12*12*95)
50	3093-31967-01	1	1	1	BRACKET(DAMPER)
51	3533-11291-00	1	1	1	DAMPER TD91B2-1.5K
52	3093-37967-01	1	-	-	SHEET(BOTTOM DELIVERY PORT)
	3093-38677-00	-	1	-	SHEET(BOTTOM DELIVERY PORT)
	3093-51801-00	-	-	1	SHEET(BOTTOM DELIVERY PORT)
53	3092-28250-00	2	-	-	SPONGE(20*20*600)
	3092-15984-00	-	2	-	SPONGE(20*20*793)
	3092-50585-00	-	-	2	SPONGE(20*20*830)
54	3093-31969-00	1	-	-	SUPPORT(BOTTOM DELIVERY PORT)
	3093-38953-00	-	1	-	SUPPORT(BOTTOM DELIVERY PORT)
	3093-51802-00	-	-	1	SUPPORT(BOTTOM DELIVERY PORT)
55	3093-39026-02	NOT USED	1	1	CONTROL PLATE(DELIVERY PORT R)
56	3093-37016-00	NOT USED	NOT USED	1	CONTROL PLATE(DELIVERY PORT L)
57	3023-69737-00	1	1	1	LABEL(PICT DELIVERY PORT E)

10 PICTURE AND PART LIST

5. DISPLAY PANEL PARTS



10 PICTURE AND PART LIST

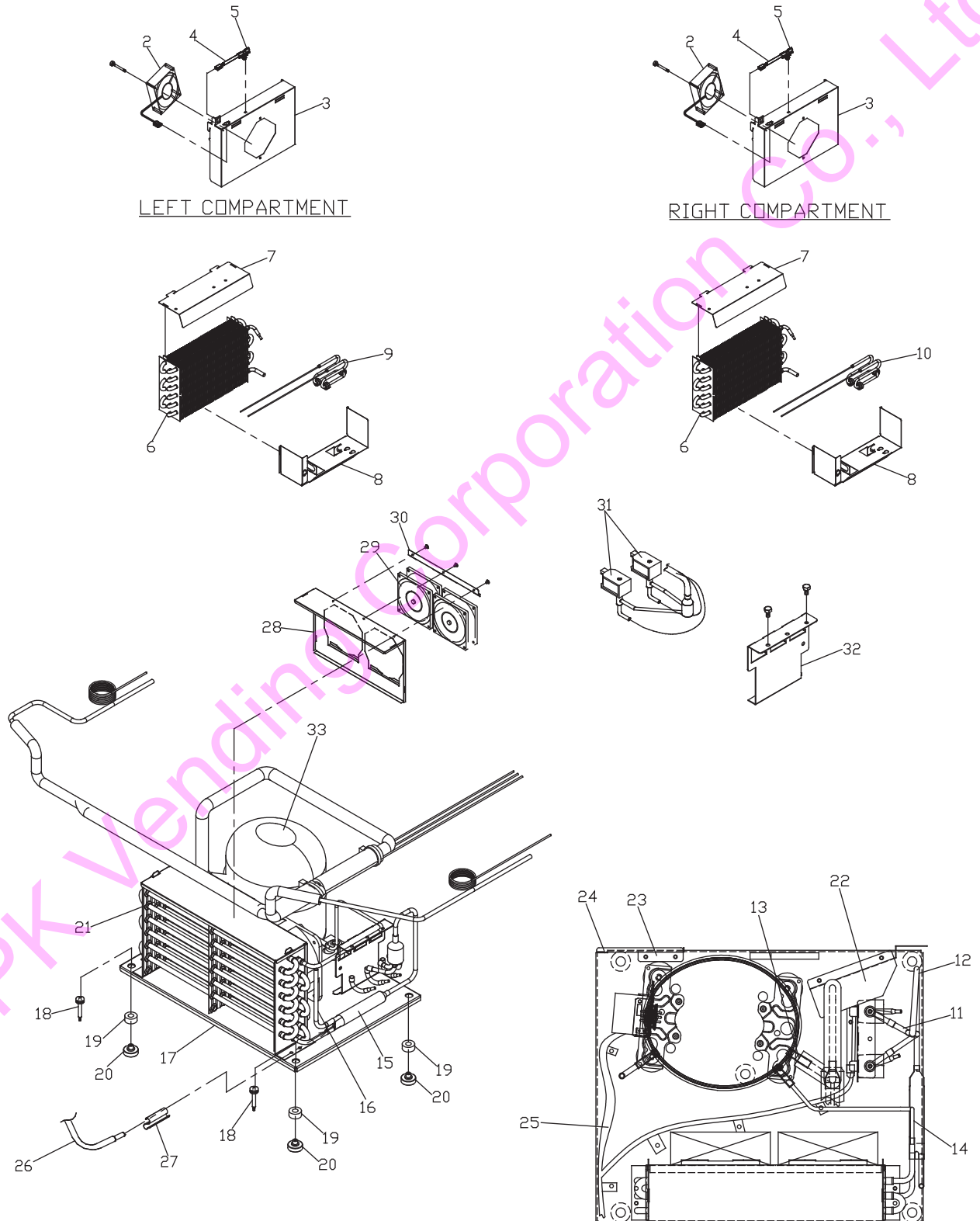
5. DISPLAY PANEL PARTS

No.	PARTS NUMBER	KB-GS20-S	KB-GS30-S	KB-GS24-S	PARTS NAME
1	3093-37331-00 3093-38286-00 3093-51794-00	1 - -	- 1 -	- - 1	PANEL(DISPLAY) PANEL(DISPLAY) PANEL(DISPLAY)
2	3092-14366-00	1	2	2	SPONGE(8*8*2000)
3	3092-15666-00	1	NOT USED	NOT USED	SPONGE(8*8*1500)
4	3093-38247-00 3093-38287-00 3093-51781-00	1 - -	- 1 -	- - 1	SUPPORT(PANEL UPPER) SUPPORT(PANEL UPPER) SUPPORT(PANEL UPPER)
5	3093-38246-00 3093-38328-00 3093-45451-00	1 - -	- 1 -	- - 1	SUPPORT(PANEL LOWER) SUPPORT(PANEL LOWER) SUPPORT(PANEL LOWER)
6	3093-31096-00	NOT USED	1	1	SHEET(BLOCK HOLE)
7	3081-70590-00 3081-73872-00	1 -	1 -	- 1	PAINTED SUPPORT(PANEL LEFT-00419) PAINTED SUPPORT(PANEL LEFT-00419)
8	3081-70352-00 3081-70667-00 3081-73991-00	1 - -	- 1 -	- - 1	PAINTED SUPPORT(PANEL RIGHT -00419) PAINTED SUPPORT(PANEL RIGHT -00419) PAINTED SUPPORT(PANEL RIGHT -00419)
9	3092-27430-00	NOT USED	NOT USED	1	SPONGE(6*8*35)
10	3081-66780-02 3081-73992-00	1 -	2 -	- 1	PAINTED COVER(BACK SELECTION BUTTON-00419) PAINTED COVER(BACK SELECTION BUTTON-00419)
11	3081-73944-00	NOT USED	NOT USED	1	BRACKET(PAINTING LED FRONT-00419)
12	3092-27430-00	NOT USED	NOT USED	1	SPONGE(6*8*35)
13	3081-70589-01 3081-73993-00	1 -	1 -	- 1	PAINTED COVER(BACK SELECTION BUTTON-00419) PAINTED COVER(BACK SELECTION BUTTON-00419)
14	3093-35061-00	10	15	12	PLATE(2CH DISPLAY)
15	3081-70353-02 3081-70668-03 3081-73941-00	1 - -	- 1 -	- - 1	PAINTED DOOR(DISPLAY -00419) PAINTED DOOR(DISPLAY -00419) PAINTED DOOR(DISPLAY -00419)
16	3092-14367-00	2	2	2	SPONGE(6*8*2000)
17	3693-00689-00	1	1	1	WSSE1101 SUPPORT
18	3093-37395-00 3093-47342-01	2 -	3 -	- 2	BRACKET(DUMMY STAGE L) BRACKET(DUMMY STAGE L)
19	3093-37396-00 3093-47343-01	2 -	3 -	- 2	BRACKET(DUMMY STAGE R) BRACKET(DUMMY STAGE R)
20	3093-38086-00	2	3	NOT USED	HOLDER(LED)
21	3081-70595-00 3081-73990-00	2 -	3 -	- 2	PAINTED DUMMY STAGE(00419) PAINTED DUMMY STAGE(00419)
22	3043-28763-00	20	30	24	SAMPLE HOLDER
23	3092-29578-00	1	1	1	SPONGE(18*14*14)
24	3093-17678-01 3093-36311-00	2 -	- 2	- 2	PLATE(DISPLAY HINGE) PLATE(DISPLAY HINGE)
25	3043-71269-00	2	2	2	SCREW COVER PACKING
26	3093-34088-00 3093-39066-00	2 -	- 2	- 2	PLATE(FEMALE HINGE 10) PLATE(FEMALE HINGE 10BL)
27	3093-25661-00	NOT USED	2	2	PIN(HINGE SAMPLE RACK)
28	3093-36313-00	NOT USED	1	1	SUPPORT(FEMALE HINGE 1)
29	3093-36314-00	NOT USED	1	1	SUPPORT(FEMALE HINGE 2)
30	3093-18054-01 3093-50676-00	1 -	1 -	- 1	DISPLAY DOOR LATCH DISPLAY DOOR LATCH
31	3093-18055-01	1	1	1	PLATE(DROP GUARD)
32	3033-68411-00	1	1	1	SCREW (STEPPED 2)
33	3093-50677-01	NOT USED	NOT USED	1	PLATE (ANTI FALL GUIDE)
34	3513-11355-01	1	1	1	RKC-EM2 KEYBOARD
35	3663-00794-00	2	3	4	KBCV06MT-HK LAMP UNIT
36	3663-00795-00	2	3	NOT USED	KBCV04MT-HK LAMP UNIT
37	3663-00784-00	2	3	2	KBCV JOINTER
38	3663-00785-00	2	3	2	KBCV MALL(R)
39	3663-00786-00	2	3	2	KBCV MALL(L)
40	3513-11335-00 3513-11543-00	4 -	4 -	- 3	LFS70624A10B LED UNIT LF4C85072XM LED UNIT
41	3062-70366-00 3062-70525-01	1 -	- 1	NOT USED -	BOX, ASSY(POWER L) BOX, ASSY(POWER L)
42	3063-70365-00	1	1	NOT USED	BOX(POWER L)
43	3513-11291-00	1	1	NOT USED	LED DRIVE BOARD
44	3623-02792-00	1	1	1	D3D111 SW
45	3063-68848-00	1	1	1	BRACKET(DOOR SWITCH)
46	3062-70372-03	1	1	NOT USED	BOX, ASSY(MDB BOARD)
47	3063-70134-00	1	1	NOT USED	PLATE (MDB)
48	3063-70214-01	1	1	NOT USED	BOX (MDB)
49	3513-11354-01	1	1	NOT USED	MDB-C BOARD
50	3513-11336-01	NOT USED	NOT USED	1	MDB BOARD
51	3063-73204-00	NOT USED	NOT USED	1	COVER (BOARD)

10 PICTURE AND PART LIST

6. REFRIGERATION UNIT PARTS

1.COOLING, UNIT<AC-3C110*E>



10 PICTURE AND PART LIST

6. REFRIGERATION UNIT PARTS

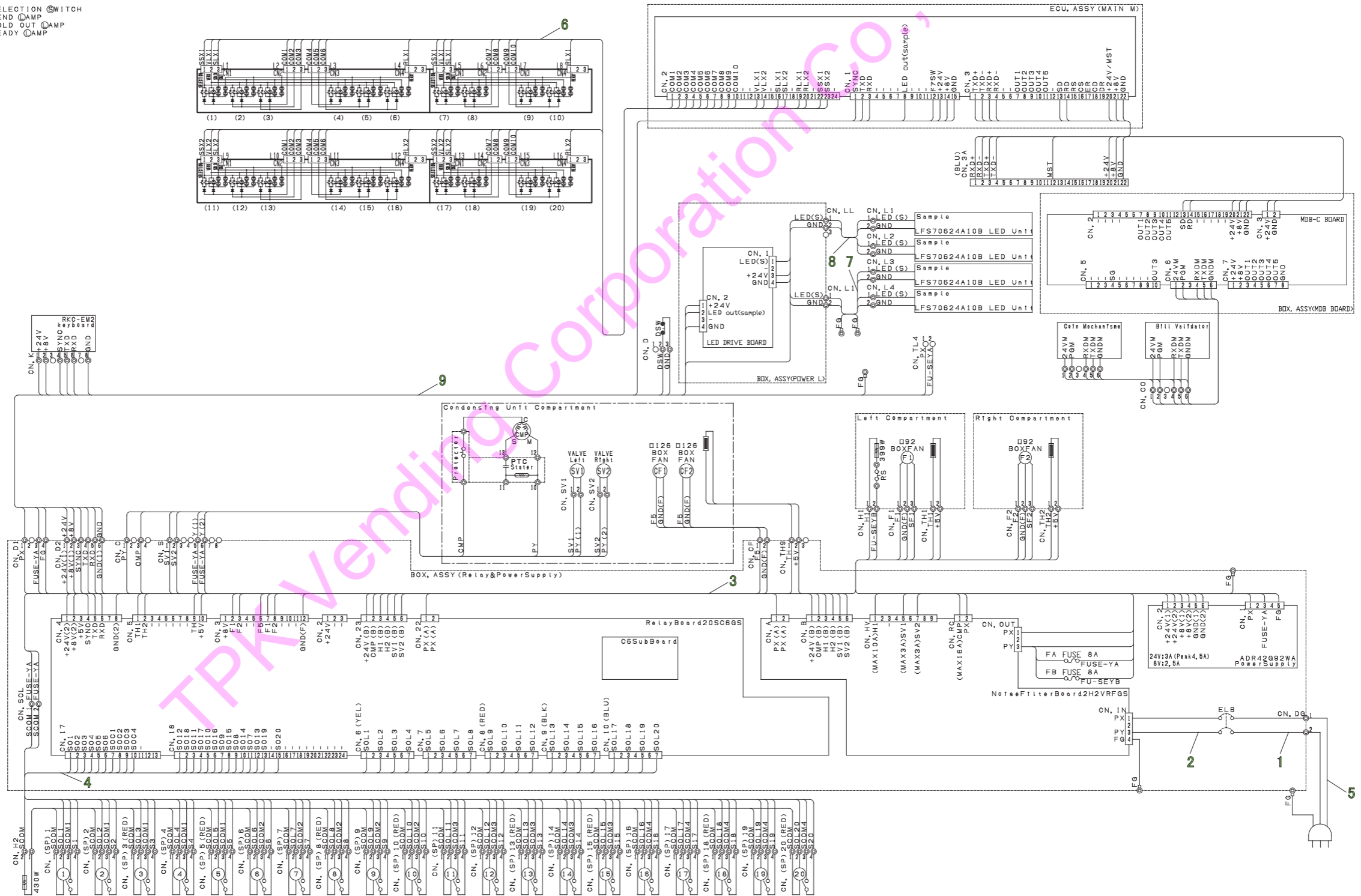
No.	PARTS NUMBER	KB-GS20-S	KB-GS30-S	KB-GS24-S	PARTS NAME
1	3191-01822-00	1	-	-	COOLING UNIT(AC-3C1101E)
	3191-01830-00	-	1	1	COOLING UNIT(AC-3C1102E)
2	3062-64867-01	2	2	2	MOTOR, ASSY(9A0924G4D03)
3	3053-57500-00	2	2	2	COVER(FAN DC230GS)
4	3062-64112-02	2	2	2	WIRE HARNESS(COMPARTMENT TH)
5	3053-54801-02	2	2	2	HOLDER(THERMISTOR)
6	3052-55832-01	2	2	2	EVAPORATOR, COMP(E3*6*230)
7	3053-55377-04	2	2	2	COVER(EVA 230K)
8	3053-56214-01	2	2	2	BRACKET(HEATER 230)
9	3062-70164-00	1	1	1	HEATER, ASSY(SHEATH 399W-230V)
10	3062-70479-00	1	1	1	HEATER, ASSY(SHEATH 430W-100V)
11	3052-54762-00	1	1	1	PIPE, COMP(VALVE 4C5112)
12	3053-57480-00	1	1	1	PIPE(SV JOINT)
13	3052-57467-01	1	-	-	PIPE, COMP(3C1101E)
	3052-57615-01	-	1	1	PIPE, COMP(3C1102E)
14	3053-57505-00	1	1	1	PIPE(DISCHARGE)
15	3053-56886-02	1	1	1	DRYER(134A-2)
16	3053-05007-03	2	2	2	CHARGE PIPE
17	3053-57460-02	1	1	1	BASE(3C1101E)
18	3052-55609-01	2	2	2	SCREW(+HEXA S TIGHT (WASHER) 5*30
19	3053-56506-00	5	5	5	VIBRATION ABSORBING RUBBER (T11)
20	3053-54907-01	5	5	5	COLLAR(CIRCLE 25 WITH GUARD)
21	3052-56203-03	1	1	1	CONDENSER, COMP(3*7)
22	3053-57506-00	1	1	1	COVER(SOLENOID VALVE)
23	3053-57727-00	1	1	1	BRACKET(WATER PROOF)
24	3053-57494-00	1	1	1	SHEET(COMPRESSOR COVER)
25	3062-70185-01	1	1	1	BOX, ASSY (ELECTRICAL EQUIPMENT)
26	3062-64473-02	1	1	1	WIRE HARNESS(OUT SIDE TH)
27	3053-55040-02	1	1	1	HOLDER(THERMISTOR)
28	3053-56188-01	1	1	1	COVER(OUTSIDE FAN MOTOR 3*7)
29	3062-66682-01	1	1	1	MOTOR, ASSY(FBK12H24HE)
30	3053-56189-01	1	1	1	BRACKET(OUTSIDE FAN MOTOR)
31	3643-00330-00	2	2	2	COIL(TEV,220-240V50HZ)
32	3053-55432-06	1	1	1	BRACKET(SOLENOID VALVE K)
33	3633-00363-00	1	1	1	COMPRESSOR(FFU130HAX)

10 PICTURE AND PART LIST

7. WIRING PARTS KB-GS20-S

No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3062-70373-00	WIRE HARNESS(ELBIN)	1
2	3062-70374-00	WIRE HARNESS(ELBOUT)	1
3	3062-70376-00	WIRE HARNESS(TC)	1
4	3062-70375-01	WIRE HARNESS(RACK)	1
5	3613-02391-01	VM504B(4M) POWER CABLE	1
6	3062-70370-00	WIRE HARNESS(SELECTION BUTTON)	1
7	3062-70368-00	WIRE HARNESS(LED)	1
8	3062-70369-01	WIRE HARNESS(LED)	1
9	3062-70367-00	WIRE HARNESS(COMMUNICATION)	1

SSX:SELECTION SWITCH
 VLX:VEND CAMP
 SLX:OLD OUT CAMP
 RLX:READY CAMP

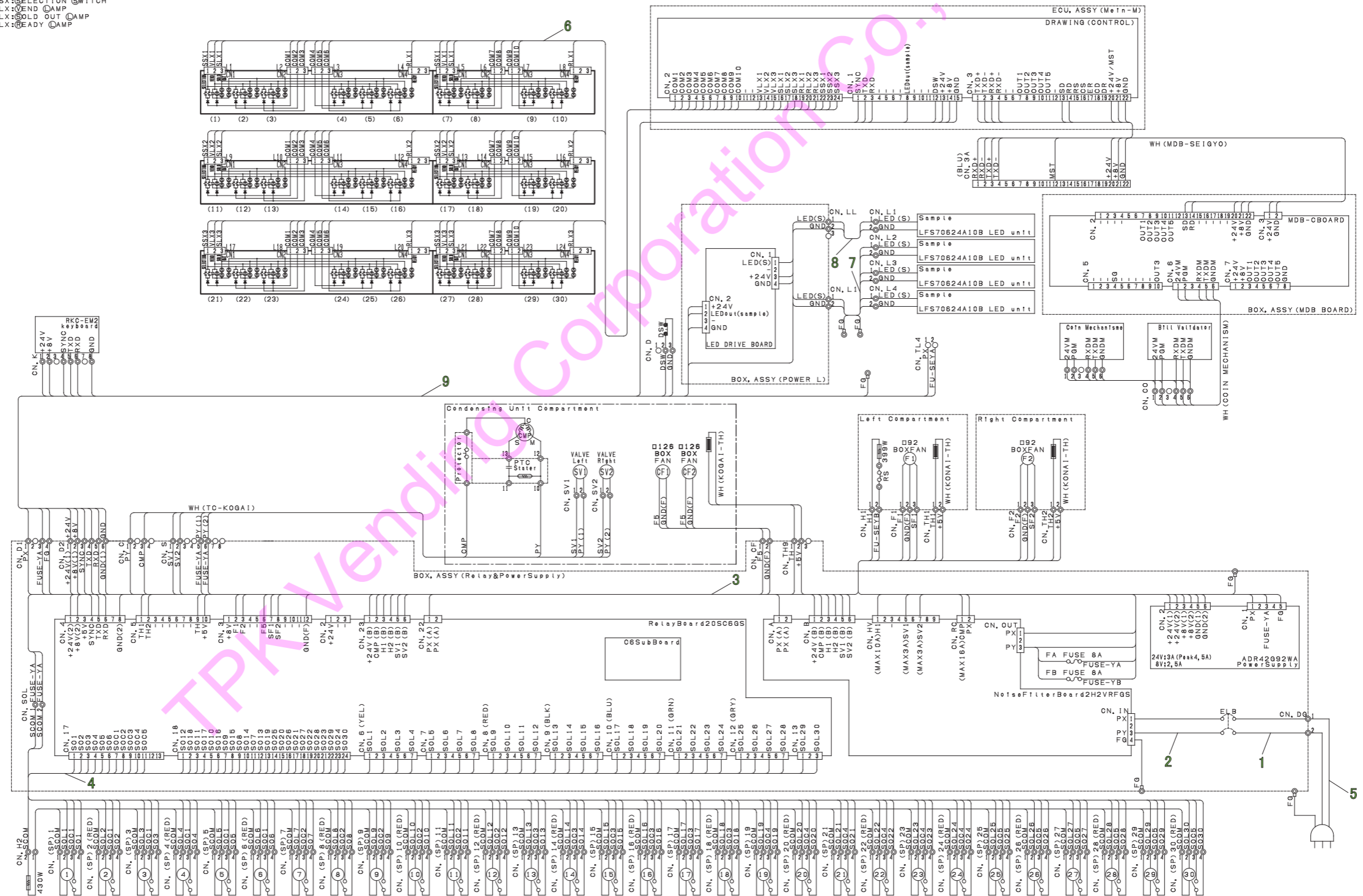


10 PICTURE AND PART LIST

7. WIRING PARTS KB-GS30-S

No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3062-70373-00	WIRE HARNESS(ELBIN)	1
2	3062-70374-00	WIRE HARNESS(ELBOUT)	1
3	3062-70517-00	WIRE HARNESS(TC)	1
4	3062-70518-00	WIRE HARNESS(RACK)	1
5	3613-02391-01	VM504B(4M) POWER CABLE	1
6	3062-70521-00	WIRE HARNESS(SELECTION BUTTON)	1
7	3062-70523-00	WIRE HARNESS(LED)	1
8	3062-70524-00	WIRE HARNESS(LED)	1
9	3062-70526-01	WIRE HARNESS(COMMUNICATION)	1

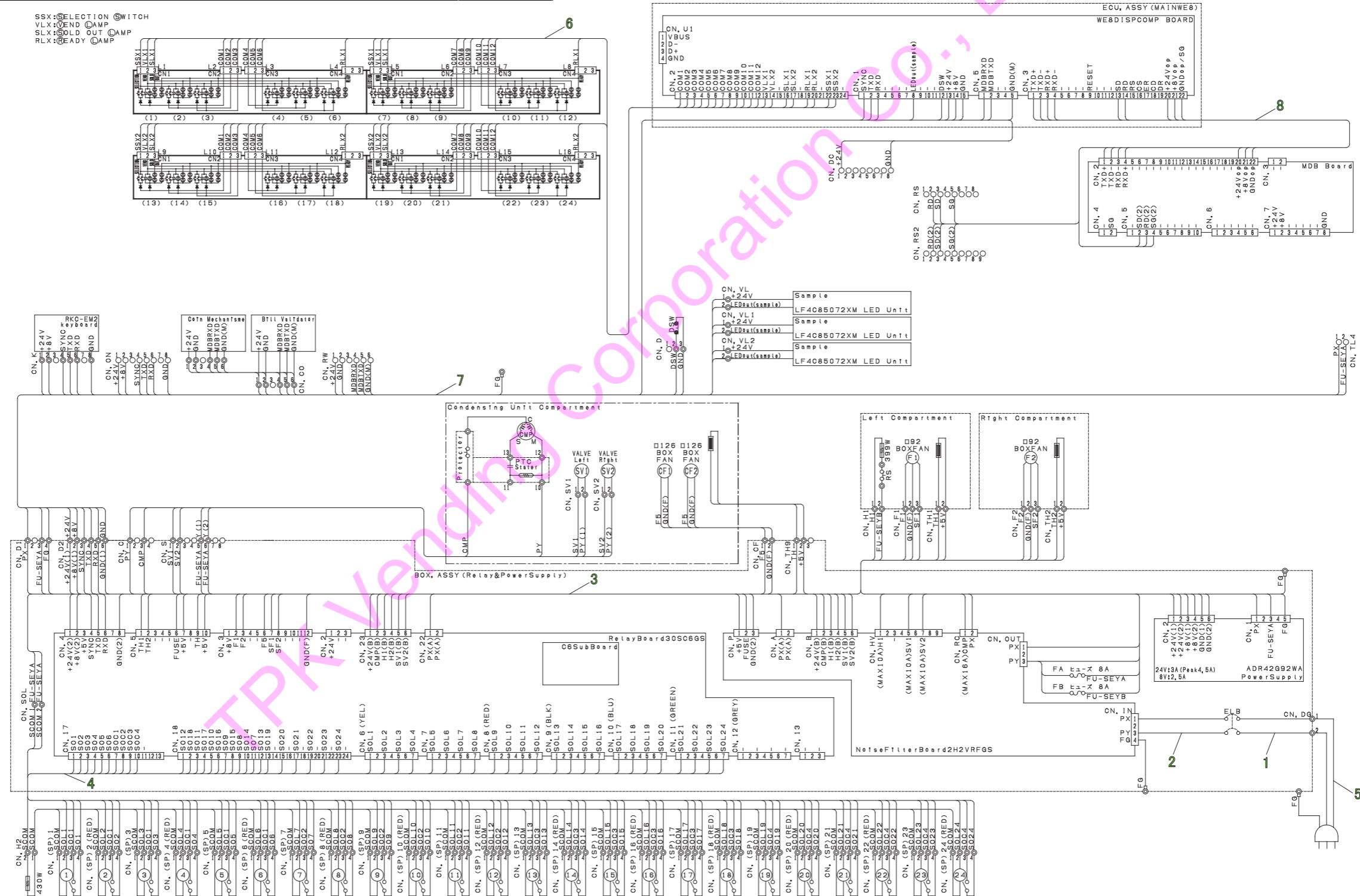
SSX:SELECTION SWITCH
 VLX:END CAMP
 SLX:SOLENOID OUT CAMP
 RLX:READY CAMP



10 PICTURE AND PART LIST

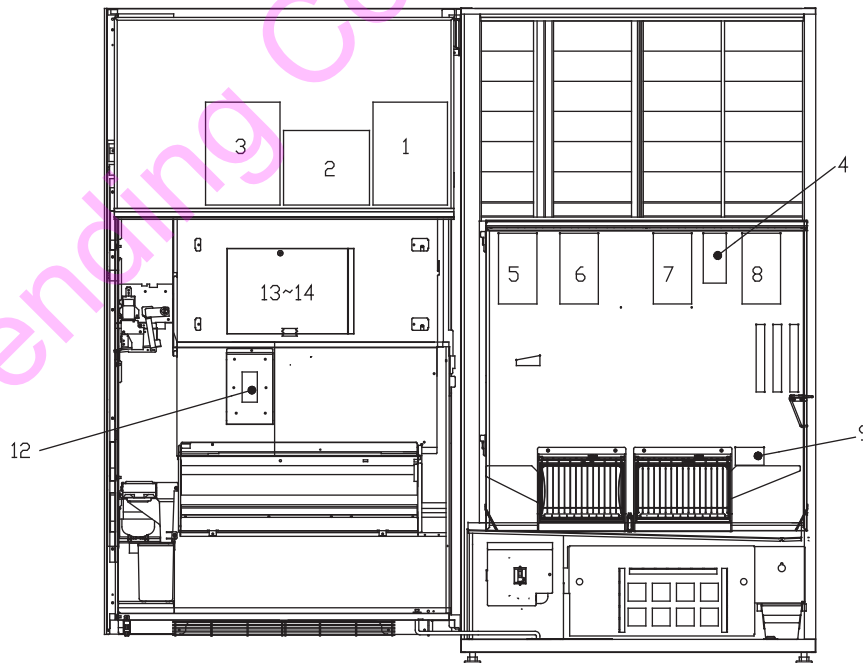
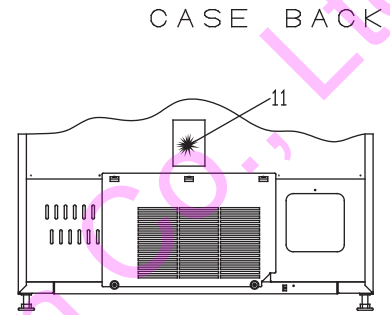
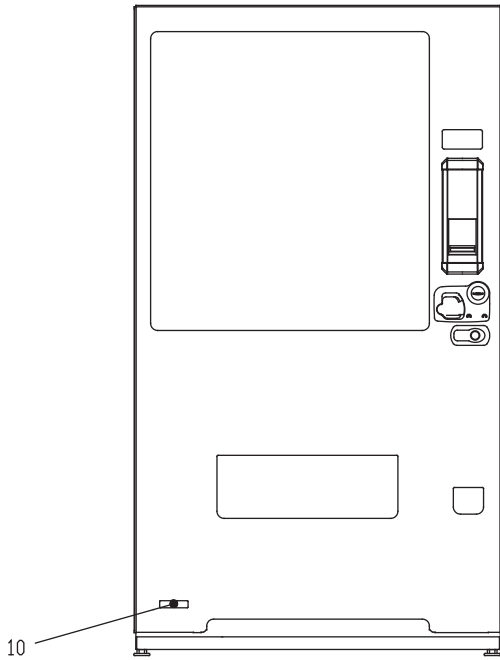
7. WIRING PARTS KB-GS24-S

No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3062-70373-00	WIRE HARNESS(ELBIN)	1
2	3062-70374-00	WIRE HARNESS(ELBOUT)	1
3	3062-73412-00	WIRE HARNESS(TC)	1
4	3062-73407-00	WIRE HARNESS(RACK)	1
5	3613-02391-01	VM504B(4M) POWER CABLE	1
6	3062-73409-00	WIRE HARNESS(SELECTION BUTTON)	1
7	3062-73411-00	WIRE HARNESS(COMMUNICATION)	1
8	3062-73219-00	WIRE HARNESS(RS232C)	1



10 PICTURE AND PART LIST

8. LABEL・ACCESSORIES PARTS KB-GS20-S



OPTION	15
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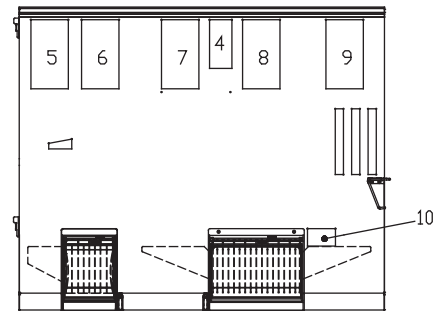
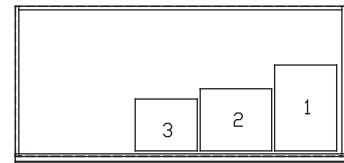
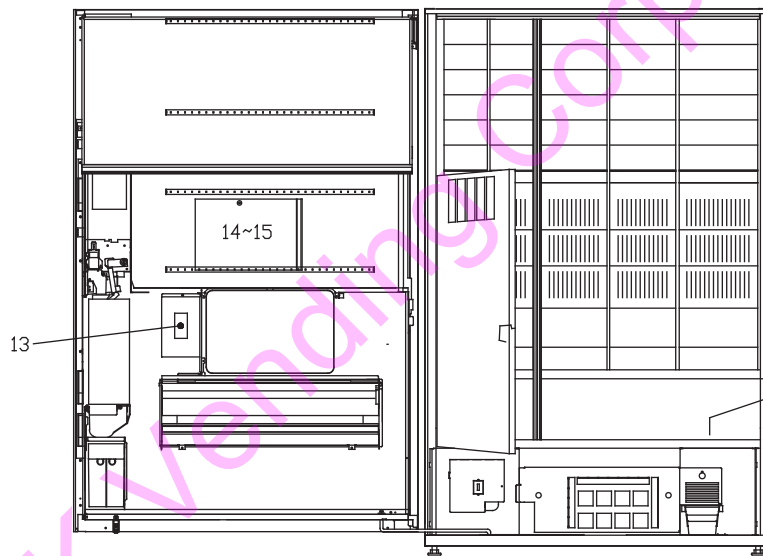
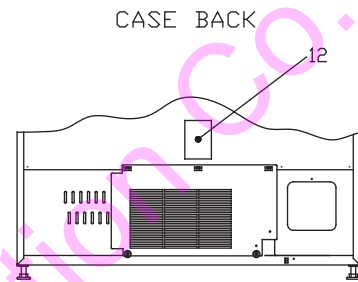
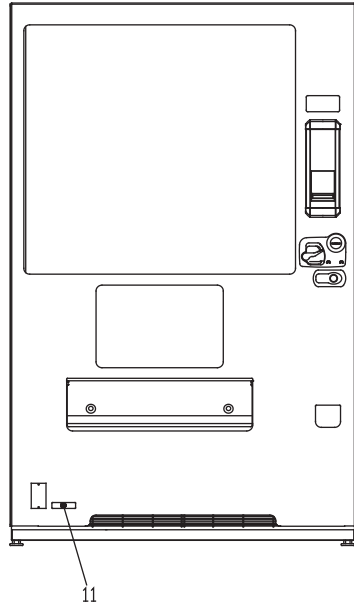
10 PICTURE AND PART LIST

8. LABEL・ACCESSORIES PARTS KB-GS20-S

No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3023-70314-00	LABEL(HANDLING E)	1
2	3023-70315-00	LABEL(COLUMN SETTING E)	1
3	3023-72210-00	LABEL(EJECTION GUIDE ADJUST CARE)	1
4	3023-69485-01	LABEL(ADJ CAUTION E)	1
5	3023-68745-00	LABEL(COLUMN NUMBER -5-1)	1
6	3023-68746-00	LABEL(COLUMN NUMBER -5-2)	1
7	3023-68747-00	LABEL(COLUMN NUMBER -5-3)	1
8	3023-68748-00	LABEL(COLUMN NUMBER -5-4)	1
9	3023-69489-00	LABEL(OPERATION CARE E)	1
10	3023-69828-00	LABEL(BRAND)	1
11	3023-69785-00	LABEL(RECOVERY E, CYCLO R134A)	1
12	3023-69540-01	LABEL(REMOTE FIX POSITION E)	1
13	3092-29735-00	BAG, COMP(MANUAL)	1
14	3023-69481-02	SAFETY MANUAL	1
15	3161-02814-00	OPTION (MANUAL BOOK DATA)	1

10 PICTURE AND PART LIST

8. LABEL • ACCESSORIES PARTS KB-GS30-S



OPTION 16

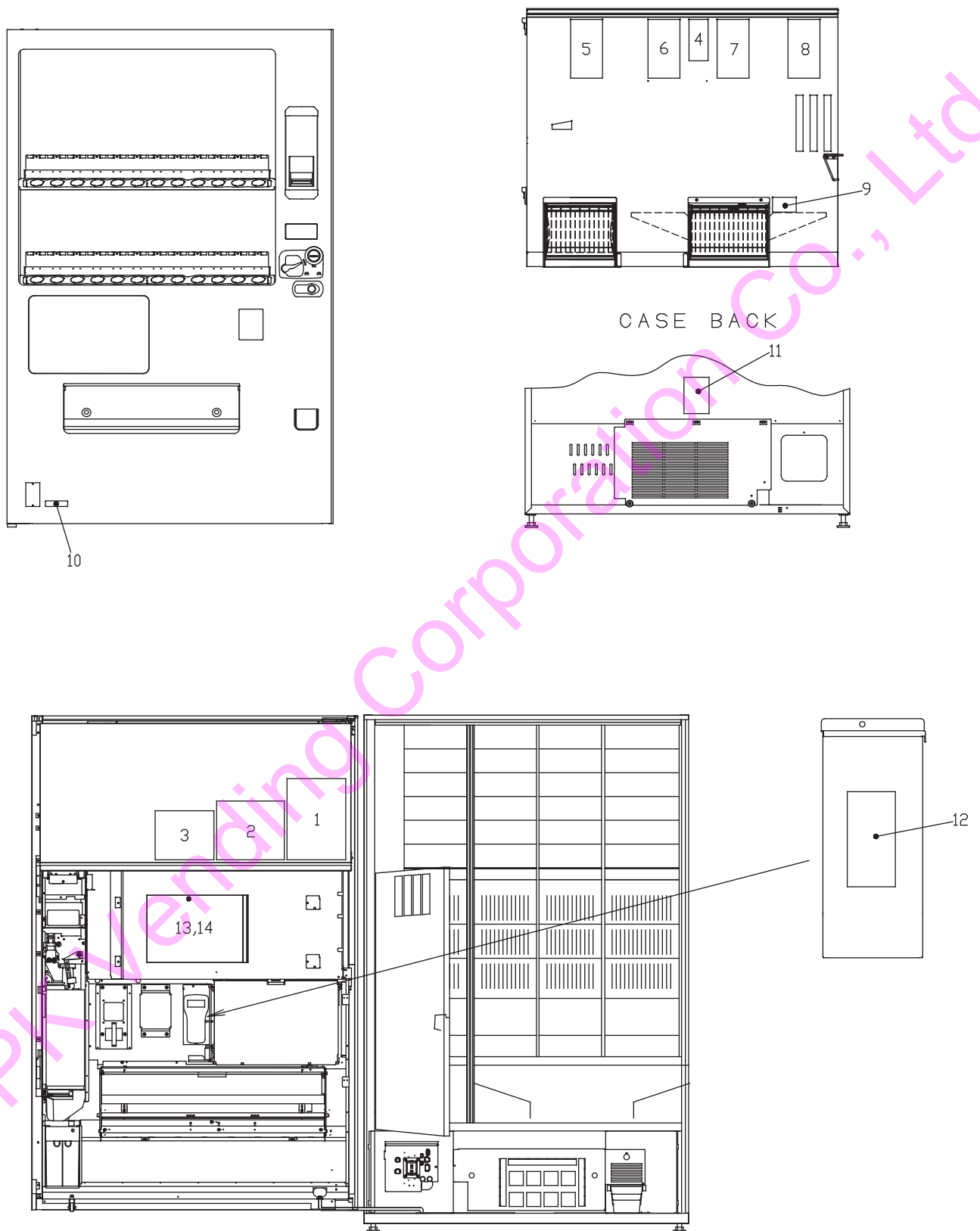
10 PICTURE AND PART LIST

8. LABEL • ACCESSORIES PARTS KB-GS30-S

No.	PARTS NUMBER	PARTS NAME	QTY PER UNIT
1	3023-70314-00	LABEL(HANDLING E)	1
2	3023-71294-00	LABEL(COLUMN SETTING E)	1
3	3023-72210-00	LABEL(EJECTION GUIDE ADJUST CARE)	1
4	3023-69485-01	LABEL(ADJ CAUTION E)	1
5	3023-68720-00	LABEL(COLUMN NUMBER -6-1)	1
6	3023-68721-00	LABEL(COLUMN NUMBER -6-2)	1
7	3023-68722-00	LABEL(COLUMN NUMBER -6-3)	1
8	3023-68723-00	LABEL(COLUMN NUMBER -6-4)	1
9	3023-68724-00	LABEL(COLUMN NUMBER -6-5)	1
10	3023-69489-00	LABEL(OPERATION CARE E)	1
11	3023-69828-00	LABEL(BRAND)	1
12	3023-69785-00	LABEL(RECOVERY E, CYCLO R134A)	1
13	3023-69540-01	LABEL(REMOTE FIX POSITION E)	1
14	3092-29735-00	BAG, COMP(MANUAL)	1
15	3023-69481-02	SAFETY MANUAL	1
16	3161-02815-00	OPTION (MANUAL BOOK DATA)	1

10 PICTURE AND PART LIST

8. LABEL • ACCESSORIES PARTS KB-GS24-S



OPTION 15~16

10 PICTURE AND PART LIST

8. LABEL • ACCESSORIES PARTS KB-GS24-S

No.	PARTS NUMBER	PARTS NAME	Qty per Unit
1	3023-70314-00	LABEL(HANDLING E)	1
2	3023-74766-00	LABEL(COLUMN SETTING E)	1
3	3023-72210-00	LABEL(EJECTION GUIDE ADJUST CARE)	1
4	3023-69485-01	LABEL(ADJ CAUTION E)	1
5	3023-68720-00	LABEL(COLUMN NUMBER -6-1)	1
6	3023-68721-00	LABEL(COLUMN NUMBER -6-2)	1
7	3023-68722-00	LABEL(COLUMN NUMBER -6-3)	1
8	3023-68723-00	LABEL(COLUMN NUMBER -6-4)	1
9	3023-69489-00	LABEL(OPERATION CARE E)	1
10	3023-69828-00	LABEL(BRAND)	1
11	3023-69785-00	LABEL(RECOVERY E, CYCLO R134A)	1
12	3023-69540-01	LABEL(REMOTE FIX POSITION E)	1
13	3092-29735-00	BAG, COMP(MANUAL)	1
14	3023-69481-02	SAFETY MANUAL	1
15	3161-02876-00	OPTION (MANUAL BOOK DATA)	1
16	3161-02886-00	OPTION (BILL VALI PROTECTOR CC)	1

11 | INFORMATION

11-1 PT. METEC SEMARANG

FACTORY OFFICE

TANJUNG EMAS EXPORT PROCESSING ZONE
JL. COASTER BLOK B12A-16
TELP. (024) 3520435 - 37
FAX. (024) 3520432
SEMARANG - INDONESIA

SALES & MARKETING OFFICE

THE MANHATTAN SQUARE BUILDING MID TOWER 3rd FLOOR UNIT C&D
JI. TB SIMATUPANG KAV 1S, CILANDAK, JAKARTA SELATAN
TELP. (021) 29406798-99
FAX. (021) 29049897
JAKARTA - INDONESIA

www.kubota-ptms.co.id

12 REVISION

12-1 STIPULATED

1. August 2016 by Vending Machine Service Division (**0626**)
2. September 2016 by Vending Machine Service Division (**0626**)

TPK Vending Corporation Co., Ltd.