




Revision		Date		Written by		Description			
<div>CASH DISPENSING UNIT</div> <div>(MODEL : GBM-MR)</div> <div>OPERATOR MANUAL</div> <div>Rev. 1.0</div> <div>Taenam Automatic Machinery for Customer Co.Ltd., R&D Laboratory</div>									
MODEL: GBM-MR						Written	H.S.CHO	05- 07-18	Sheet
TITLE: GBM-MR Operator Manual						Checked	H.B.LEE	05- 07-18	1
				41700103-01		Approved	J.K.CHUNG	05- 07-18	25

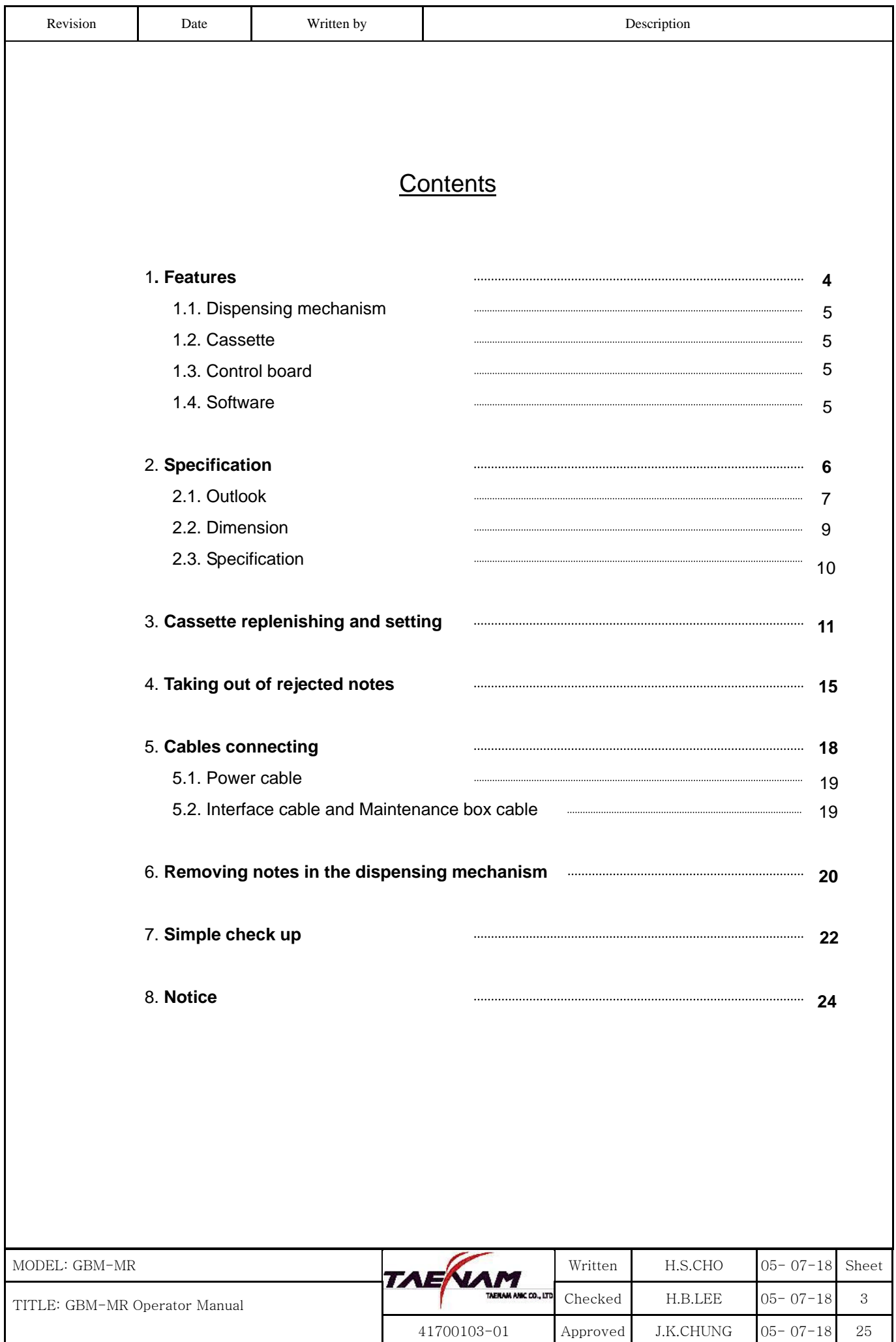


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Document History

REV	History	Date	Writer	Remarks
1.0	First Edition	2005. 7.18	H.S.CHO	


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<div>1. Features</div>							
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<h1>1. Features</h1> <h2>1.1 Dispensing mechanism</h2> <ul style="list-style-type: none">● Rear-loading design for widely used rear service type ATM.● When doubled, skewed, and mutilated note are detected, those notes are sent to the reject bin or reject box.● The hall sensor is used as the detecting sensor instead of the conventional optical sensor for preventing the possible contamination.● The stepping motor is opted for precise and reliable note delivery control.● Two long belts are installed for reliable note delivery control.● Key-Lock is installed in reject bin for more security.● Collecting rejected notes are very easy.● Accord with the International Standards such as UL,CE and FCC. <h2>1.2 Cassette</h2> <ul style="list-style-type: none">● Almost all of the worldwide denominations are supported.● Cassette Key is installed for more security.● Nearly non-aperture design for security.● Separation roller installed inside the cassette gives minimized miss feeds. <h2>1.3 Control board</h2> <ul style="list-style-type: none">● Display error codes on seven segment LEDs.● Easy check up due to five LEDs (Power 5V, 24V: Green, TxD: Yellow, RxD: Yellow, Error: Red).● Maintenance box (option) prepared for on-site diagnostic.● Standard RS-232C (9pin) interface connector.● Molex 6pin power connector.● Distinction of a note type by the Dip switch in a cassette. <h2>1.4. Software</h2> <ul style="list-style-type: none">● Taenam's own protocol● Very easy software upgrade using by maintenance box when needed.● Enough memory for customer's request.					
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<div>2. Specification</div>						
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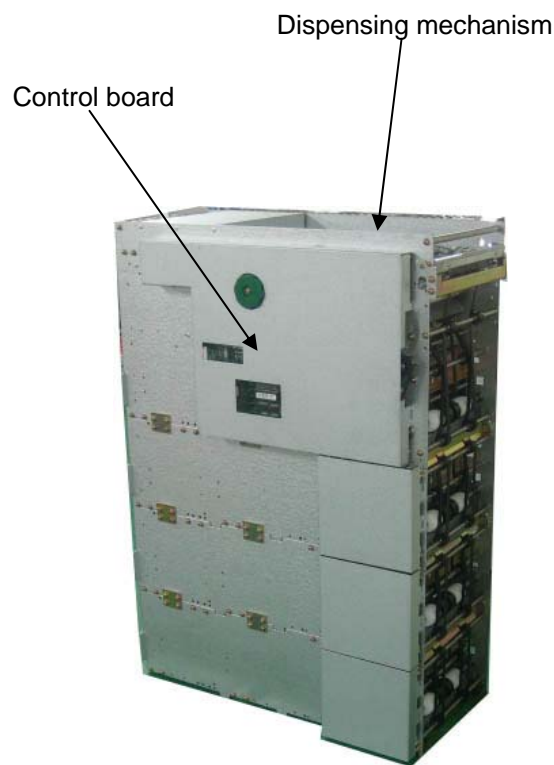
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2. Specification

2.1. Outlook

The GBM-MR consists of as below.

GBM-MR	—	Dispensing mechanism
	—	Maximum 4 cassettes
	—	Control board
	—	External power supply (option)
	—	Maintenance box (option)
	—	Shutter (option)



< Front side >



< Rear side >

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< Reject box type >



< Cassette >



< Maintenance box >

NOTE) *the appearances of these products may be slightly modified in designing.

**User can purchase GBM-MR1, MR2, MR3 or MR4 respectively according to the user's option.
But once you purchase one of the types, you can't be allowed to operate the type as you please.
(If you purchase GBM-MR4, you can't operate GBM-MR3 without any approval. It violates the UL approval standard.)

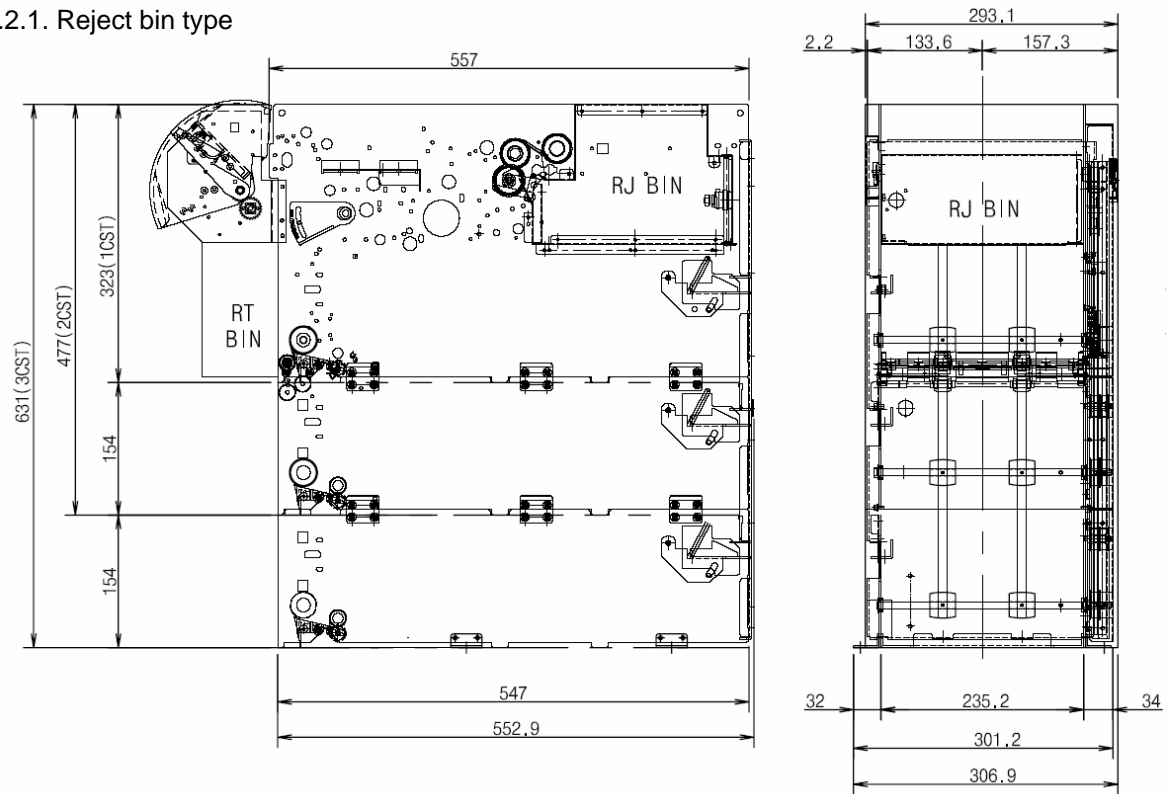
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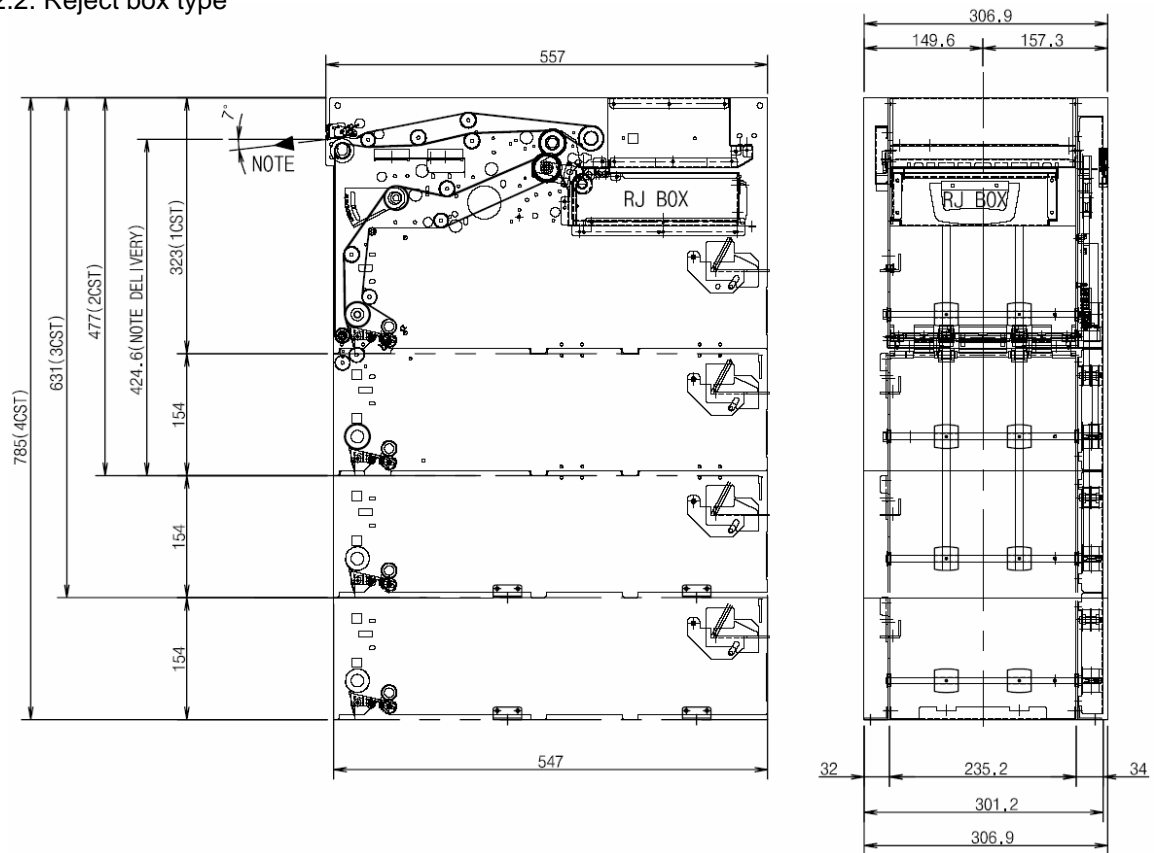
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2.2. Dimension (unit : mm)

2.2.1. Reject bin type



2.2.2. Reject box type



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2.3 Specification

Feature		Specification	Remark
Loading type		Rear loading (Rear service)	
Dispensing speed		7 notes per second	
Supporting Note size	Horizontal	120 ~ 170 mm	Contact us for different size
	Vertical	63 ~ 80 mm	
	Thickness	0.07 ~ 0.18 mm	
Number of cassettes		2 cassettes (Basic)	Up to 4 cassettes
Cassette capacity		3000 bills per cassette	Internal length: 230 mm (9.0in.)
Cassette key		Yes	
Reject type		Note by note reject, bin type	
Reject capacity		Over 200 notes	
Reject bin		Bin or box type	
Reject bin key		Yes	
Near end sensing		30 ± 10 notes	Field adjustable
Dimension	Height	785 mm (30.9 in.)	4 cassettes configuration
	Depth	557 mm (21.9 in.)	
	Width	306.9 mm (12.1 in.)	
Power voltage		+5V (1.2A, PEAK 1.5A)	
		+24V(3.5A, PEAK 5.0A)	
Protocol		Taenam type	Emulation available
Interface		Standard RS-232C	9 Pin D-sub connector
Weight	Dispensing Unit : GBM-MR2 : 20.7Kg GBM-MR3 : 26.1Kg GBM-MR4 : 31.5Kg		Delivery unit excluding cassettes
	Cassette : 4.35Kg each		Bills excluded
	Shutter : 1.7Kg		
Shutter module		100 bills per stacking	Option
Maintenance box		LCD(4 row x 16 char.), 5keys	Option

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<div>3. <u>Cassettes replenishing</u> <u>and setting</u></div>									
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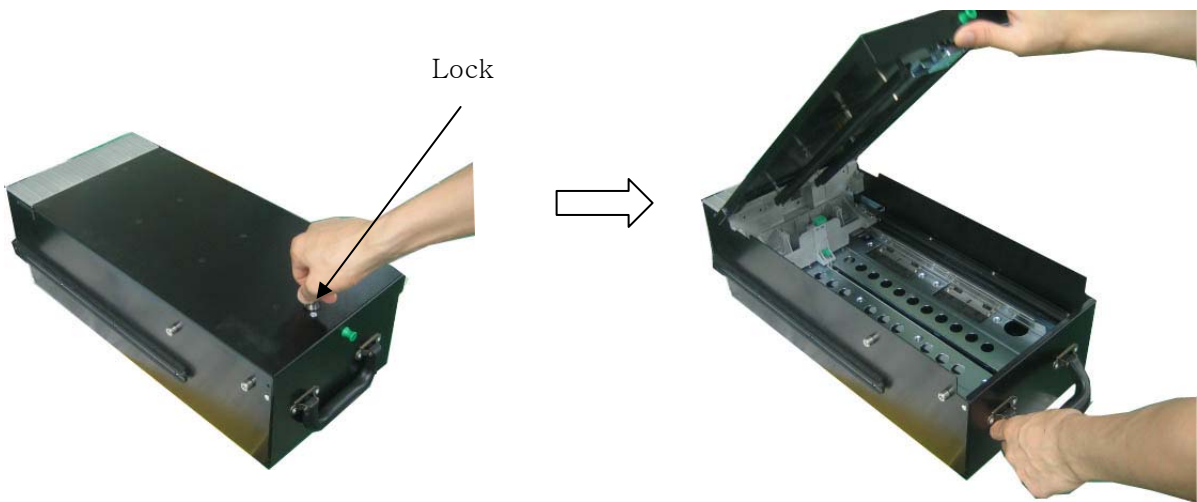
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3. Cassettes replenishing and setting

- 1) Press the lock-lever of the dispensing mechanism, at the same time, grasp the handle of the Cassette and pull out the cassette to the front.



- 2) After rotating the lock to the right with a cassette key, open the cassette lid upward.

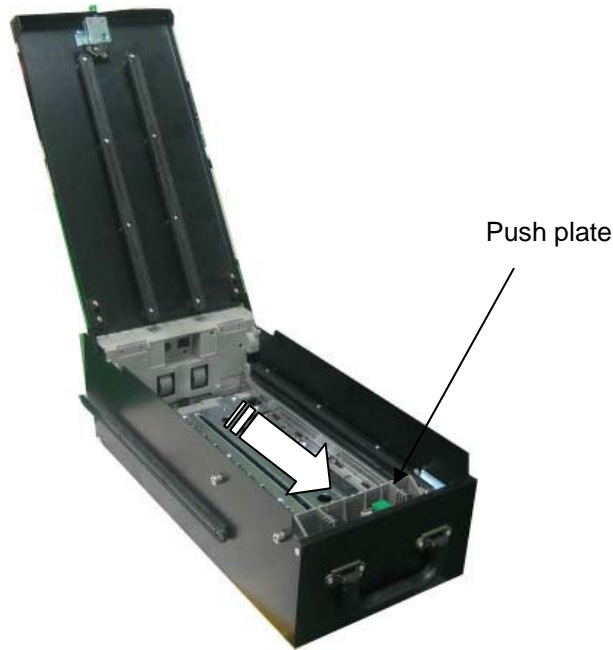


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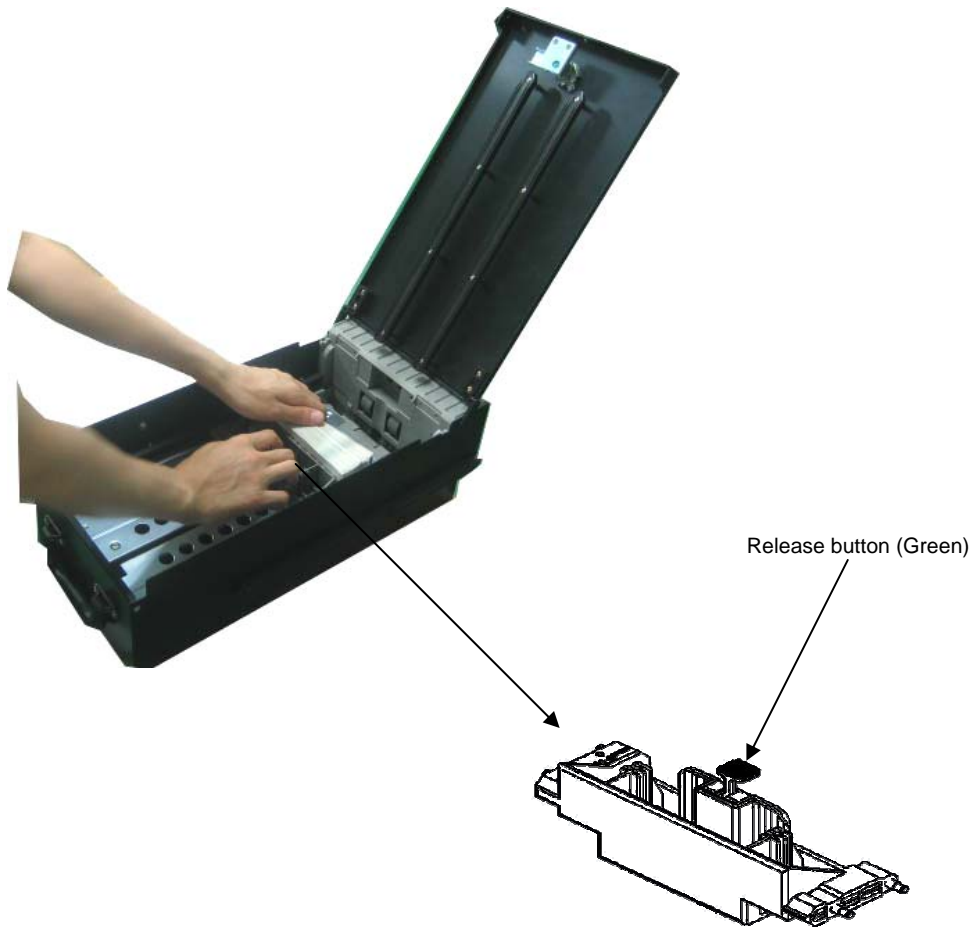


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3) Pull the push plate to the back till locking.



4) Setting the notes evenly, and pushing the release button smoothly until the push plate contacts the notes.



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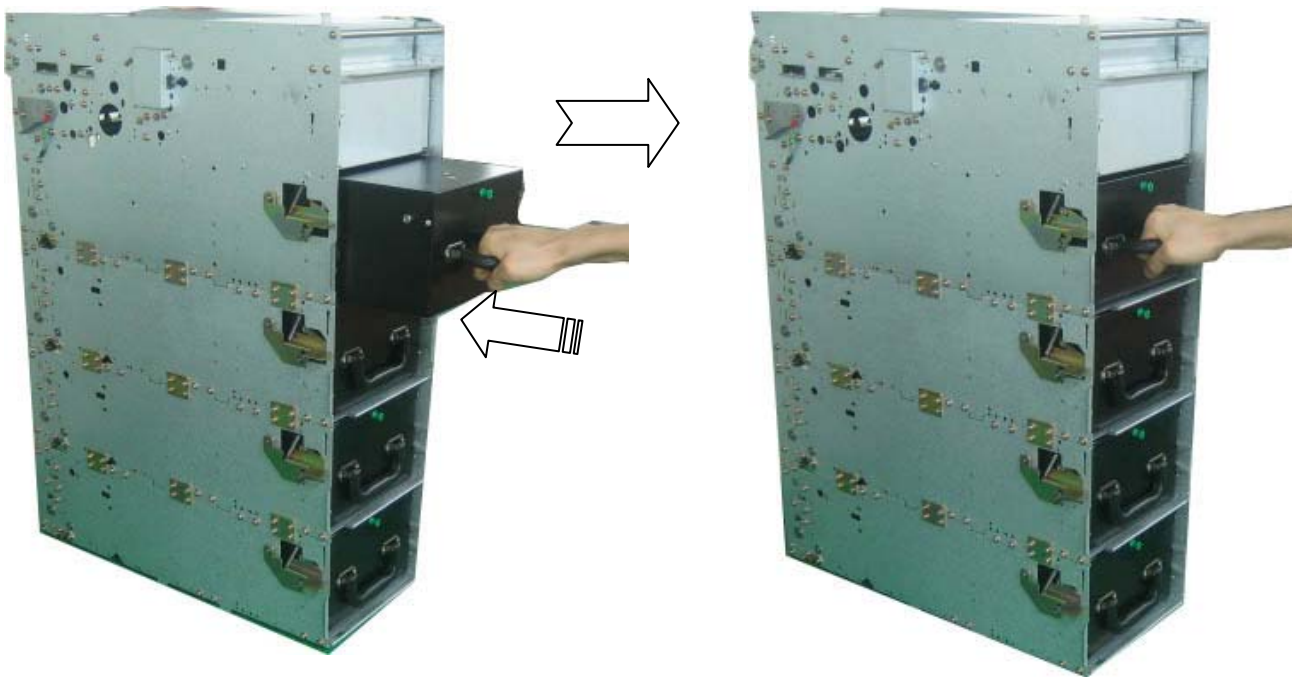


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- 5) After closing the cassette lid and turning the cassette key to the left side,
Check the cassette lid locking.




- 6) Push the cassette into the dispensing mechanism till locking entirely.



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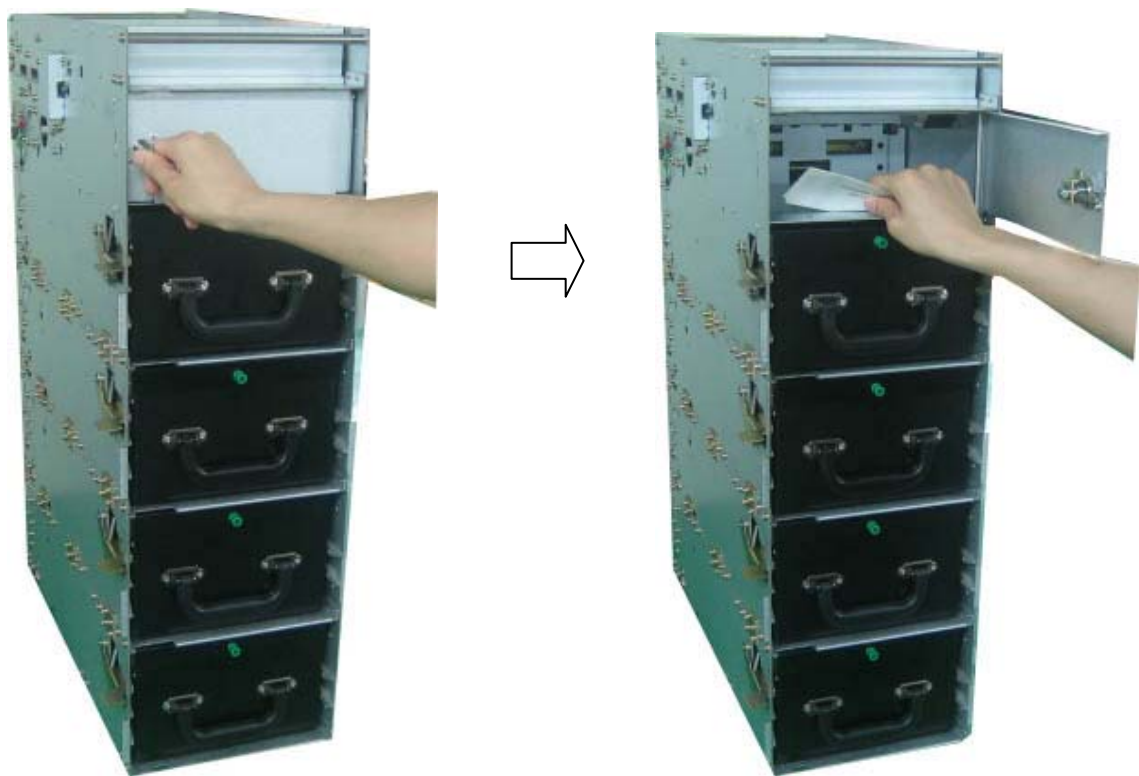


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<div>4. Taking out of rejected notes</div>						
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4. Taking out of rejected notes

- Turn the lock to the right with reject bin key
- Open the reject bin lid
- Take rejected notes out of the bin
- Turn the lock to the upward with reject bin key for reject bin closing
- If you have a reject box type, refer to the next page.



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<Reject Box type>

- Pull the reject box from the GBM-MR.
- Open the lid with a key.
- Take out the rejected notes from the reject box.
- Close the reject box and put it in the GBM-MR.



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<div>5. Cables connecting</div>						
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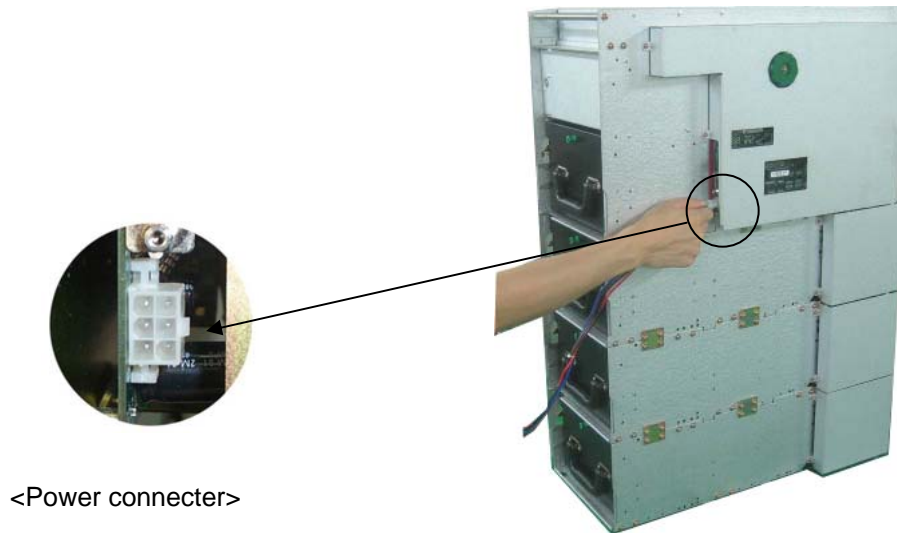


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5. Cables connecting

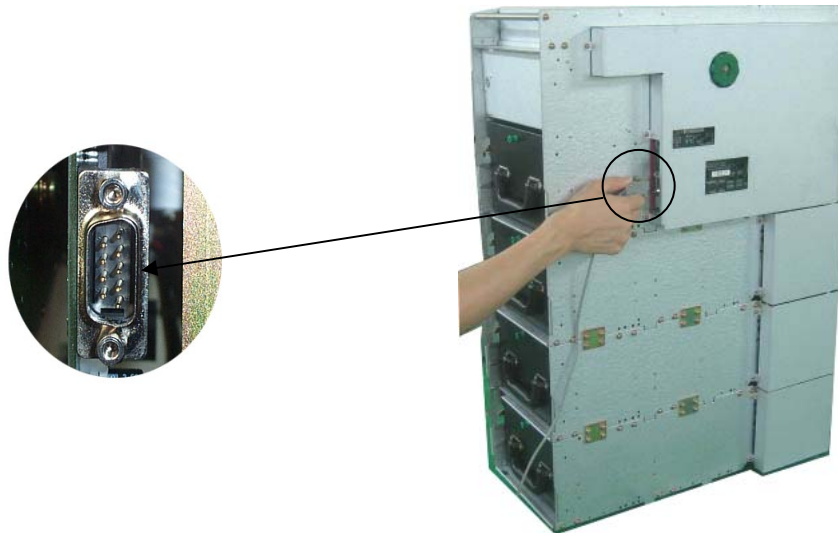
5.1. Power cable

- Connect the power cable to the power connector of main board.




5.2. Interface cable or Maintenance box (MT-2003) cable

- Connect the interface cable (RS-232C) to the 9pin D-sub connector of main board.



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<div>6. Removing notes on the dispensing mechanism</div>							
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6. Removing notes on the dispensing mechanism


- The GBM-MR may be hung up operation by abnormal events, such as note jam. In this case, there may be notes on the GBM-MR transport belts. For resetting the GBM-MR, such notes should be removed there. To do so, rotate just a knob to the front as the picture below. The GBM-MR is ready for the next operation then.



Note) Make sure that power is off when clearing the note jam.

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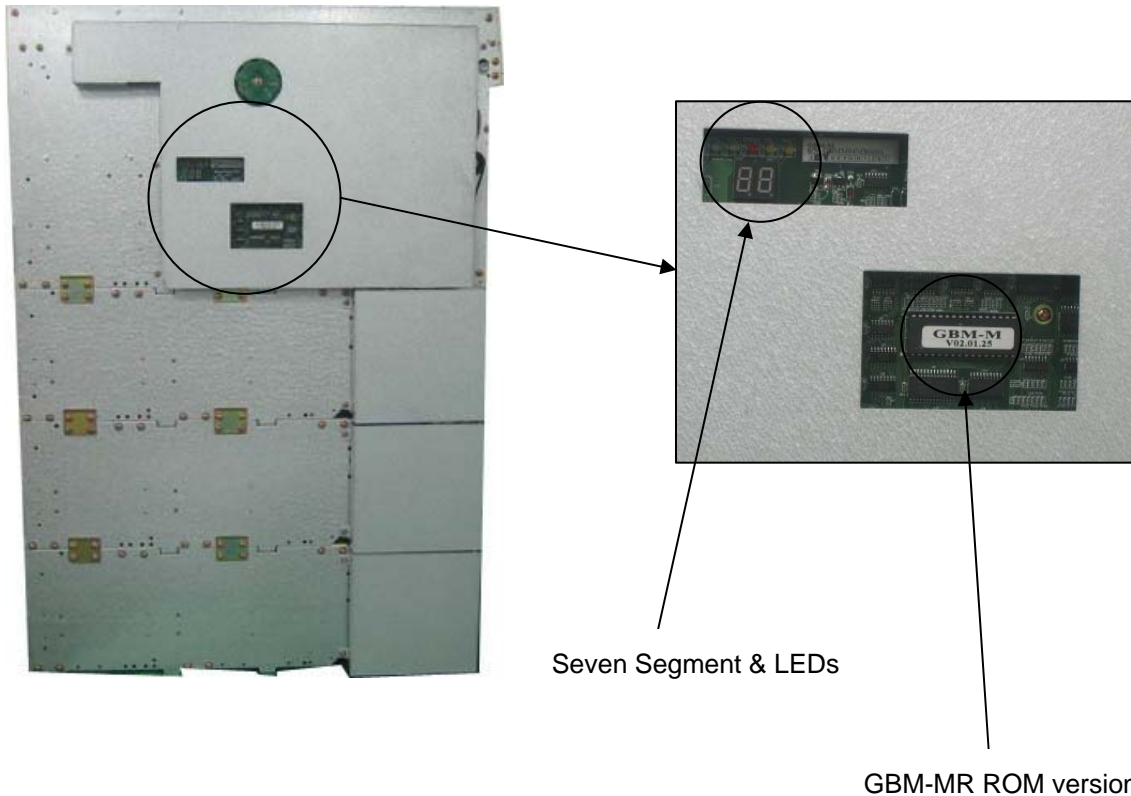
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<div>7. <u>Simple check up</u></div>						
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7. Simple check up

- An operator can easily recognize something wrong in GBM-MR due to LEDs.
 - When a green power LED is off in operation, check the power supply, control board or power cable.
 - When a yellow TxD LED is off for some time in operation, check the serial interface cable, control board or power cable.
 - When a yellow RxD LED is off for some time in operation, check the serial interface cable, control board or power cable.
 - When a error LED goes red, then check the GBM-MR or control system to the GBM-MR.
 - When error happens, GBM-MR displays the error code on its seven segments. (Except "00")
 - An operator can check GBM-MR ROM version through the window of board cover.



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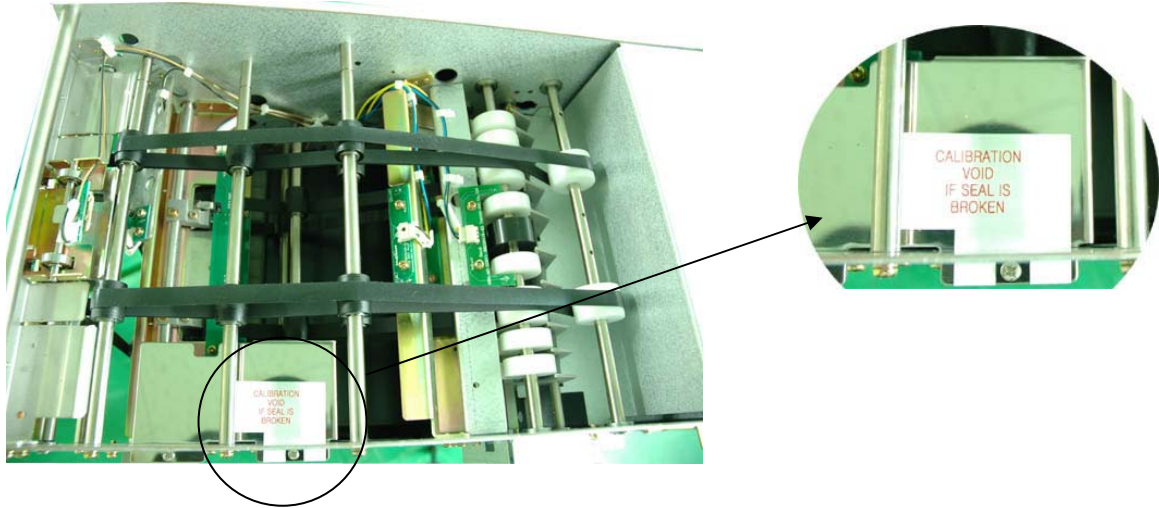
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<div>8. Notice</div>							
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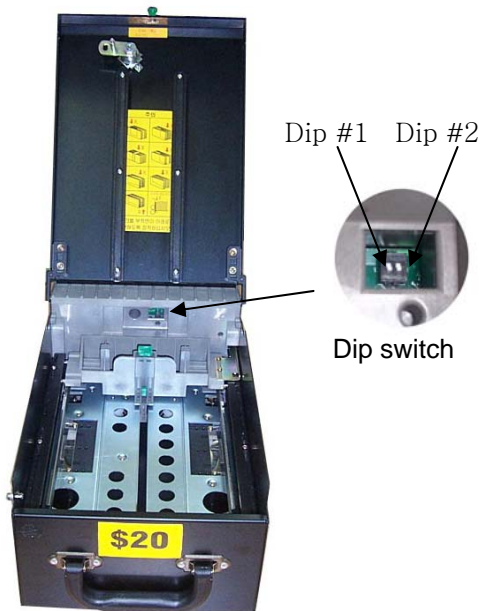
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8. Notice

- Do not tear out the label and do not tamper the mechanism.
When it happens, it causes faulty double note detecting mechanism.



- Do not manipulate the Dip switch in a cassette without particular reason.
If not so, it causes serious cash accident during operation.



< Manipulating Dip switches >

Dip #1	Dip #2	Note type
↓	↓	Type1 (the lowest note type)
↑	↓	Type2 (the 2nd low note type)
↓	↑	Type3 (the 3rd low note type)
↑	↑	Type4 (the 4th low note type)

Ex) If US dollar

-Case 1-

Type 1 note: 1 dollar
Type 2 note: 5 dollar
Type 3 note: 10 dollar
Type 4 note: 20 dollar

-Case 2-

Type 1 note: 10 dollar
Type 2 note: 20 dollar
Type 3 note: 50 dollar
Type 4 note: 100 dollar

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