




Revision	Date	Written by	Description		
<div>CASH DISPENSING UNIT (MODEL: GLOBAL BILL MODULE, GBM) OPERATOR MANUAL</div> <div>Jun. 2002.</div> <div>Taenam Information and Communication Co.Ltd., R&D Laboratory</div>					
MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	1
		Approved		05-07-19	25



Revision	Date	Written by	Description
----------	------	------------	-------------

Document History

NO	History	Date	Writer	Remarks
1	First Edition	2001. 6.15	E. J. Lee	
2	Second Edition	2001. 9.15	E. J. Lee	
3	Third Edition	2002. 6. 24	E. J. Lee	

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	2
		Approved		05-07-19	25




Revision	Date	Written by	Description
----------	------	------------	-------------

Contents

1. Features	4
1.1. Dispensing mechanism	5
1.2. Cassette	5
1.3. Control board	5
1.4. Software	5
2. Specification	6
2.1. Outlook	7
2.2. Dimension	8
2.3. Specification	8
3. Cassette replenishing and setting	9
4. Taking out of rejected notes	15
5. Cables connecting	17
5.1. Power cable	18
5.2. Interface cable	19
5.3. Maintenance box cable	19
6. Removing notes in the dispensing mechanism	20
7. Simple check up	22
8. Notice	24

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	3
		Approved		05-07-19	25




Revision	Date	Written by	Description			
<div>1. Features</div>						
MODEL: GBM			Written		05-07-19	Sheet
TITLE: GBM Operator Manual			Checked		05-07-19	4
			Approved		05-07-19	25



Revision	Date	Written by	Description
<h2>1. Features</h2> <h3>1.1 Dispensing mechanism</h3> <ul style="list-style-type: none">● Front-loading design for widely used front service type ATM.● Automatically changing the dispensing speed by external +36V or +24V power channel without any change. (7 notes per second at 36V, 5 notes per second at 24V)● Automatically reducing the dispensing speed when doubled, skewed, and mutilated note are detected. And those notes are sent to the reject bin.● 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 and FCC. <h3>1.2 Cassette</h3> <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.● Separation roller installed inside the cassette gives minimized miss feeds. <h3>1.3 Control board</h3> <ul style="list-style-type: none">● Very small size● Display error codes on seven segments.● Easy check up due to four LEDs (Power: Green, TxD: Yellow, RxD: Yellow, Error: Red).● Maintenance box (option) prepared for on-site diagnostic.● Standard RS-232C (25pin) interface connector.● Molex 7pin power connector. <h3>1.4. Software</h3> <ul style="list-style-type: none">● Taenam's own protocol● SDD 1700 emulation (option)● Very easy software upgrade using by maintenance box when needed.● Enough memory for customer's request.			

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	5
		Approved		05-07-19	25



Revision	Date	Written by	Description			
<div>2. Specifiction</div>						
MODEL: GBM			Written		05-07-19	Sheet
TITLE: GBM Operator Manual			Checked		05-07-19	6
			Approved		05-07-19	25

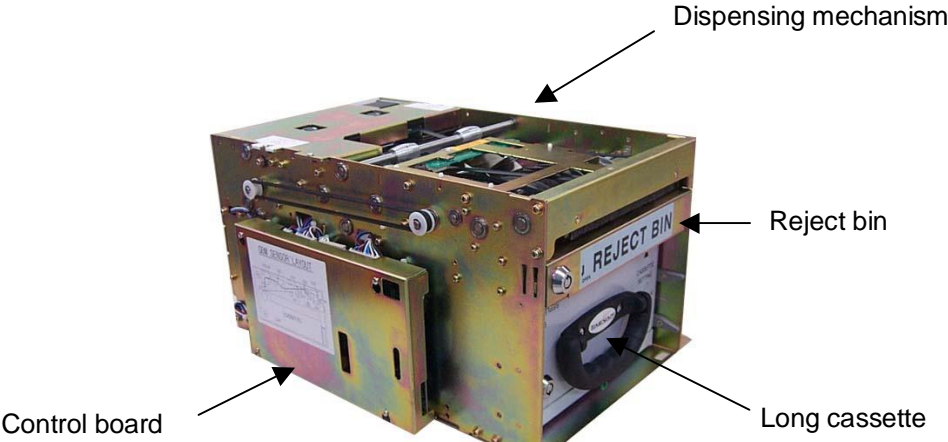
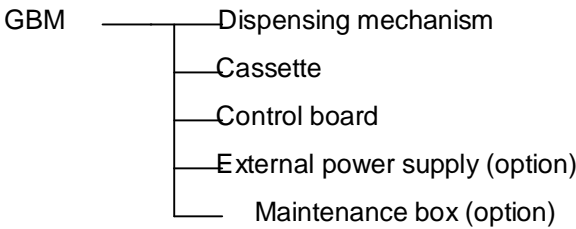


Revision	Date	Written by	Description		
----------	------	------------	-------------	--	--

2. Specification

2.1 Outlook

The GBM consists of as below



< Short cassette >



< Maintenance box >

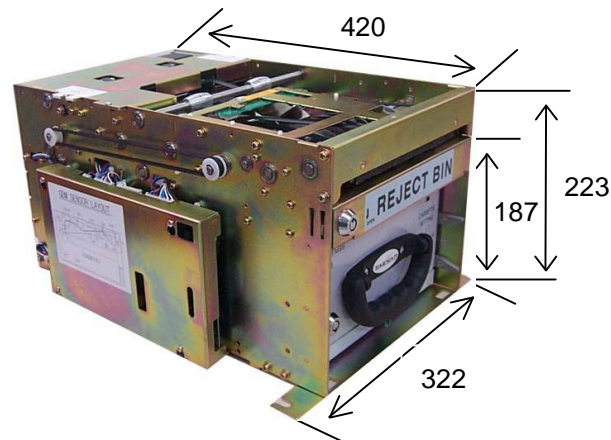
NOTE) **the appearances of these products may be slightly modified in designing.

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	7
		Approved		05-07-19	25



Revision	Date	Written by	Description
----------	------	------------	-------------

2.2 Dimension




(Unit : mm)

2.3 Specification

Feature		Specification	Remark
Loading type		Front loading (Front service)	
Dispensing speed		7 notes per second	36 V
		5 notes per second	24 V
Supporting Note size	Horizontal	130 ~ 185 mm	Contact us for different size
	Vertical	63 ~ 85 mm	
	Thickness	0.07 ~ 0.15 mm	
Number of cassette		One cassette only	
Cassette capacity		Long cassette 2000 bills	Internal length: 240 mm (9.4 in.)
		Short cassette 1000 bills	Internal length: 120 mm (4.7 in.)
Reject type		Note by note reject, bin type	
Reject capacity		40 bills	
Near end sensing		30 ~ 200 notes	Varies at customer's request
Power voltage channel		5V (normal 0.7A, peak 1.5A)	Automatic power voltage level detection
		24V (normal 2.5A, peak 3.5A) / 36V (normal 2.5A, peak 4A)	
Dimension	Height	223 mm (8.9 in.)	
	Depth	420 mm (16.5 in.)	
	Width	322 mm (12.7 in.)	
Weight		Approx. 15 Kg (6.7 lbs.)	
Height between bottom and dispensing slot		187 mm (Approx. 7.36 in.)	
Software		Proprietary protocol or various industry protocol emulation	
Interface		Standard RS-232C	Varies at customer's request
Maintenance board		LCD (4 row x 16 char.), 5 keys	Option for repair people

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	8
		Approved		05-07-19	25



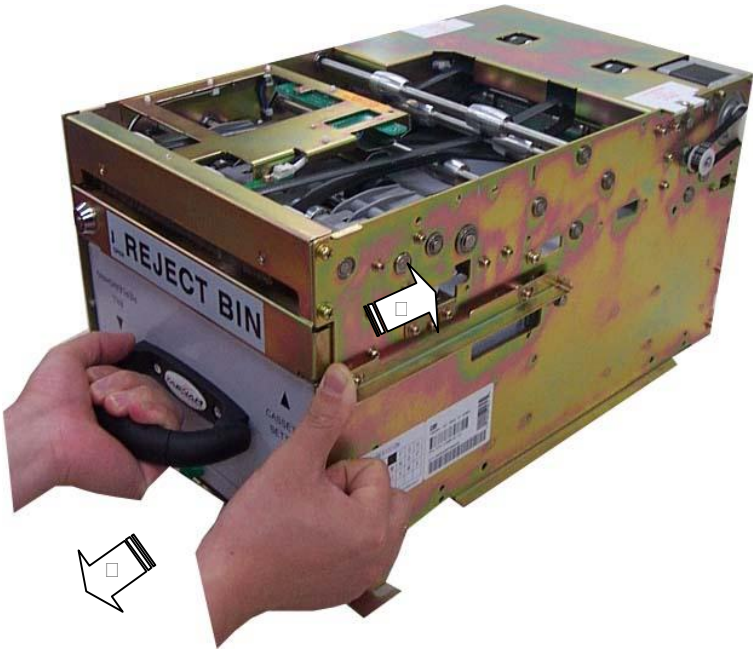
Revision	Date	Written by	Description			
<div>3. <u>Cassette replenishing</u> <u>and setting</u></div>						
MODEL: GBM			Written		05-07-19	Sheet
TITLE: GBM Operator Manual			Checked		05-07-19	9
			Approved		05-07-19	25



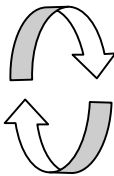
Revision	Date	Written by	Description		
----------	------	------------	-------------	--	--

3. Cassette replenishing and setting

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



- 2) Turn the cassette upside down and place the cassette in the even table.



< At the time of cassette pulled >

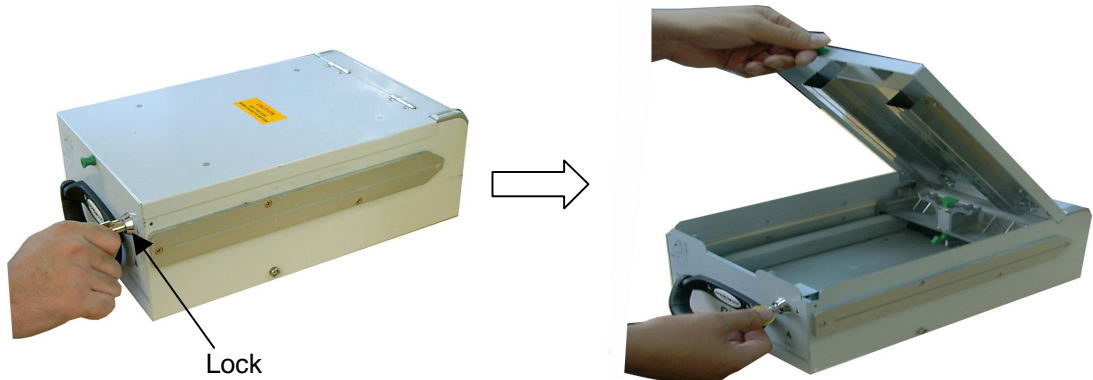
< Placing the cassette in the even table >

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	10
		Approved		05-07-19	25

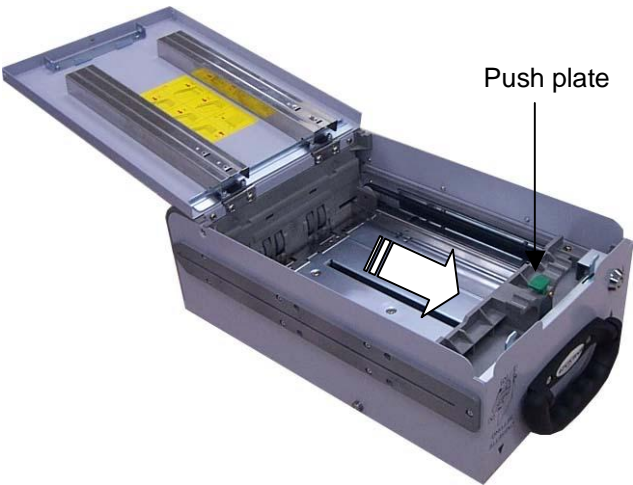


Revision	Date	Written by	Description		
----------	------	------------	-------------	--	--

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



4) Push the push plate to the back till locking.



MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	11
		Approved		05-07-19	25



Revision	Date	Written by	Description		
----------	------	------------	-------------	--	--

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



6) After closing the cassette lid and turning the cassette key to the upper side, Check the cassette lid locking.

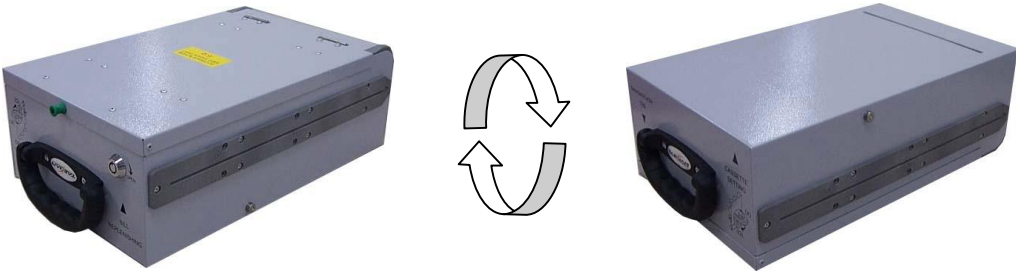


MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	12
		Approved		05-07-19	25



Revision	Date	Written by	Description		
----------	------	------------	-------------	--	--

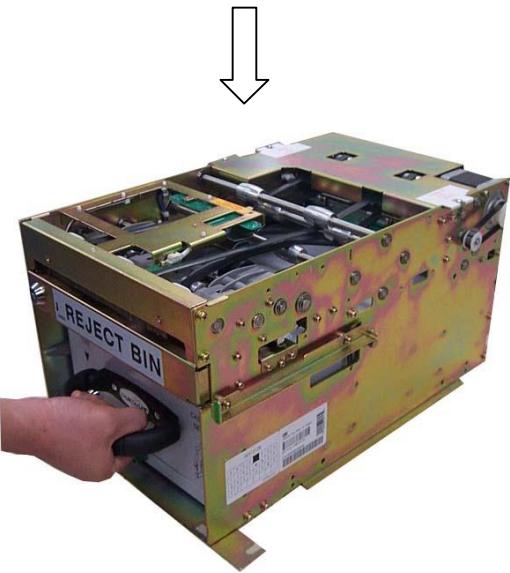
7) Turn the cassette upside down.



8) Push the cassette into the dispensing mechanism till locking entirely.



(NOTE: The lid of the cassette must be not set upward.)

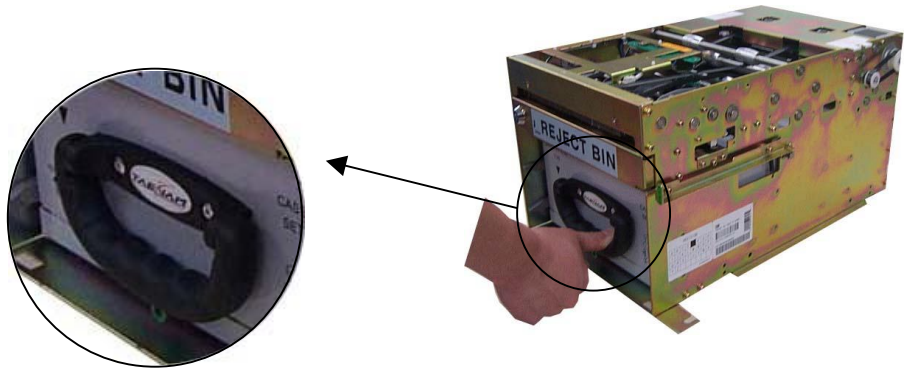


MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	13
		Approved		05-07-19	25

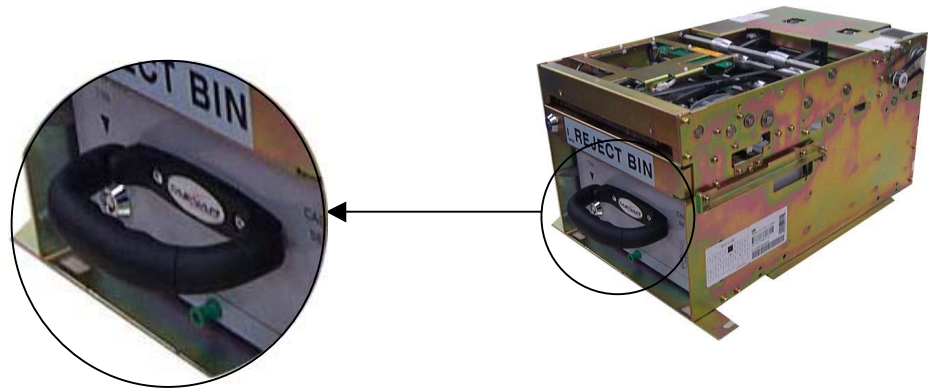


Revision	Date	Written by	Description
----------	------	------------	-------------

9) Make sure that the handle is downward.




(O)



(X)

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	14
		Approved		05-07-19	25



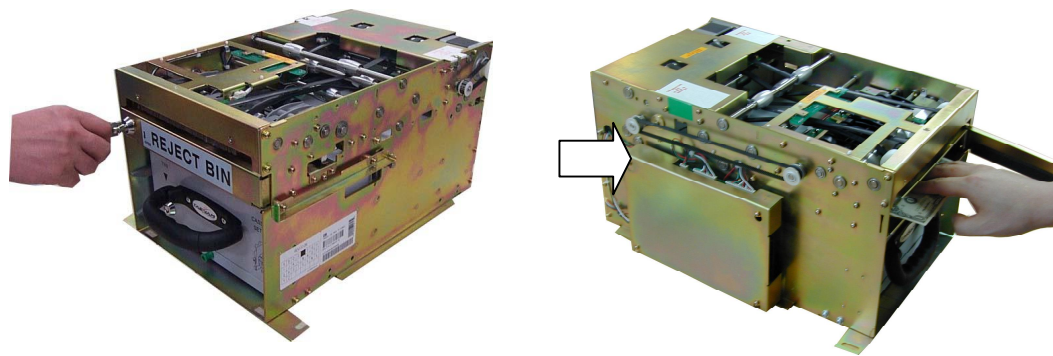
Revision		Date	Written by	Description		
<div>4. Taking out of rejected notes</div>						
MODEL: GBM			Written		05-07-19	Sheet
TITLE: GBM Operator Manual			Checked		05-07-19	15
			Approved		05-07-19	25



Revision	Date	Written by	Description
----------	------	------------	-------------


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



MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	16
		Approved		05-07-19	25



Revision	Date	Written by	Description			
<div>5. <u>Cables connecting</u></div>						
MODEL: GBM			Written		05-07-19	Sheet
TITLE: GBM Operator Manual			Checked		05-07-19	17
			Approved		05-07-19	25

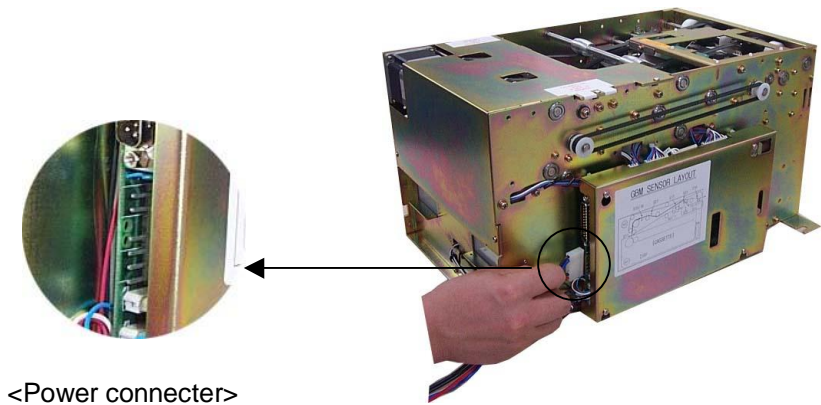


Revision	Date	Written by	Description		
----------	------	------------	-------------	--	--

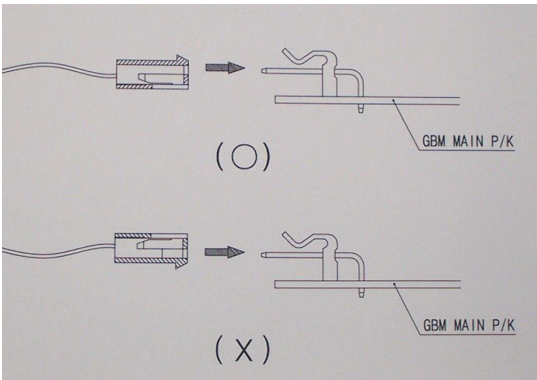
5. Cables connecting

5.1. Power cable

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



(NOTE: Make sure power is off when connecting the power cable and correct connecting is as the picture below.)



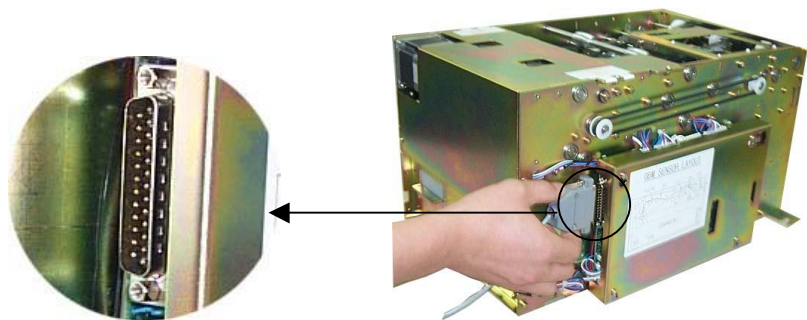
MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	18
		Approved		05-07-19	25



Revision	Date	Written by	Description		
----------	------	------------	-------------	--	--

5.2. Interface cable

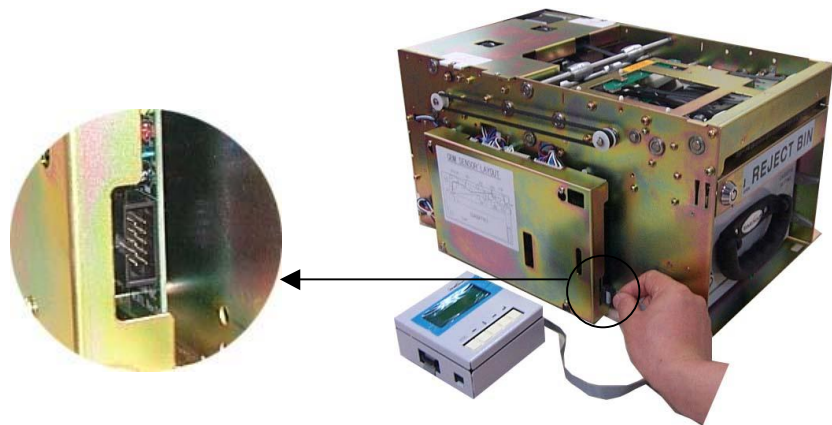
- Connect the interface cable (RS-232C) to the serial port.



(NOTE: Make sure power is off when connecting the interface cable)

5.3. Maintenance box (MT-2001) cable


- Connect the MT-2001's cable to the maintenance connector of the GBM main board. Then the MT-2001 is ready to operate it.



(NOTE: For connecting the cable, make sure that power is off.)

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	19
		Approved		05-07-19	25



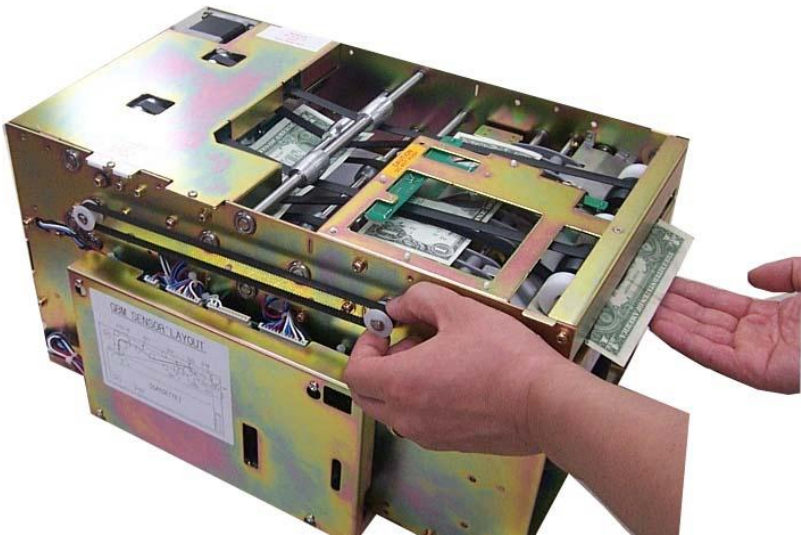
Revision	Date	Written by	Description			
<div>6. <u>Removing notes on the dispensing mechanism</u></div>						
MODEL: GBM			Written		05-07-19	Sheet
TITLE: GBM Operator Manual			Checked		05-07-19	20
			Approved		05-07-19	25



Revision	Date	Written by	Description
----------	------	------------	-------------

6. Removing notes on the dispensing mechanism


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



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

MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	21
		Approved		05-07-19	25



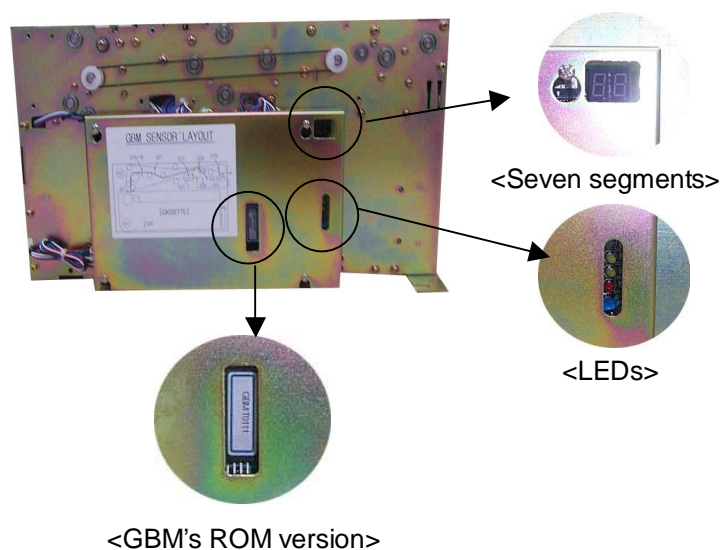
Revision	Date	Written by	Description			
<div>7. <u>Simple check up</u></div>						
MODEL: GBM			Written		05-07-19	Sheet
TITLE: GBM Operator Manual			Checked		05-07-19	22
			Approved		05-07-19	25



Revision	Date	Written by	Description
----------	------	------------	-------------


7. Simple check up

- An operator can easily recognize something wrong in GBM 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 or control system to the GBM.
 - When error happens, GBM displays the error code on its seven segments. (Except"00")
 - An operator can check GBM's ROM version through the window of board cover.



MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	23
		Approved		05-07-19	25



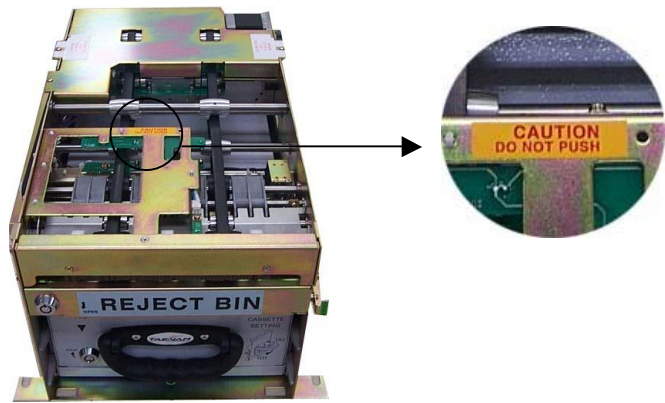
Revision	Date	Written by	Description			
<div>8. Notice</div>						
MODEL: GBM			Written		05-07-19	Sheet
TITLE: GBM Operator Manual			Checked		05-07-19	24
			Approved		05-07-19	25



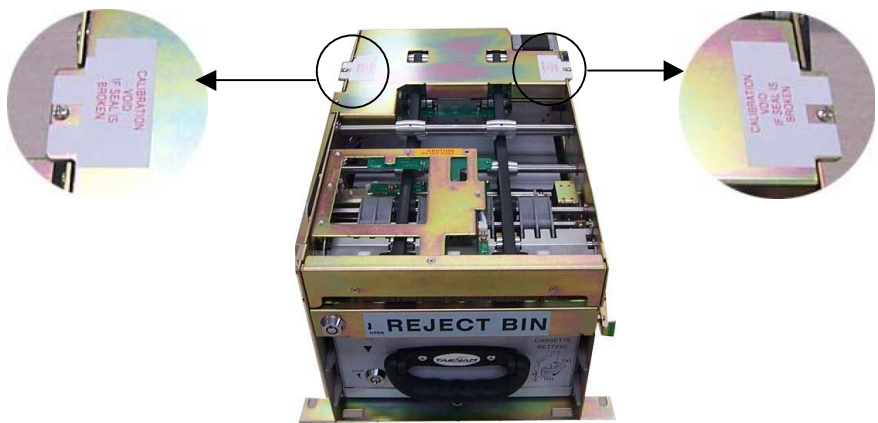
Revision	Date	Written by	Description
----------	------	------------	-------------

8. Notice

- Do not push the points attached a caution label hardly.
When it happens, it might cause faulty operation.



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



MODEL: GBM		Written		05-07-19	Sheet
TITLE: GBM Operator Manual		Checked		05-07-19	25
		Approved		05-07-19	25