Bill Acceptor

XBA

Quick Start Guide

International Currency Technologies

Before Starting

Dear Valued Customer, thank you for purchasing the XBA Bill Acceptor. The XBA comes equipped with innovative wide-angle banknote insertion technology to offer superior acceptance rate of 98% or higher. With outstanding design, the XBA has the ability to provide a very high degree of resistance to strong ambient light as well as advanced optical and mechanical anti-fishing structure for better investment protection. The built-in USB port allows for convenient firmware upgrades via an USB flash drive.

Before installation, please check that the package contents of the XBA bill acceptor are as listed below:

- ♦ XBA Bill Acceptor
- ♦ Power and Data Communication cable
- ♦ Bill insertion bezel sticker
- ♦ DIP switch setting guide
- ♦ Quick Start Guide
- ♦ C25760-R XBA Metal Plate(Option)

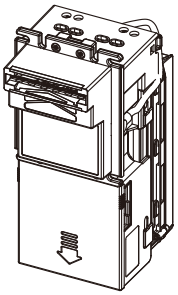
Should you have further questions,
XBA Bill Acceptor Installation & Service Manual can be downloaded at:
www.ictgroup.com.tw

Select “Support” from menu, then click “Manual Download”.

Start Installation

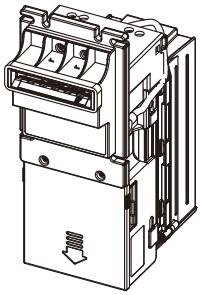
Step 1: Confirm the bezel type

There are three types of bezels based on the vending machine requirements. Be sure to choose the bezel you need before ordering/ installation as each bill acceptor comes with only ONE bezel.



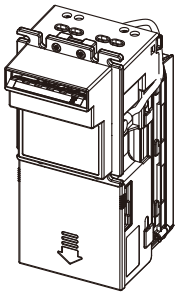
Standard plastic Bezel

FIG.01



TOB-Bezel

FIG.02



Standard Metal Bezel

FIG.03

Step 2: Select interface

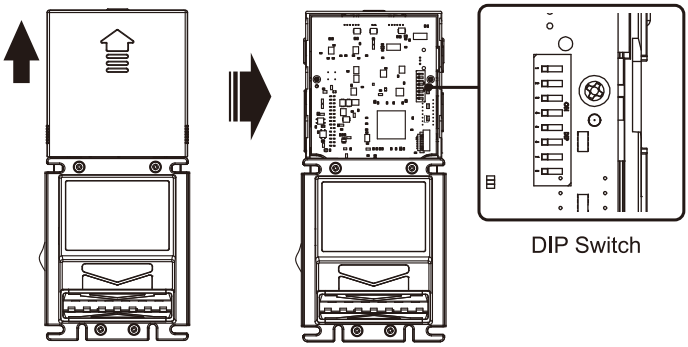


FIG.04

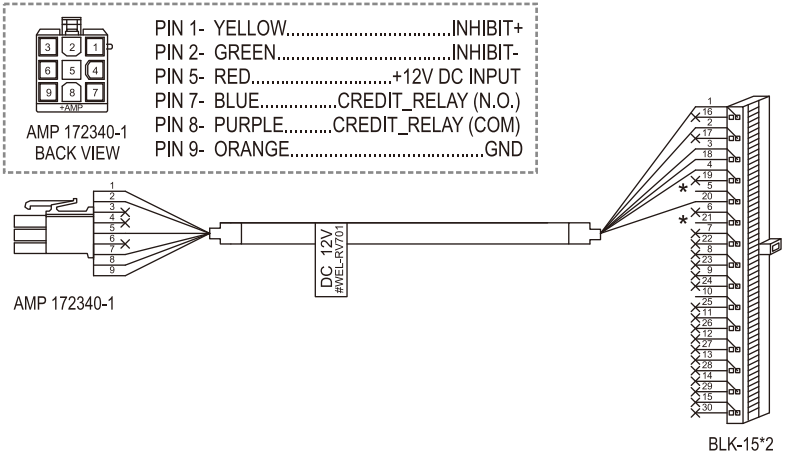
Step 3: Prepare the connection cable

We provide the cables for MDB, RS232(ICT Protocol), Pulse, ccNet, RS232 A0, JPSTD, GPT Parallel and ccTalk interfaces. Each bill acceptor comes with ONE cable only.
Please select the one you need to connect.

FIG.05

Interface	Used Voltage	Usage
Pulse	12V DC	Power & Data Communication

WEL-RV701

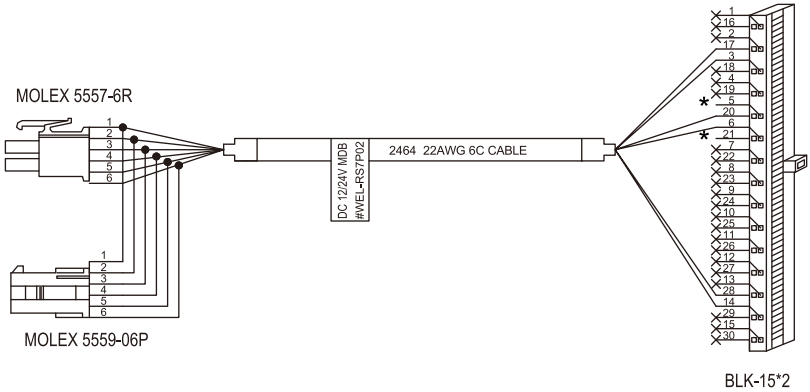


PIN 1- PURPLE.....CREDIT_RELAY (COM)
PIN 2- BLUE.....CREDIT_RELAY (N.O.)
PIN 3- RED.....+12V DC INPUT
PIN 4- YELLOW.....INHIBIT+
PIN 18- GREEN.....INHIBIT-
PIN 20- ORANGE .....GND

FIG.06

Interface	Used Voltage	Usage
MDB	12/24V DC	Power & Data Communication

WEL-RS7P02



PIN 1- BLUE.....DC+12/24VDC INPUT
PIN 2- YELLOW.....Ground
PIN 3- PURPLE.....MDB_WAKE_UP_EN
PIN 4- ORANGE.....MDB_MASTER_RXD
PIN 5- RED.....MDB_MASTER_TXD
PIN 6- GREEN.....MDB Ground

PIN 3- BLUE.....DC+12/24V INPUT
PIN 6- ORANGE.....MDB_MASTER_RXD
PIN 14- RED.....MDB_MASTER_TXD
PIN 17- PURPLE.....MDB_WAKE_UP_EN
PIN 20- YELLOW.....Ground
PIN 28- GREEN.....MDB Ground

FIG.07

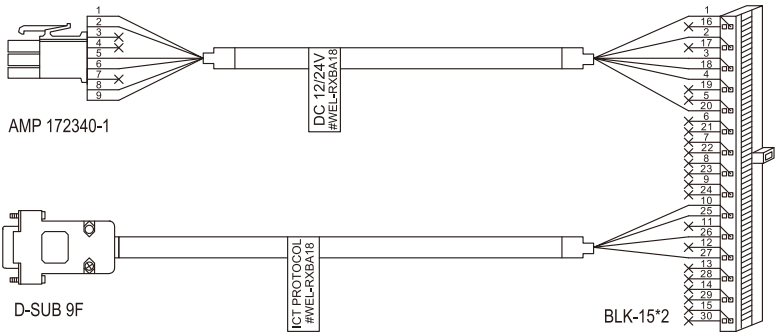
Interface	Used Voltage	Usage
ICT Protocol	12V DC	Power & Data Communication
ccNet		
RS232 A0		

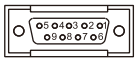
WEL-RXBA18

AMP 172340-1
BACK VIEW

PIN 1- YELLOW .....INHIBIT+
PIN 2- GREEN..... .INHIBIT-
PIN 5- RED.....+12V DC INPUT
PIN 7- BLUE..... .CREDIT RELAY(N.O.)
PIN 8- PURPLE.....CREDIT RELAY(COM)
PIN 9- ORANGE.....GND

BLK-15*2
PIN 1- PURPLE .....CREDIT RELAY(COM)
PIN 2- BLUE.....CREDIT RELAY(N.O.)
PIN 3- RED.....+12V DC INPUT
PIN 4- YELLOW.....INHIBIT+
PIN 18- GREEN.....INHIBIT-
PIN 20- ORANGE.....GND





D-SUB 9F TOP VIEW

PIN 2- RXD
PIN 3- TXD
PIN 5- GND

PIN 10- YELLOW.....GND
PIN 25- RED.....VCC
PIN 26- WHITE.....TX11
PIN 27- BLACK.....RX11

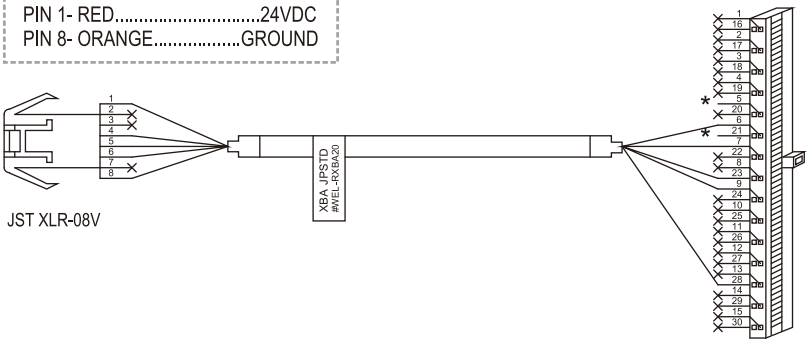
FIG.08

Interface	Used Voltage	Usage
JPSTD	24V DC	Power & Data Communication

WEL-RXBA20

PIN 4- YELLOW.....SYNC
PIN 5- GREEN.....RXD
PIN 6- BLUE.....TXD

PIN 1- RED.....24VDC
PIN 8- ORANGE.....GROUND



JST XLR-08V

BLK-15*2

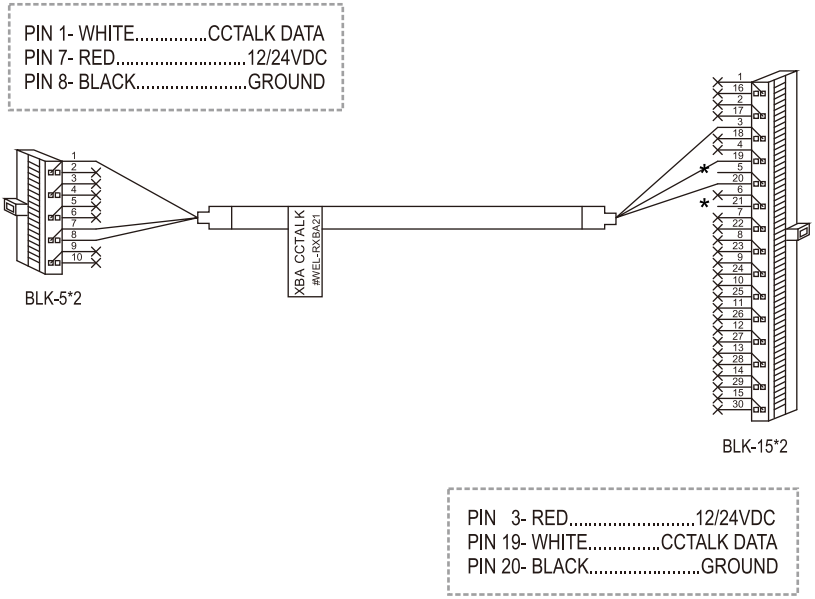
PIN 6- YELLOW.....SYNC
PIN 7- GREEN.....RXD
PIN 9- BLUE.....TXD

PIN 23- RED.....24VDC
PIN 28- ORANGE.....GROUND

FIG.09

Interface	Used Voltage	Usage
ccTalk	12/24V DC	Power & Data Communication

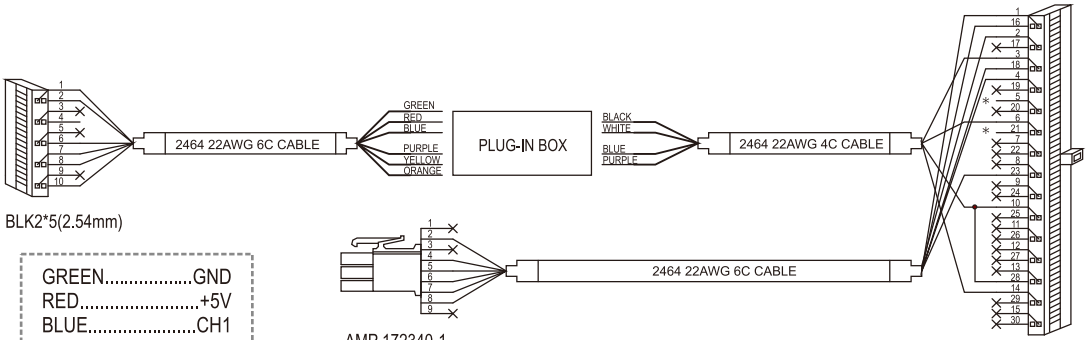
WEL-RXBA21



Note: XBA ccTalk supports 12/24V DC from CPU board number "399M30" (399M20 or before, support 12V DC only).

Interface	Used Voltage	Usage
GPT Parallel	24V DC	Power & Data Communication

5RGB-AA203L1-03-1



GREEN.....GND
RED.....+5V
BLUE.....CH1
YELLOW.....CH2
PURPLE.....CH3
ORANGE.....CH4

AMP 172340-1
BACK VIEW

PIN 2- RED.....INHIBIT+
PIN 4- ORANGE.....CREDIT_RELAY_NO
PIN 5- GREEN.....CREDIT_RELAY_COM
PIN 6- YELLOW.....INHIBIT-
PIN 7- BLACK.....VIN_RETURN
PIN 8- WHITE.....VIN

PIN 3- WHITE.....+12V
PIN 6- PURPLE.....BA_TXD
PIN 10.28- BLACK.....GND
PIN 14- BLUE.....BA_RXD

PIN 1- GREEN.....CREDIT_RELAY_COM
PIN 2- ORANGE.....CREDIT_RELAY_NO
PIN 4- RED.....INHIBIT+
PIN 16- BLACK.....VIN_RETURN
PIN 18- YELLOW.....INHIBIT-
PIN 23- WHITE.....VIN

FIG.10

Step 4: Configure the power-saving function

If your control board provides a sleep and wake-up feature (for example a battery-powered vending machine), then it can function with our power-saving mode to minimize power consumption while the machine is idle. This function allows your battery-powered machine to operate longer between chargings.

Note: 1. The wake-up function is triggered through PIN3 of the WEL-RS7P02 cable.

2. Please do NOT select this mode if your VMC does not support sleep/wake-up feature. It may cause abnormal operation that affects the transaction.

Mode	SW3	SW4
No power-saving mode	OFF	OFF

TABLE.01

Mode 1	SW3	SW4
XBA wakes up by bill insertion and then wakes up VMC	OFF	ON

TABLE.02

Mode 2	SW3	SW4
XBA wakes up by VMC	ON	OFF

TABLE.03

Mode 1+2	SW3	SW4
XBA wakes up by bill insertion or VMC	ON	ON

TABLE.04

Step 5: Power off the vending machine.

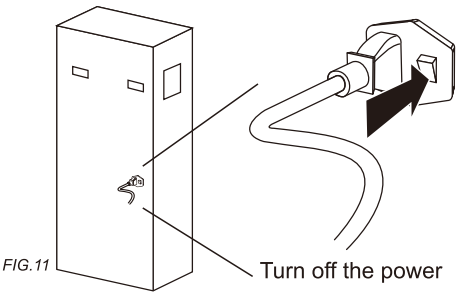
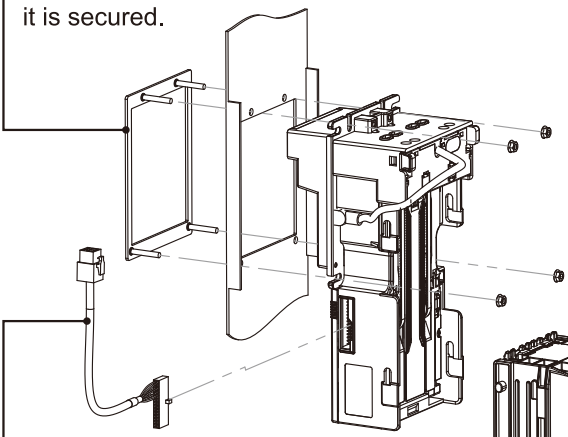


FIG.11

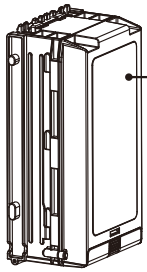
Step 6: Open the door and install the XBA on the vending machine

<Standard Bezel or Standard Metal Bezel>

Step 6-1.
Install the C25760-R XBA Metal plate on the vending machine and ensure it is secured.



Step 6-3.
Remove the cashbox, install the XBA on the mounting frame and then fasten the four screws.



Step 6-2.
Hook up the cable to the XBA through the 30-pin connector.

FIG.12

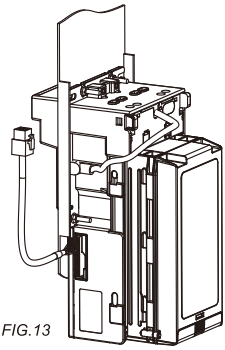


FIG.13

Step 6-4.
Install the cashbox and connect the other end of the cable to VMC to complete the installation.

Note:

Please hook up the MOLEX 5557-6R connector of WEL-RS7P02 with the ICT coin changer cable if you choose to connect the XBA through it.

<TOB-Bezel>

Step 6-1.
Install the mounting frame on the vending machine and ensure it is secured.

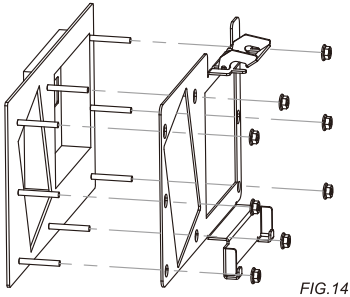


FIG.14

Step 6-2.
Hook up the cable with the XBA through the 30-pin connector.

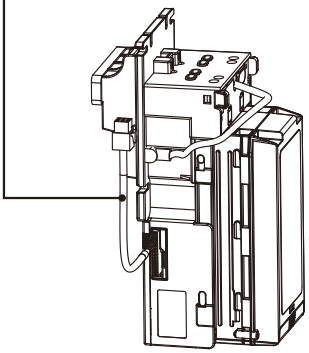


FIG.15

Step 6-3.
Buckle the XBA to the mounting frame.

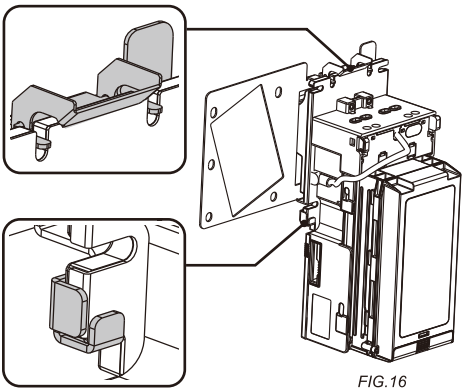


FIG.16

Step 6-4.
Connect the other end of the cable to VMC to complete the installation.

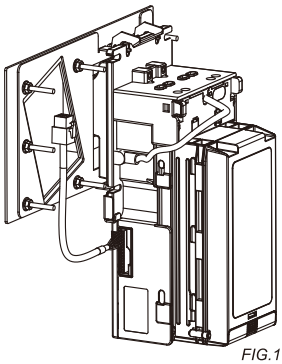
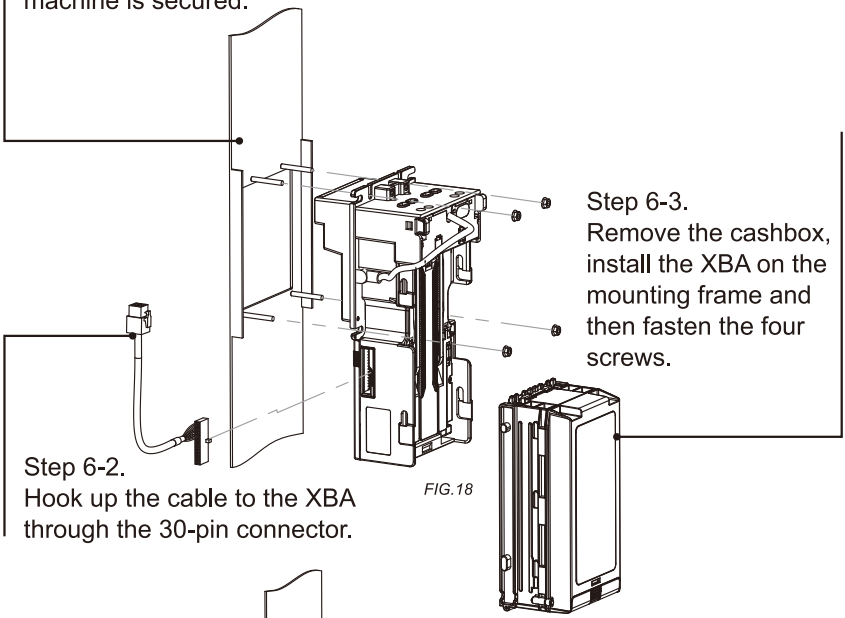


FIG.17

Note:
Please hook up the MOLEX 5557-6R connector of WEL-RS7P02 with the ICT coin changer cable if you choose to connect the XBA through it.

<Standard Metal Bezel>

Step 6-1.
Make sure 4 bolts on the vending machine is secured.



Step 6-3.
Remove the cashbox, install the XBA on the mounting frame and then fasten the four screws.

Step 6-2.
Hook up the cable to the XBA through the 30-pin connector.

FIG.18

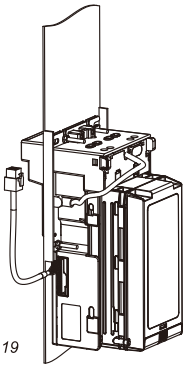


FIG.19

Step 6-4.
Install the cashbox and connect the other end of the cable to VMC to complete the installation.

Note:

Please hook up the MOLEX 5557-6R connector of WEL-RS7P02 with the ICT coin changer cable if you choose to connect the XBA through it.

Step 7:
Power on the
vending machine.

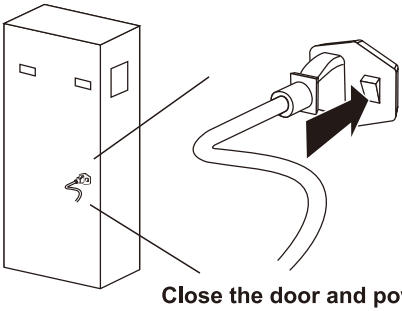


FIG.20 **Close the door and power on**

Step 8: Check the bezel LED

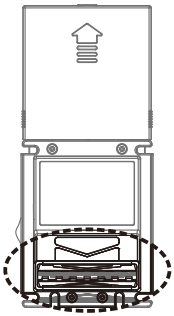
Green(Power Save Mode)/Multi-Color means the bill acceptor is functioning normally; if not please check the rear LED and refer to the chart below.

Step 9: Transaction testing

Insert bills of each accepted denomination, check if they are accepted and stored into the cashbox. If any problem occurs, please refer to the troubleshooting section in the service manual or contact local ICT distributor.

Note: *Please refer to the provided DIP switch setting guide to configure more options if necessary.*

Step 9-1:
Check Bezel LED Error



Bezel LED

FIG.21

TABLE.05

LED Flashes		Status	Corrective Actions
Red	**Green**		
	1	White Card Calibration	Please calibrate with ICT white calibration card.
1		Bill jammed.	Remove the bill box by sliding the top button and the bill path(as FIG.22), and then remove the jammed bill.
2		Disable.	Inspect the right DIP switch setting.
3		Recognition sensor module error.	Inspect the foreign objects on sensor or bill path and clean.
3	**1**	IR error.	Inspect the foreign objects on sensor or bill path and clean.
3+2		Hook sensor error.	Inspect the foreign objects on security hook and clean.
4		Anti-string sensor error or a stringing attempt has detected.	Inspect the foreign objects on sensor or bill path and clean.
5		Bill box has been removed.	Replace the bill box.
6		Stacker error or stacker full.	Empty the bill box.
7		Motor error.	Inspect the foreign objects on bill path and clean.

Step 9-2:
Check Back LED Error

TABLE.06

LED Flashes RED	Status	Corrective Actions
1	White Card Calibration	Please calibrate with ICT white calibration card.
1	Bill jammed.	Remove the bill box by sliding the top button and the bill path (as FIG.22), and then remove the jammed bill.
2	Disable.	Inspect the right DIP switch setting.
3	Recognition sensor module error.	Inspect the foreign objects on sensor or bill path and clean.
3+1	IR error.	Inspect the foreign objects on sensor or bill path and clean.
3+2	Hook sensor error.	Inspect the foreign objects on security hook and clean.
4	Anti-string sensor error or a stringing attempt has detected.	Inspect the foreign objects on sensor or bill path and clean.
5	Bill box has been removed.	Replace the bill box.
6	Stacker error or stacker full.	Empty the bill box.
7	Motor error.	Inspect the foreign objects on bill path and clean.

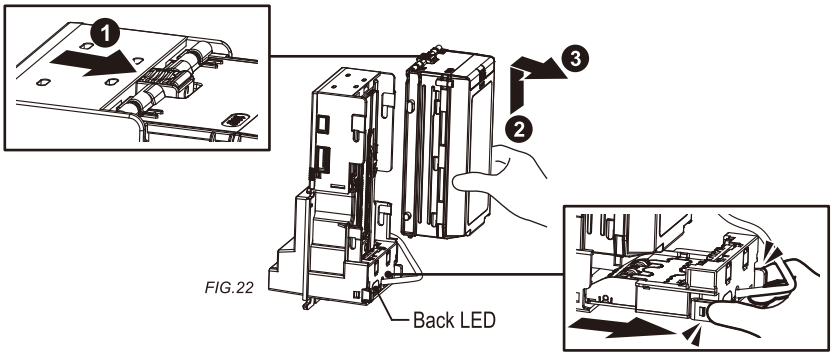


FIG.22

If the error can not be solved after corrective actions or it recurs, please contact ICT for technical support.

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