Newton A

USER MANUAL

KISAN
AMERICA, INC.

Thank you for purchasing KISAN product, NEWTON A.

- Read this operation manual thoroughly before using the product.

- Follow this operation manual to ensure the safe and proper use of the product and to prevent any physical/material damage.

- The contents of this manual could be changed without notice.

- The actual product may differ from the contents of this manual.

- Any part of our product shall not be reproduced for commercial purpose without our permission.

KISAN
AMERICA, INC.

Contents

KISAN
AMERICA, INC.

When inserting banknotes

Do not insert banknotes severely damaged, wet or mixed with alien substances.
Make sure that no other foreign substances enter the product including your hands and hair, when inserting and counting banknotes.
Straighten the folds or corners of banknotes before insertion.
Banknotes should be properly arranged and put on the hopper as shown below.

KISAN
AMERICA, INC.

To use the product safely

DO NOT place the product near heat sources such as a stove or a heater.

DO NOT try to disassemble or repair the product by yourself.
Such attempts may cause accidents.

DO NOT place heavy objects or liquid containers, such as a beverage can, on the product.

DO NOT apply excessive force to the product.

DO NOT try to open or operate the product by force.
Make sure to apply proper grounding, using the plug.
Short-circuit may cause electric shock.
Make sure to shut its power off before putting your hands inside the product
for such purposes as replacing a fuse or checking the components.

DO NOT unplug the product holding its electric cord.
Such action may cause electric shock or fire.

KISAN
AMERICA, INC.

To maximize the durability of the product

DO NOT expose the product to the direct rays of the sun for a long period.

DO NOT place the product in a dusty space make sure that the product stays free
of dusts or foreign substances , also do not place the product on an unstable
or shaky place.
Keep and use the product under the optimal conditions as follows
- Temperature : 10 ~ 35 ℃(For use) / - 10 ~ 45℃(For storage)
- Humidity : 20 ~ 90 % RH

DO NOT press the LCD screen or control keys with sharp objects such as a pen or a pin.
For the safekeeping of a long period, lay its cover over the product.

KISAN
AMERICA, INC.

Daily Checkup

Remember to shut off the power and unplug the product during the checkup.

DO NOT use chemicals when removing dust from the product.

The use of chemicals may cause discoloration and deterioration.
Under long-term use, such foreign substances as dust may stick to the sensor, causing errors.
To prevent this, use a brush to remove any foreign substances from the sensor.

KISAN AMERICA, INC.
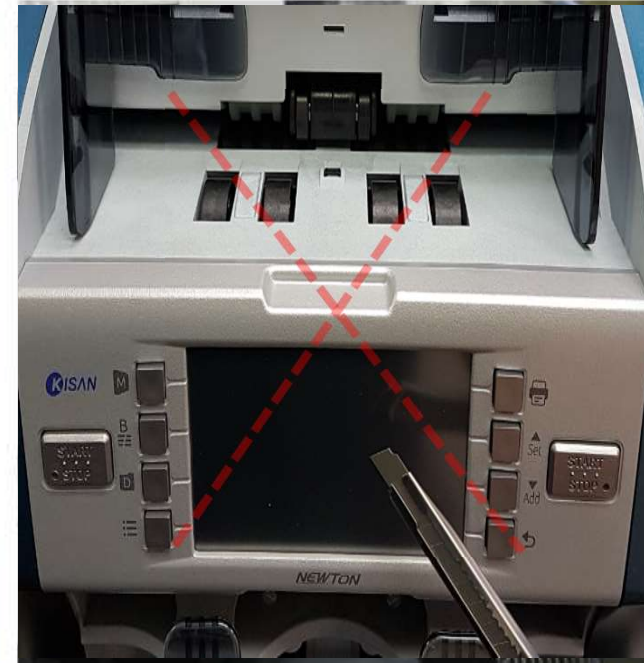
Front Part

Hopper is an area where the banknotes to be placed

Hopper guide moves from side to side and adjustable by the size of banknotes

Reject stacker is an area where the rejected banknotes are taken out

Stacker is an area where banknotes are taken out upon the operational completion

KISAN
AMERICA, INC.

Rear Part

USB host port
is linked to the A-type USB

LAN/DEBUG port
is linked to Ethernet

Power switch
turns the power on/off

Dust pocket removes dusts
collected during the operation

Power connector
110-220V power inputted

Display port : COM2
is linked to the external display

Printer Port : COM1
is linked to the printer

KISAN
AMERICA, INC.

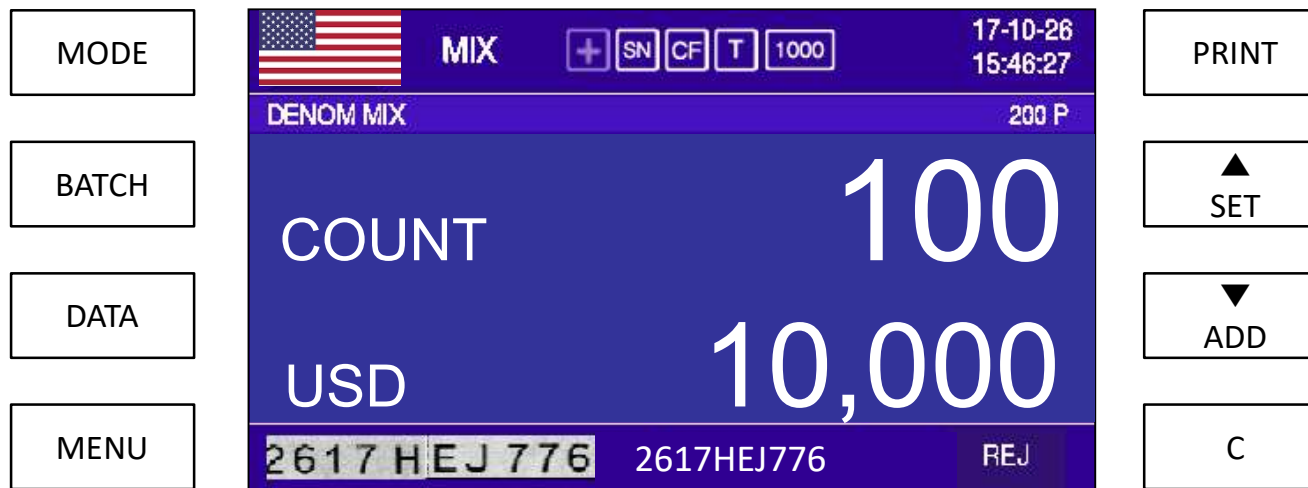# Control / Screen Display

LCD Touch Screen

Operation Button

START/STOP Button

A Newton A can be operated by two users with two different settings and parameters.

Specifications

Item	Specification
Mode	Mix, Auto(Single), Count, Face/Orient, Serial No(OCR)
Dimension	12.4" x 12.2" x 11.3" (W x D x H)
Speed	1500 notes/min : Normal Counting, Value Counting 1000 notes/min : Serial Number Detecting
Pocket Capacity	Hopper 600 notes Stacker 200 notes Reject 50 notes
Currency	Up to 20
Sensor	CIS / MG(18ch) / US / UV / IR
Operation System	Linux
Display	4.3" TFT Color Touch Screen LCD (480x272 Pixels)
Interface	USB x 2, LAN, Serial port x 2
Weight	22 lbs.
Power Supply	100 ~ 240V AC, 50/60 Hz

KISAN
AMERICA, INC.

Operation of Function

	Display	
MODE		PRINT
BATCH		▲ SET
DATA		▼ ADD
MENU		C

Screen display:

🇺🇸 MIX ⊞ SN CF T 1000   17-10-26 15:46:27

DENOM MIX   200 P

COUNT   **100**

USD   **10,000**

2617 HEJ 776   2617HEJ776   REJ

When the machine is powered on, the screen will be displayed as above.
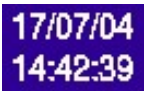(The settings in the screen may differ from actual one.)

Touch the icon on the screen or press the button on the side of each icon to select a menu.

Do not use sharp objects such as a pen for touching the icons on the screen.

KISAN AMERICA, INC.

Main Menu

Display shows:
- 🇺🇸 MIX [+] [SN] [CF] [T] [1000] 17-10-26 15:46:27
- DENOM MIX 200 P
- COUNT **100**
- USD **10,000**
- 2617HEJ776 REJ

Buttons: MODE, BATCH, DATA, MENU, PRINT, ▲SET, ▼ADD, C

Button	Short Press	Long Press
MODE	Switching Mode (Auto->Mix->Denom->Free)	Switching to the mode settings screen
BATCH	Switching batch value(10->20->50->100->150->200)	Switching to batch value setting screen
DATA	Count Result/Total/History , SerialNumber	Switching to the Check-Log screen
MENU	Counting Speed change	Switching to the SETUP screen
PRINT	Counting Print	
▲SET	Changing denomination at DENOM mode	
▼ADD	Changing ADD mode or not	
C	Count clear /Cencel	
START/STOP	Counting Start/Stop/Jam path clear	

KISAN AMERICA, INC.
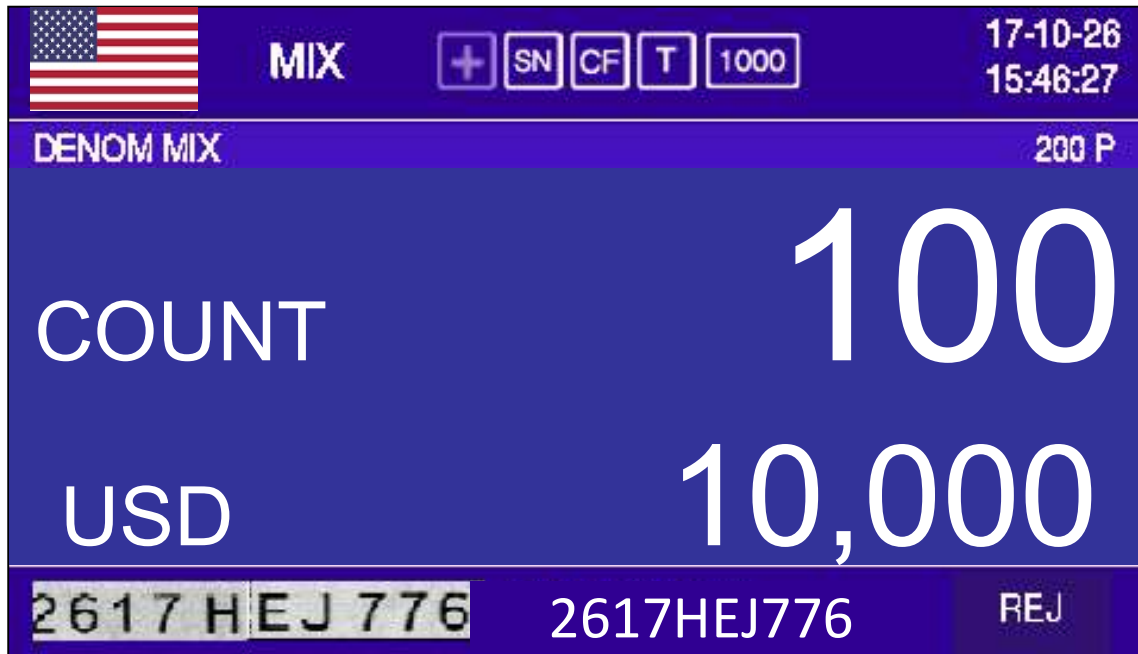
ICON	Screen Touch
🇺🇸	Switching the country currency
17/07/04 14:42:39	Switching to Time Setup Screen
REJ	Switching to Reject Reason Screen
100 10,000	Switching to detail counting result Screen

Display the Detail Counting Result

: If you want to see more detail breakdown , Touch the screen after counting .

MODE		PRINT

Count Result - Detail (KRW)

Denom	Count	Amount	Detail
1,000	54	54,000	
5,000	43	215,000	Banknote
10,000	56	560,000	
50,000	47	2,350,000	
Total	200	3,179,000	

Button	Short Press
PRINT	Print the counting information / Serial Number
▲SET	Display Off Old & New / PAGE UP
▼ADD	Dsiplay On Old & New / PAGE DOWN
C	Backward
START/STOP	Switching to Main Screen

Screen	Screen Touch
Detail	Display the counting information by denomination
Banknote	Display the information of denomination

KISAN
AMERICA, INC.

Mode Setting

: If you want to change the specific mode , Long Press the "MODE" button .

MODE		PRINT
BATCH		▲ SET
DATA		▼ ADD
MENU		C

Button	Short Press
C	Changing Cancel / backward
START/STOP	Apply the new mode / Switching to Main Screen

Screen	Screen Touch
Auto	Counts only one denomination initially counted
Mix	Shows total amount and number of banknotes when mixed denominations are counted together.
Free	Counts the total number of banknote without recognition of denomination
Add / SN	On/Off the Add/Serial Number

Batch Setting

: If you want to change the specific batch value , Long Press the "BATCH" button .

MODE

BATCH

DATA

MENU

PRINT

▲ SET

▼ ADD

C

Batch Setting

PCS	Amount
200	

Add	SUB

1	5	10
50	100	

7	8	9
4	5	6
1	2	3
	0	Erase

Button	Short Press
C	Changing Cancel / backward
START/STOP	Apply the new mode / Switching to Main Screen

Screen	Screen Touch
All Number Key	Input the number of batch

KISAN
AMERICA, INC.

Simple Trouble shooting guide1

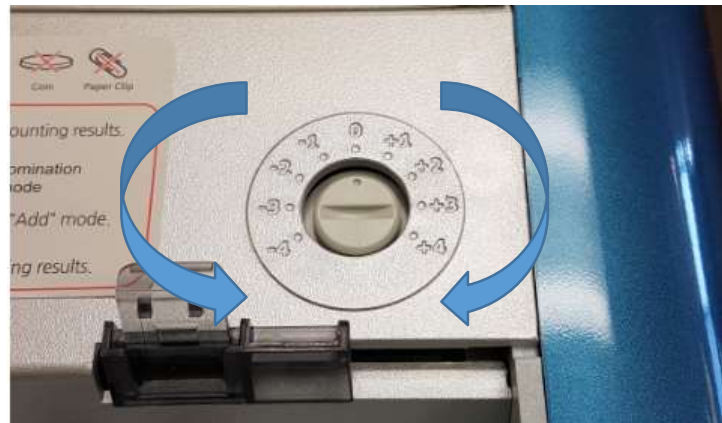**Trouble. When there is a lot of Pre-processing image error**
Solution 1. Remove dust on the CIS.
Solution 2. Check the GAP of insert module using Test-Note
Solution 3. Adjust the GAP for insert module. (- direction or + direction , **P1.1 See picture below)**
Solution 4. Check the skew using Test-Note. & newton APL
Solution 5. Update the currency SW again using USB.

Trouble. When there is a lot of denomination recognizing error(Reference F1.2)
Solution 1. Remove dust on the CIS.
Solution 2. Check the image using Test-Note.
Solution 3. If the image is abnormal, Try CIS calibration
Solution 4. Update the currency SW again using USB.

KISAN
AMERICA, INC.

Simple Trouble shooting guide 2

Trouble. When there is in case of a continuous " Check CIS " message
Solution 1. Remove dust on the CIS.
Solution 2. Update the FPGA SW again using USB
Solution 3. Update the APL SW again using USB
Solution 4. Update the DSP SW again using USB

Trouble. When alert window does not disappear after removal of JAM
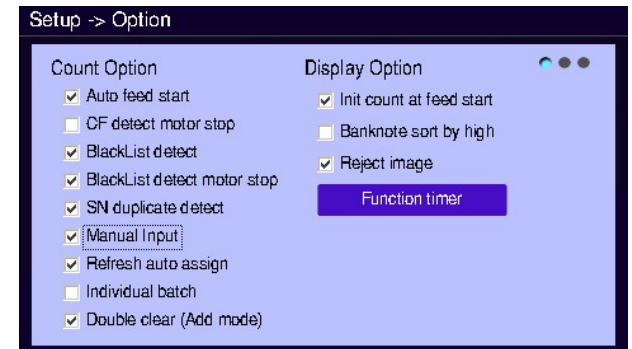Solution 1. Try again open/close Main Cover & Back Cover
Solution 2. Update the Mecha SW again using USB
Solution 3. Replace the IR sensor PCB

KISAN
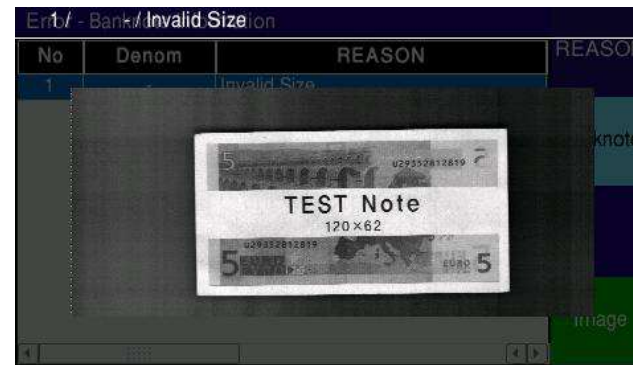AMERICA, INC.

Simple Trouble shooting guide 3

Check Reject Image

Setup -> Option -> 1st page -> Mark the Reject Image

When the error screen appears.

Screen touch "R" -> Banknote -> Image

KISAN AMERICA, INC.

Reject Reason List

Code	Reject Reason
R-01	Unfit (Unfit)
R-02	Unfit (Stain)
R-03	Unfit (Breakage)
R-11	Tape
R-12	Double
R-1A	Miss Denom(CIS)
R-1B	Miss Denom(Reflection)
R-1C	Miss Denom(Transmission)
R-1D	No NN Patern
R-1E	Other Paper Size

Code	Reject Reason
R-1F	No Same Patern
R-20	Reco Chain
R-21	Other Denom
R-22	Other Face/Orient
R-23	Over Pocket
R-24	Not Defined Denom
R-25	Insert Chain
R-26	Too Skewed MG
R-50	Recognition Double
R-60	No Serial Number Face

KISAN AMERICA, INC.

Reject Reason List

Code	Reject Reason
R-C1	Suspect IR
R-C2	Suspect UV_T
R-C3	Suspect IR, UV_T
R-C4	Suspect UV_R
R-C5	Suspect IR, UV_R
R-C6	Suspect UV_T, UV_R
R-C8	Suspect MG_D
R-C9	Suspect IR, MG_D
R-CA	Suspect UV_T, MG_D
R-CB	Suspect IR, UV_T, MG_D

| Code	Reject Reason
R-CC	Suspect UV_R, MG_D
R-CD	Suspect IR, UV_R, MG_D
R-CF	Suspect UV_R, UV_T, MG_D
R-D0	Suspect MG_U
R-D1	Suspect IR, MG_U
R-D2	Suspect UV_T, MG_U
R-D3	Suspect IR, UV_T, MG_U
R-D4	Suspect UV_R, MG_U
R-D5	Suspect IR, UV_R, MG_U
R-D6	Suspect UV_R, UV_T, MG_U

KISAN
AMERICA, INC.

Guide for Component

1. **The Hopper sensor and rollers**

    Clean the hopper sensor and roller as shown in the photo below
    with a soft towel or a brush

KISAN
AMERICA, INC.

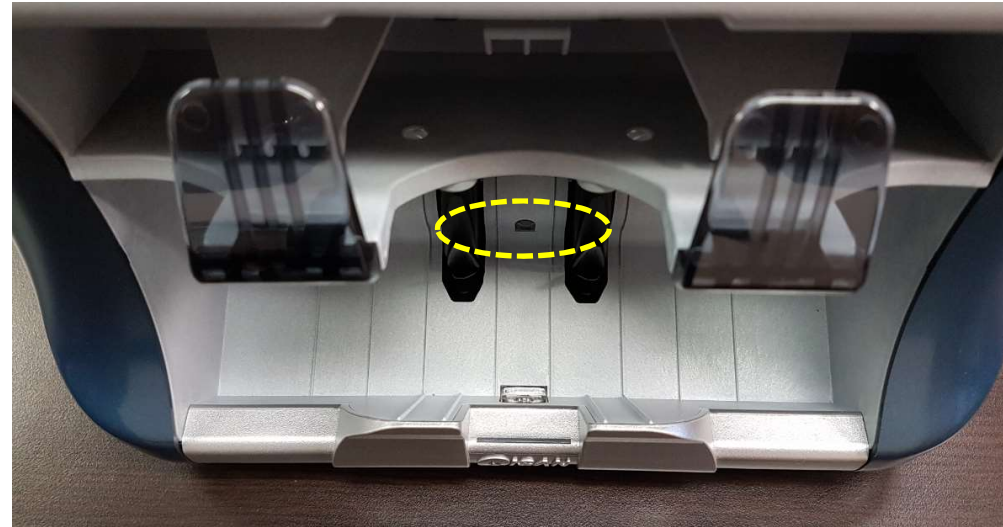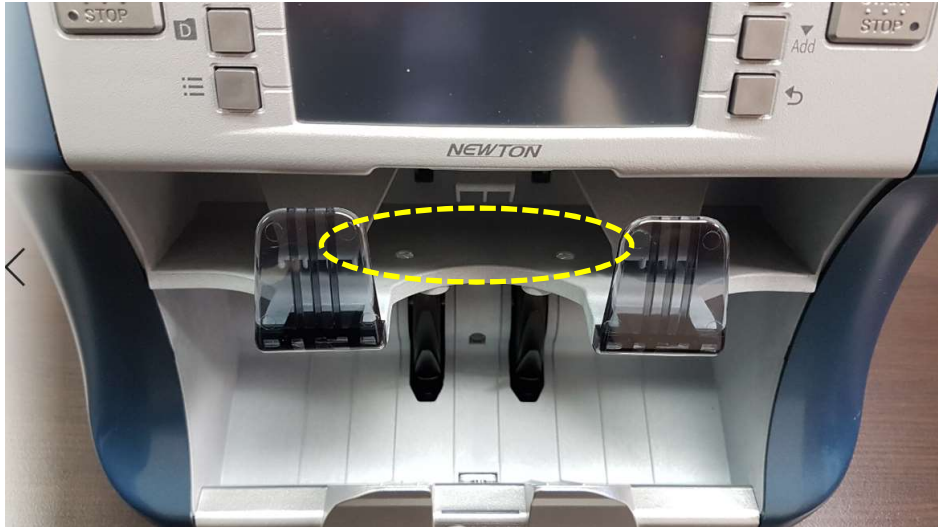## 2. Recognize Detector Sensor

Open the cover by pulling the lever and clean the sensor as shown in the photo with a soft towel or a brush

KISAN
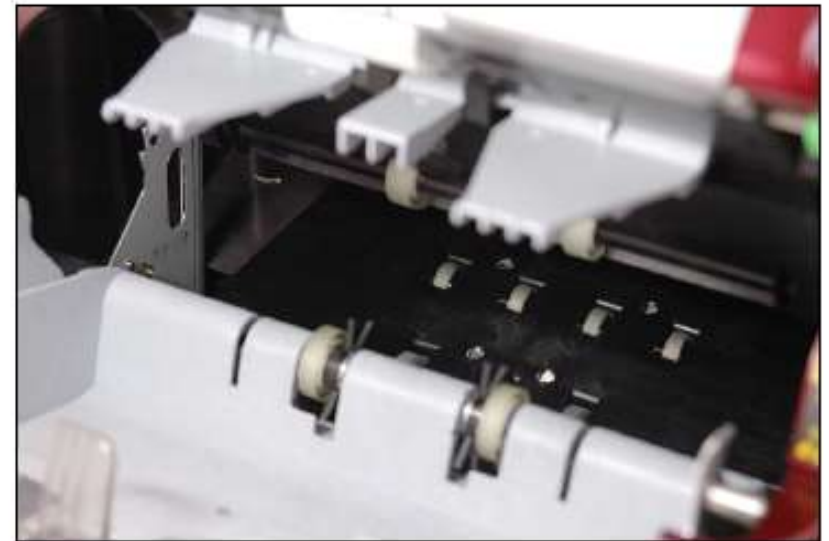AMERICA, INC.
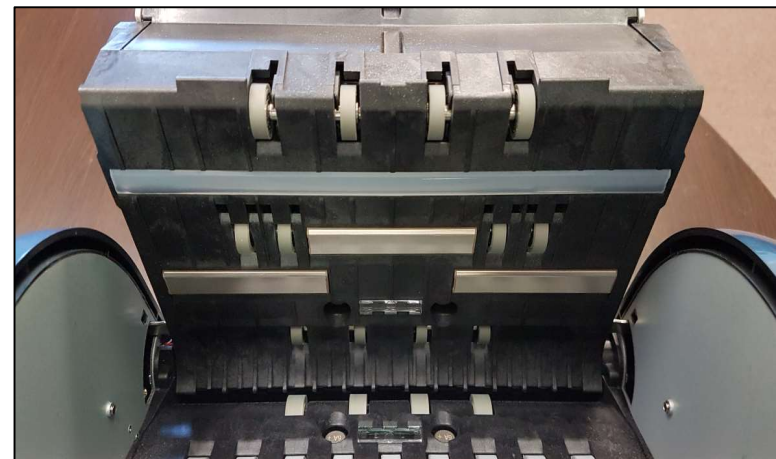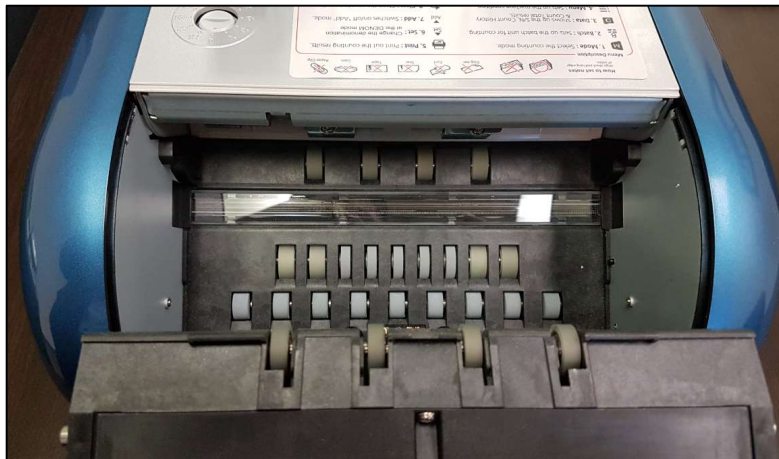
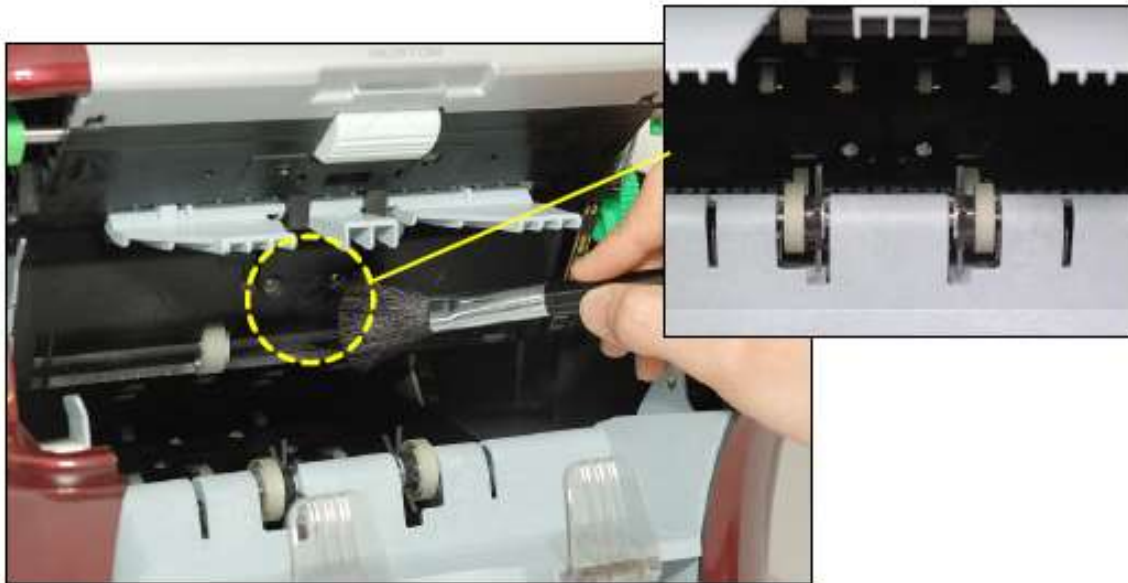## 3. Stack and Reject Sensor

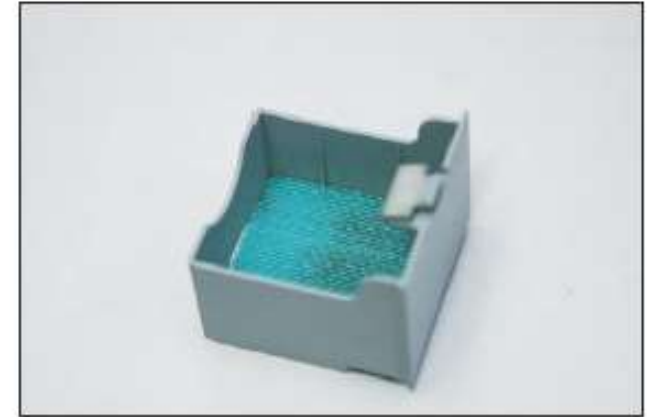Clean the sensor as shown in the photo with a soft towel or a brush

4. The Reject count and separate sensor

Open the fore panel by pushing "Open Lever" and clean the sensor as shown in the photo with a soft towel or a brush

KISAN
AMERICA, INC.

5. The dust pocket
Pull out a dust tray and clean

KISAN will make continuous efforts to improve our products.

Thank you