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# Instruction Manual

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YS-TR-520FDS II  
-590FDS II  
(PROUD)  
W-Cylinder UT

- Thank you very much for purchasing Yuyama Full Auto Tablet Packer YS-TR-520FDS II /590FDS II .
- Read this manual carefully and use YS-TR-520FDS II /590FDS II properly.
- Store this manual at hand with the guarantee card.

Read Pages 3 to 5 "Safety Precautions" carefully  
before use.



**yuyama**




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# Safety instructions





- Degrees of dangers and damages caused by wrong usage ignoring instructions are categorized and explained in the following symbols.

 <b>WARNING</b>	This symbol indicates that failure to obey this instruction may result in serious injury or death.
 <b>CAUTION</b>	This symbol indicates that failure to obey this instruction may result in injury or only property damage.

	This symbol is used to “promote awareness.”
	This symbol is used to indicate “prohibited” actions.
	This symbol is used to indicate “forced” actions.

- Be sure to use the machine following the Instruction Manual and obey instructions thereof for safe operation.

## **WARNING**

	Do not operate switches with wet hands.	Fear of an electric shock or an injury
	Do not plug or unplug the power with wet hands.	Fear of an electric shock or an injury
	Earth the machine securely.	Earth leakage due to problems such as a failure may result in an electric shock. Be sure to ask specialists to earth the machine.
	Do not disassemble, repair or modify the machine.	Failure to obey this instruction may cause a fire or a malfunction, resulting in injury. Personnel other than service personnel are not allowed to disassemble or repair the machine. Do not modify the machine.

 **WARNING**



**Prohibited**

Do not move your fingers close to the cutter blade.

Sharp blades are used for the machine. Do not move your fingers close to the cutter blades. Failure to obey this instruction may result in injury.



**Prohibited**

Do not move your fingers close to the heater roller during paper feed.

Failure to obey this instruction may result in burn injury or injury.



**Prohibited**

Do not touch the heater roller during heating or right after the power is turned off.

Failure to obey this may result in burn injury.

 **CAUTION**



**Prohibited**

Do not apply strong vibrations or impacts on the body.

This machine contains refined electronic parts. Therefore, strong vibrations and impacts on the machine will result in malfunctions. Ensure that the machine is not contaminated with pieces of paper and metals.



**Prohibited**

Do not place the machine in places specified in the right column.

- Unstable places
- Places that cannot burden the weight of the machine
- Humid or dusty places
- Places that are exposed to direct sunlight

Failure to obey this instruction may result in machine failures.



**Prohibited**

Do not insert your hands and fingers into the DTA cells while the tablet set plate is operating.

Failure to obey this instruction may result in injury.



**Prohibited**

Do not touch the conveyor or place anything near the conveyor.

Do not touch the operating conveyor. Failure to obey this instruction may result in injury. Accumulated packed items or items near the conveyor may be caught by the conveyor, resulting in machine failures.



**Prohibited**

Do not use the machine when it is wet.

If the machine gets wet by flood damage or any other reasons, do not use the machine but contact with a nearby dealer immediately.

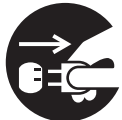


## CAUTION



Be sure to use the genuine power outlet.

Use of an outlet with an inapplicable voltage and electric capacitance may result in heat generation and fire. In addition, lack of the power capacity and rapid voltage fluctuations may result in malfunctions. Be sure to use the genuine power outlet.



Disconnect the power cord and plug in case of abnormal conditions.

Damaged power cord/plug, loosen outlet or piled dust may cause an electric shock, heat generation and fire. If any abnormality is detected, stop operation and disconnect the power plug.



Clean the passage for drugs securely.

Clean the passage for drugs securely to prevent remaining drugs from mixing with other drugs.



Be sure to use YUYAMA's genuine paper.

To avoid wrong drug dispensing, be sure to follow the instructions in this Instruction Manual for packing paper attachment and use YUYAMA's genuine paper.



Observe the temperature and humidity ranges.

Use the machine under the following environment.  
Temperature range: 10 to 35 degrees C  
Humidity range: 15% to 85% (No condensation is allowed)  
However, use the machine at humidity of 48% or less when the temperature is 35 degrees C and at temperature of 28 degrees C or less when the humidity is 85% .



Stop the machine immediately in case of operational abnormality.

In case of abnormality such as malfunction, stop the machine immediately.



Perform a periodic inspection once a year.

To use the machine safely, it is recommended to inspect all parts at least once a year besides daily maintenance.



Before moving the machine, be sure to unplug the power.

Moving the machine with the power plugged may damage the power plug.



If the machine is not to be used for a long time, turn the breaker [OFF].

Turn the breaker OFF for safety.

#### FCC Part 15.19

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC Part 15.105(b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### FCC Part 15.21

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter

#### ICES-003

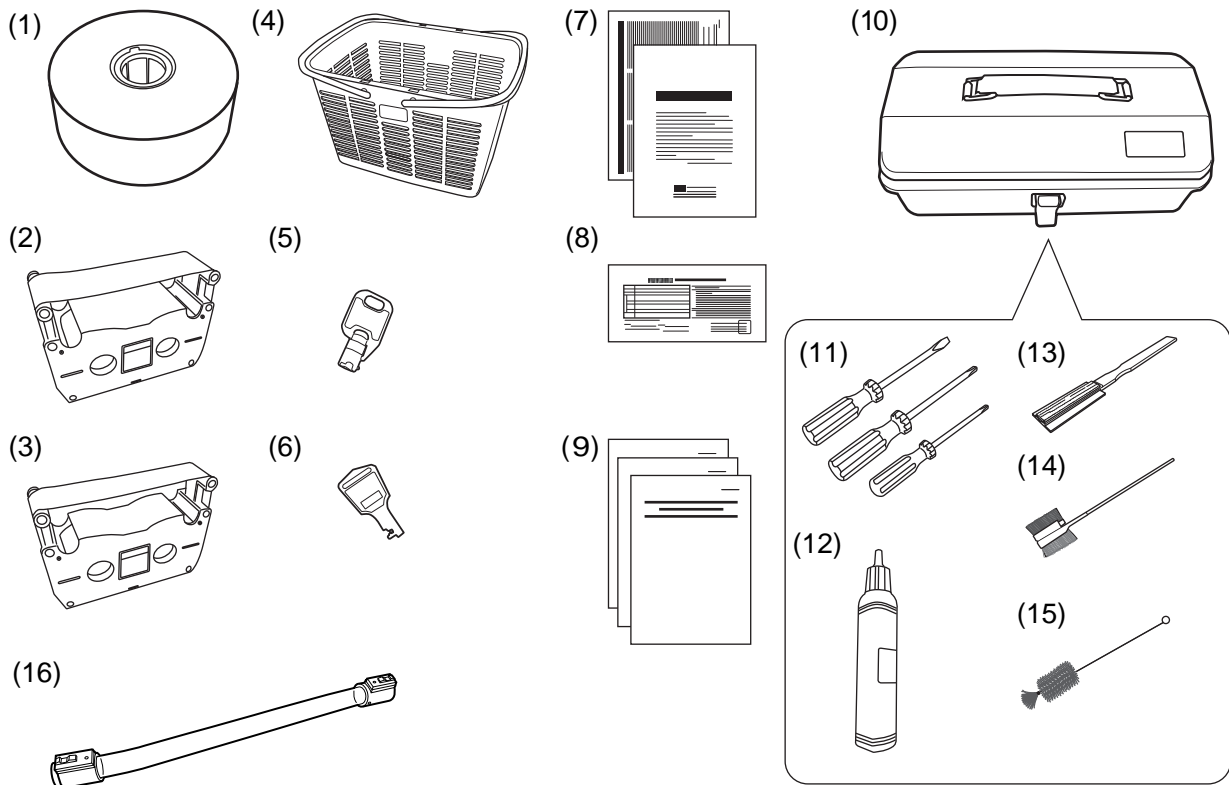
This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

#### RSS-Gen 7.1.5

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

# Accessories



- (1) Packing paper
- (2) Ink ribbon (black or color) \*
- (3) Half type ink ribbon (black) \*
- (4) Drug basket
- (5) Key (for upper door) x 2
- (6) Key (for the sides of the packing machine) x 2
- (7) Request for packing paper and list of sales offices
- (8) Warranty
- (9) Instruction Manual (for each type)

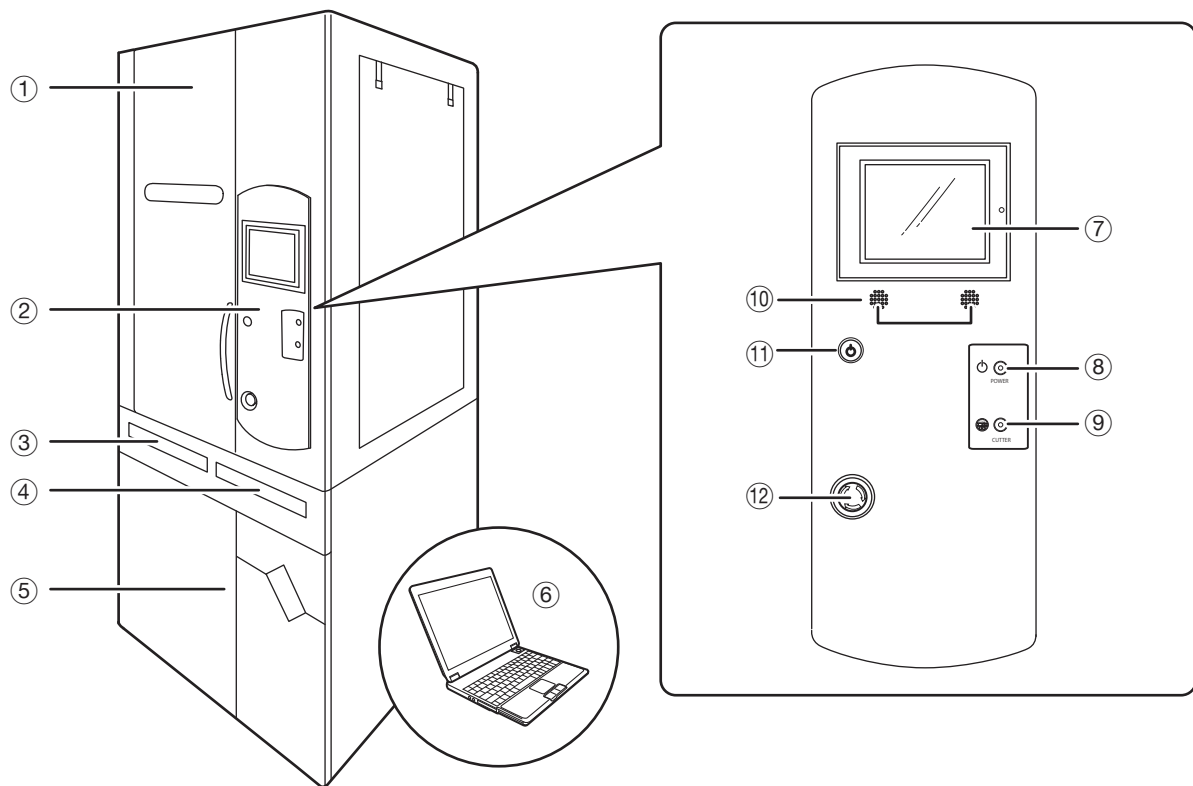
- (10) Tool box
- (11) Phillips screwdriver (large and small) and straight slot screwdriver
- (12) Wax
- (13) Printer head cleaner
- (14) Heater roller cleaning brush
- (15) Cleaning brush
- (16) Tablet feed pipe

\*Any of the inks with a \* mark will be provided.

- Do not store the packing paper in a place that is exposed to direct sunlight or with high humidity.
- Contact with your dealer or your nearest Yuyama's sales office (in the separate sheet) when you need to purchase accessories.

# Names of Each Section

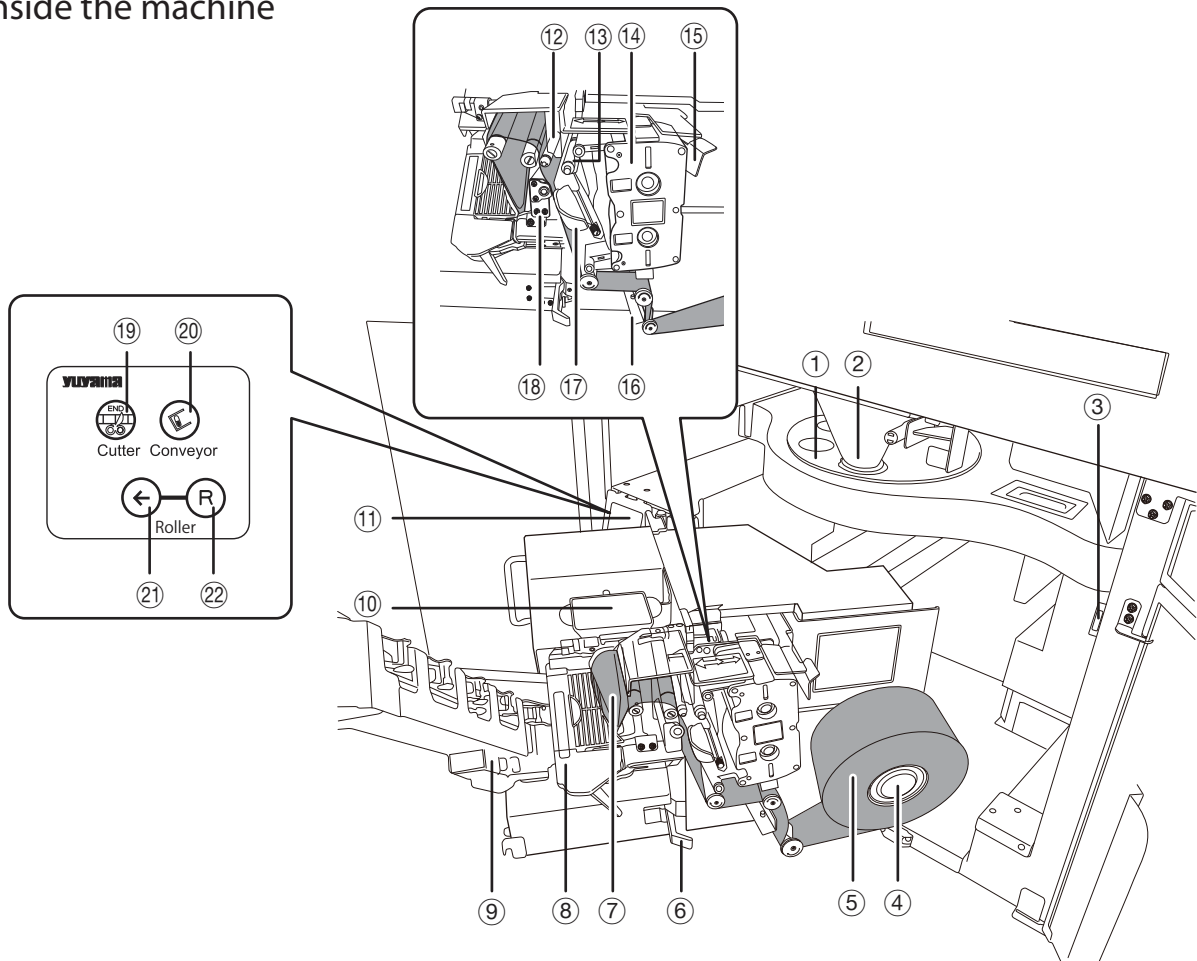
## ■ Machine Appearance



- ① Upper door
- ② Operation panel
- ③ DTA tray
- ④ Adaptive table
- ⑤ Lower doors
- ⑥ PC (notebook PC or desktop PC)
- ⑦ Touch panel
- ⑧ [Power] switch
- ⑨ [Cutter] switch
- ⑩ Loudspeaker
- ⑪ Door key
- ⑫ [Emergency] switch

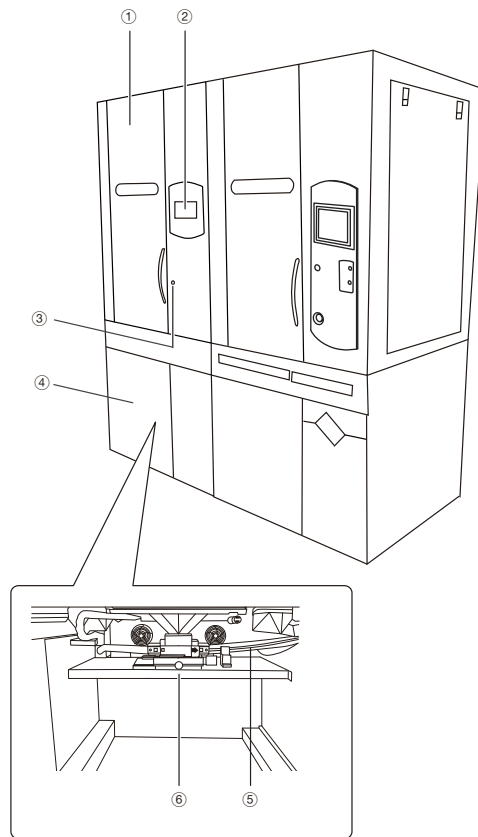


## ■ Inside the machine



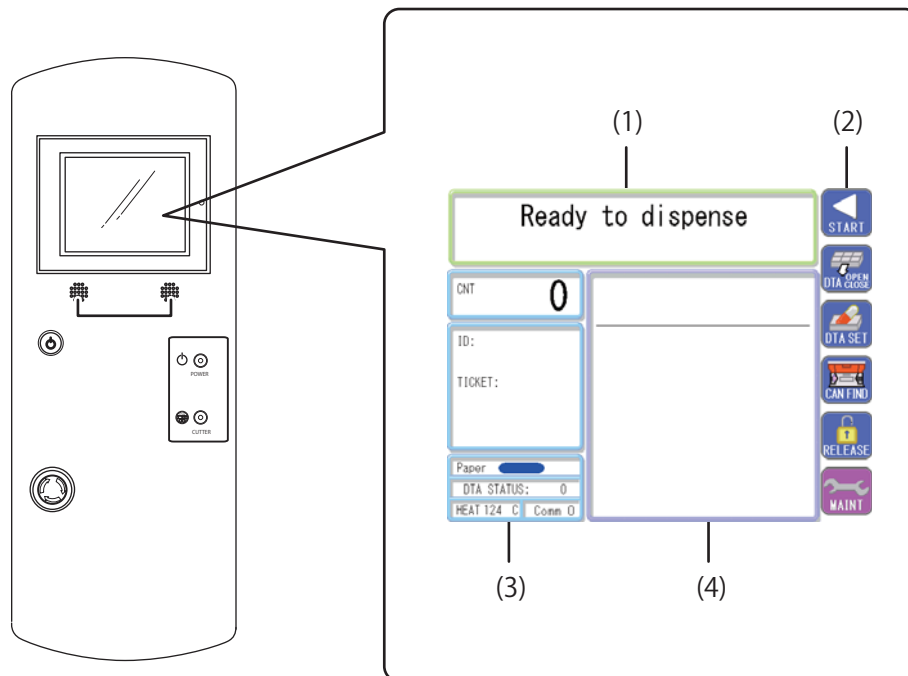
- ① Revolver unit
- ② Major hopper
- ③ Circuit breaker
- ④ Paper tube shaft
- ⑤ Packing paper
- ⑥ Packaging section opening/closing lever
- ⑦ Paper guide
- ⑧ Heater roller
- ⑨ Conveyor
- ⑩ Final hopper
- ⑪ Lower section operation panel
- ⑫ Paper guide pin
- ⑬ Ribbon tension bar
- ⑭ Ink ribbon
- ⑮ Printer head release lever
- ⑯ Paper end sensor
- ⑰ Ribbon guide
- ⑱ Platen roller
- ⑲ [Cutter] switch
- ⑳ [Conveyor] switch
- ㉑ [Heater Roller Backward] switch
- ㉒ [Heater Roller Forward] switch

## ■ W-Cylinder Interior



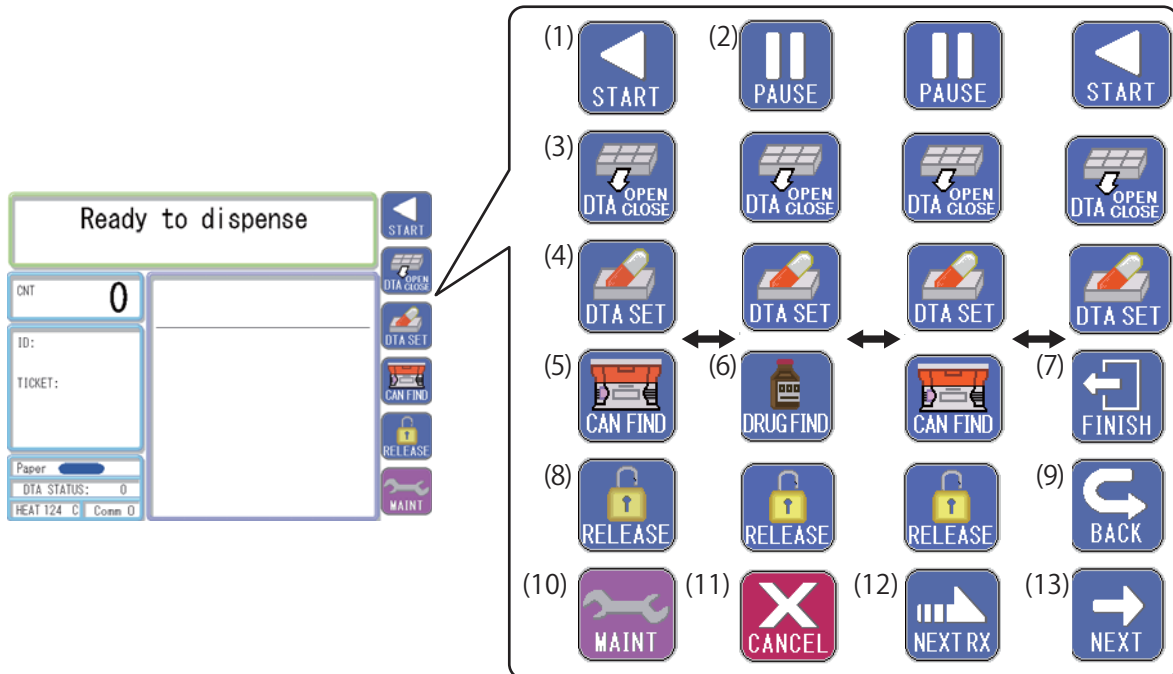
- ① Upper door
- ② Operation panel
- ③ Door key
- ④ Lower door
- ⑤ Tablet route unit
- ⑥ Standby unit

# Touch panel



- |   |   |
|---|---|
| (1) Message display   | Displays the status and operation of the packing machine.   |
| (2) Key button  | Used to operate the packing machine. (P12)  |
| (3) Display of prescription information and status of the packing machine | Displays the prescription information for the drug that is now being dispensed (or is to be dispensed) and the status of the packing machine. (P13) |
| (4) Display and setting of details  | Displays the detail of prescription.<br>Also used to operate the packing machine such as to call a cassette.  |

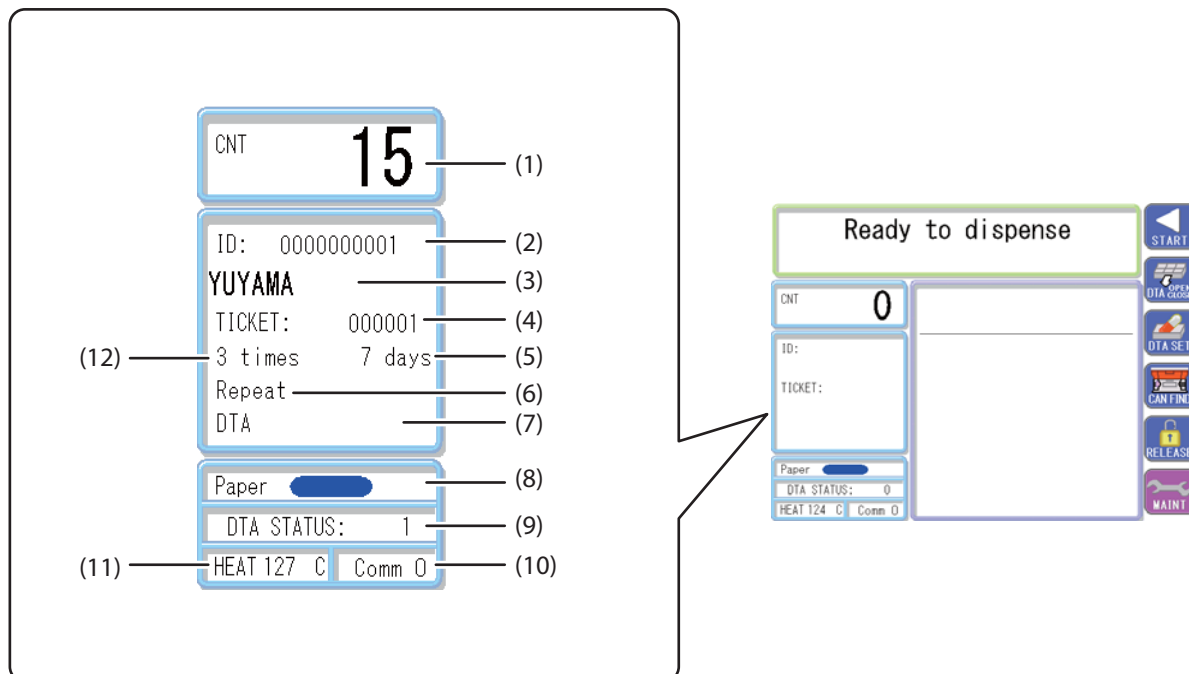
## ■ Key button



- (1) Switches the mode to the one where dispensing is issued only by the packing machine.  
Restarts dispensing when the machine is temporarily stopped.
- (2) Stops dispensing temporarily.
- (3) Opens/closes the DTA tray.
- (4) Sets the DTA.  
(Cannot set the DTA when [Number of DTAs: 2].)
- (5) Switches the screen to the [Call Cassette] screen.
- (6) Switches the screen to the [Call Drug] screen.
- (7) Exits the maintenance mode or the special mode.
- (8) Unlock the drug rack door.
- (9) Returns to the previous page.
- (10) Switches to screen to the [Maintenance] screen.
- (11) Cancels the prescription.
- (12) Displays the content of the next prescription.
- (13) Goes to the next screen.

\* Displayed key buttons vary depending on the status of the packing machine.

■ Displaying the prescription Information and the status of the packing machine



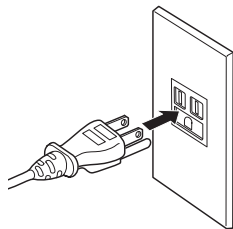
- |                        |  |
|------------------------|--|
| (1) Number of pouches  | Displays the number of finished pouches and the number of the remaining pouches during dispensing.       |
| (2) Patient ID         | Displays the patient ID during dispensing.   |
| (3) Name of patient    | Displays the name of the patient during dispensing.  |
| (4) Ticket number      | Displays the ticket number of the drug that is currently being dispensed.                                |
| (5) Number of days     | Displays the number of days for the drug to be dispensed.  |
| (6) Pk. Order          | Displays the packing order (dispenses drug according to the usage [Continuation] or by the day [Repeat]) |
| (7) Form of tablet     | Displays the form of the drug to be used for dispensing (cassette or DTA).                               |
| (8) Paper              | Displays the remaining paper amount by 5 levels.   |
| (9) DTA STATUS         | Displays the number of reserved DTA.   |
| (10) Communication     | Displays the status of communication between the personal computer and the packing machine.              |
| (11) Temperature       | Displays the temperature of the heater roller.   |
| (12) Number of pouches | Displays the number of pouches (the number of doses for a day) for the dispensing data.                  |

# Turning on the power

Press the power switch, turns on the power of packaging machine.

Even when the packing machine has been turned ON, do not start operation until the eating of the heater roller is completed.

\*Operate the breaker before installing the packing machine or cleaning the printer head.

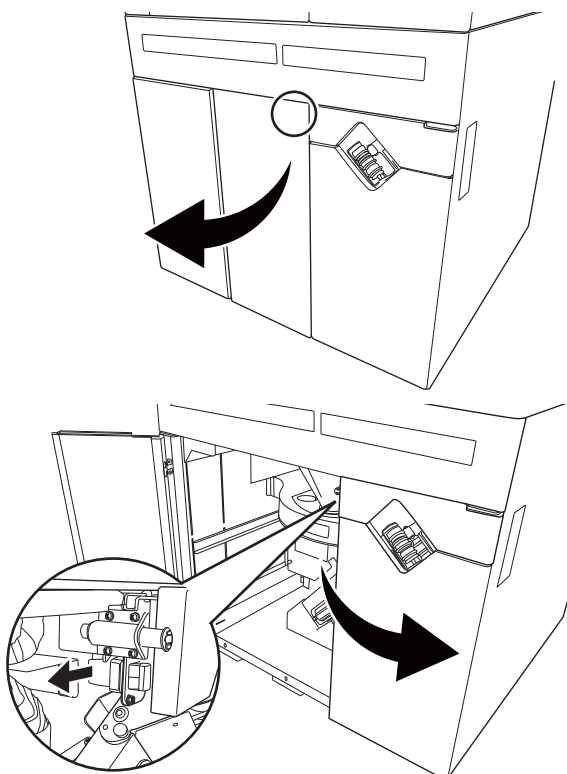


## 1. Connect the power plug to the outlet.

- Be sure to use an AC100V outlet with the 3P earth.
- Do not use a multi-outlet extension cord from a device such as a table tap.

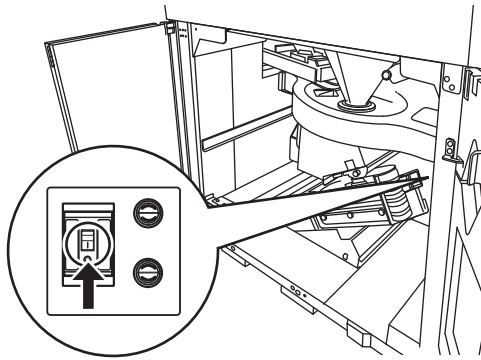
### CAUTION

Be sure to connect earth to avoid power-supply noises and electric shocks. Lack of the power capacity and rapid voltage fluctuations may result in malfunctions.



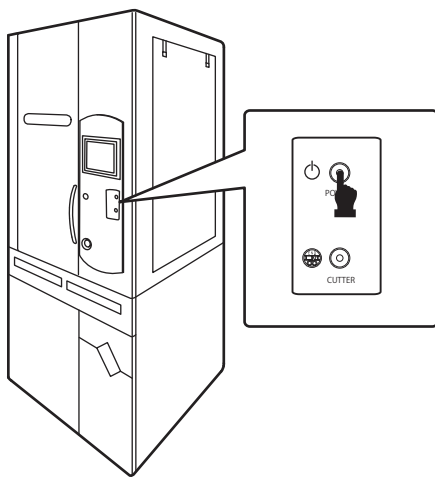
## 2. Open the lower door.

- Push [PUSH] on the acrylic door and open it while folding it.
- Unhook to open the door on the conveyor side.



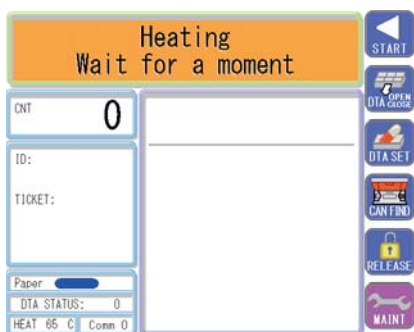
### 3. Turn [ON] the breaker.

- After the breaker has been turned on, close the lower door.



### 4. Packaging machine power switch on.

- Wait for a while until packing is ready as the heater roller is heated.
- You can start dispensing when [Ready to dispense] is displayed.



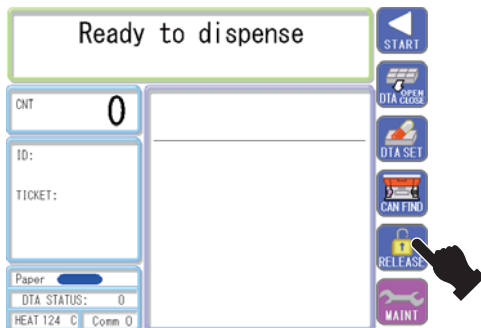
# Unlocking the upper door

You are required to input a password to open the upper door. Open the door after entering the password.

Once the password has been entered, you can set the machine so that you can open the door without entering the password or you are required to enter the password every time you open the door.

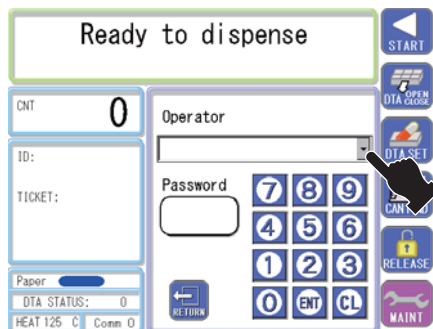
Once the power is turned off, you are required to enter the password again.

\* Entering a password is required only for the packing machine whose upper door has a lock.

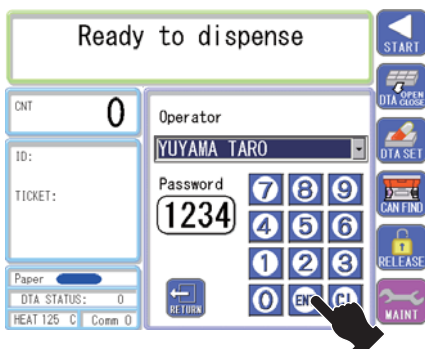


## 1. Touch [RELEASE].

- The screen is switched to the password entry screen.



- Select [Operator].
- (When [Operator] is touched, the list of registered operators appears. Select a desired operator's name from the list.)



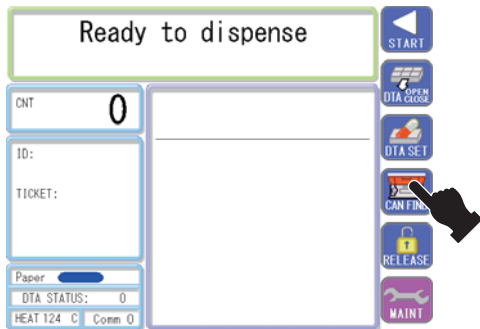
- After the password has been entered, press [ENT].
- The upper door is unlocked, so that you can open the door.



# Refilling tablets

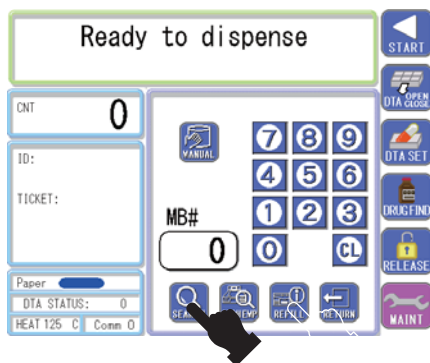
The following describes how to refilling tablets.

- \* The cassette varies depending on the size and shape of the tablets. Be sure to refill the tablets specified on the cassette.



## 1. Touch [CAN FIND].

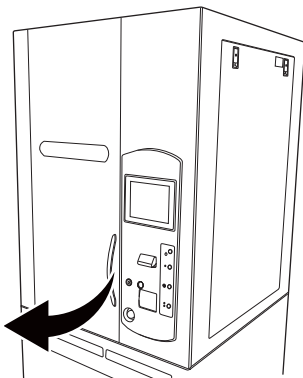
- The screen is switched to the [Call Cassette] screen.

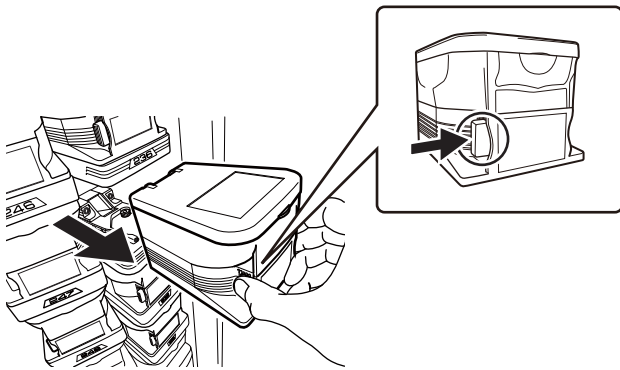


- After touching a shelf number, please search for touch.
- The called cassette moves to the front.

## 2. Open the upper door.

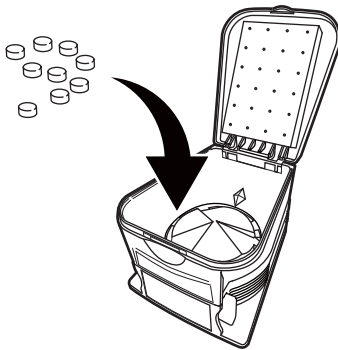
- Open the upper door while holding its handle.





### 3. Remove the cassette.

- Remove the cassette by pressing the lock of the cassette until it makes a click sound.



### 4. Put tablets in the cassette.

- Replace the desiccant in the cassette periodically.

#### ⚠ CAUTION

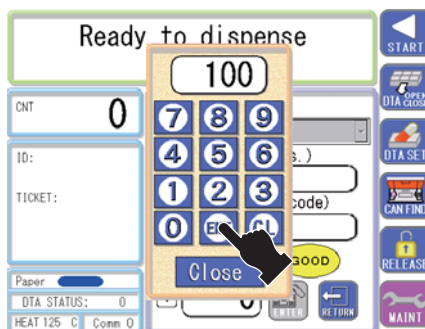
Note the following points when refilling tablets.

- Note that foreign materials are not mixed.
- Do not put too many tablets.
- Make sure that tablets are not put in the backside of the cassette (the part where the tablets are ejected).



### 5. Touch [QTY].

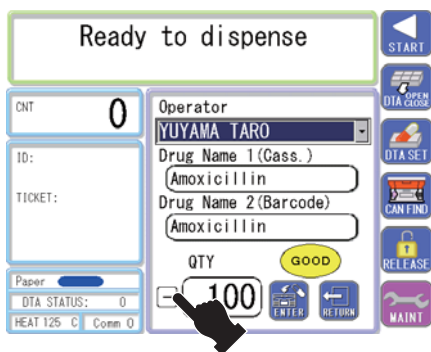
- Touch the frame of [QTY] to open the numeric keypad screen.



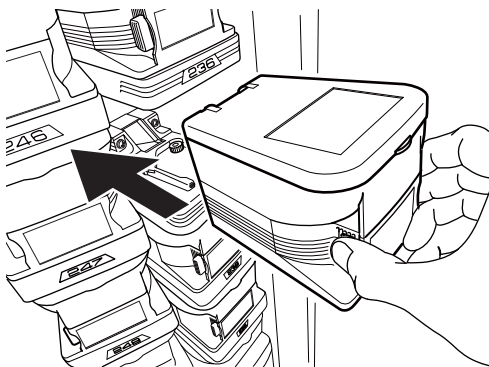
- After entering the quantity, touch [ENT].
- The entered number is displayed in [QTY].



- Touch [REFILL].
- After refilling, touch [RETURN] to return to the original screen.

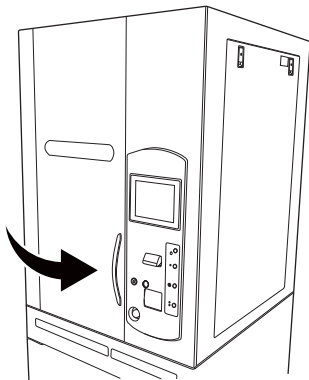


- [+] and [-] are alternatively displayed by touching the code next to [QTY].
- You can reduce the inventory amount by touching [REFILL] with [-].



## 6 . Install the cassette.

- Insert the cassette all the way.

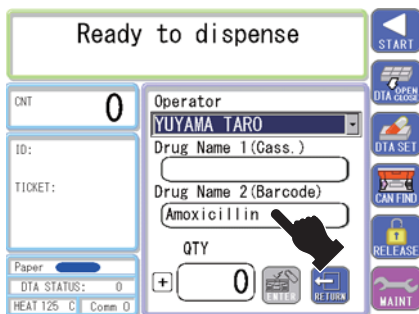


## 7 . Close the upper door.

- Close the upper door while holding its handle.

■ [Refill information entry]

You can go to the refill information entry screen by reading the drug name by its barcode and clicking the displayed drug name while the refill screen is displayed.



1. Read the drug name using its barcode and click the displayed drug name.



2. Enter the manufacturing number (up to 20 alphanumeric characters).

- Touch the manufacturing number display item and enter alphanumeric characters using the numeric keypad.

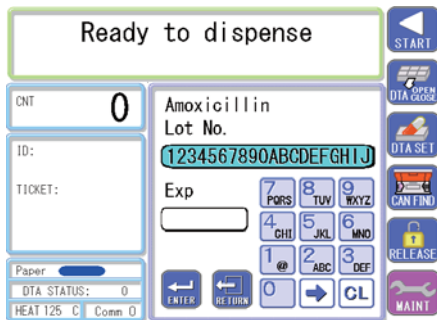
- 1 Repeat of 1→@→1
- 2 Repeat of 2→A→B→C→2
- 3 Repeat of 3→D→E→F→3
- 4 Repeat of 4→G→H→I→4
- 5 Repeat of 5→J→K→L→5
- 6 Repeat of 6→M→N→O→6
- 7 Repeat of 7→P→Q→R→S→7
- 8 Repeat of 8→T→U→V→8
- 9 Repeat of 9→W→X→Y→Z→9

0 0

→ Enter

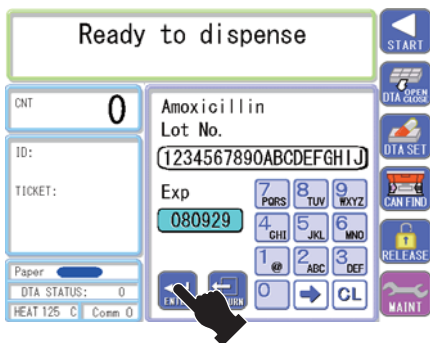
(Move the cursor in the right direction.)

Clear Backspace

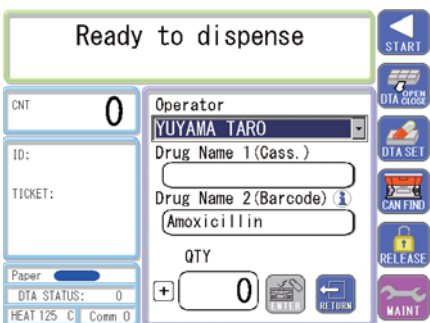


3. The manufacturing number is displayed. Enter the expiration date (2-digit Christian era and 4-digit month and day or 2-digit Christian era and 2-digit month).

- Touch the expiration date display item and enter a numeric figure using the numeric keypad.
- Enter of either the manufacturing number or the expiration date is acceptable.



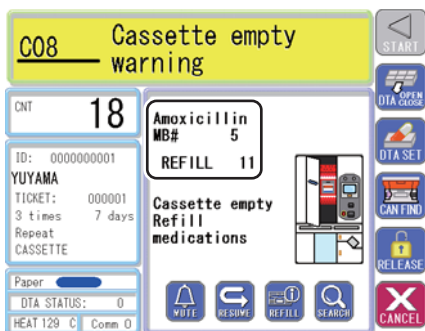
4. The expiration date is displayed. Touch [ENTER].



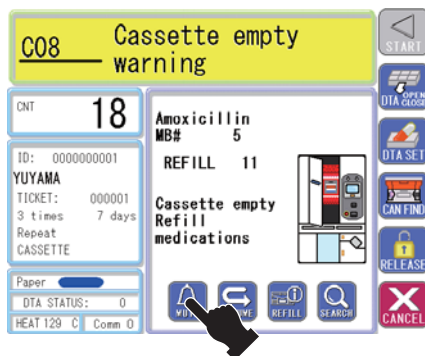
5. You can return to the refill screen. The “i” mark is displayed next to the drug name (barcode).

- “i” This mark is displayed when the manufacturing number and the expiration date have been acquired from the RSS barcode or when the manufacturing number and the expiration date have been entered in the refill information entry screen.

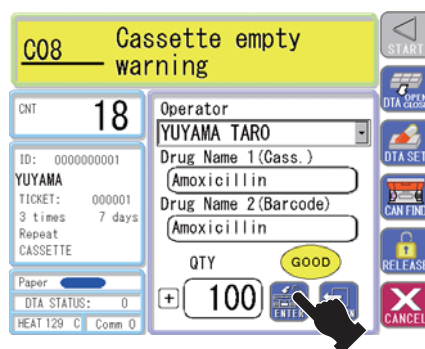
- When all tablets have been dispensed during dispensing  
Dispensing stops when all tablets have been dispensed.  
After refill of tablets is completed ([REFILL] is touched), dispensing automatically resumes.



1. [Cassette empty warning] is displayed on the touch panel and an alarm is issued. (The detail of the short drug is displayed.)



2. Touch [MUTE] to stop the alarm.

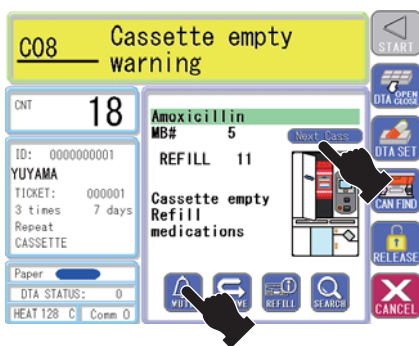


3. Refill tablets in the cassette and touch [REFILL].

- [Cassette empty warning] is released and dispensing resumes.

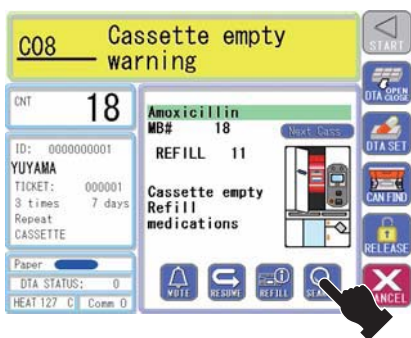
- When all tablets have been dispensed during dispensing (when the group cassette is empty)

This page describes the case when tablets registered in the group cassette are short during dispensing.

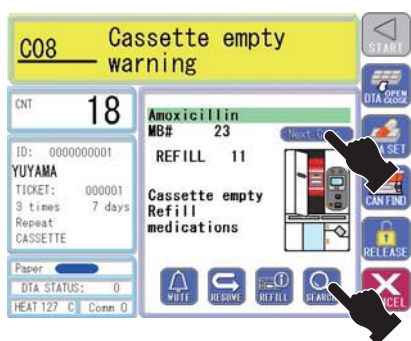


1. When the drug for the group cassette is short, the [Next Cass] button is displayed.

- Touch [MUTE] to stop the alarm.
- Press the [Next Cass] button.



- The location number (MB#) of the displayed cassette is changed. The next location number moves to the front by cylinder rotation by pressing the [SEARCH] button.

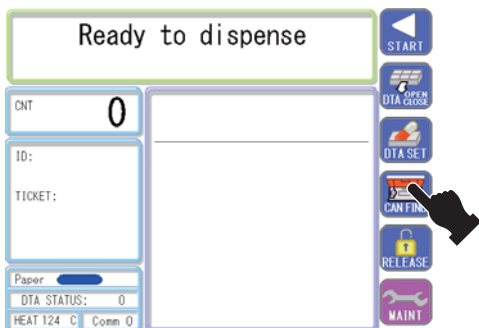


- Every time the [Next Cass] button is pressed, the location number where empty cassettes are attached is displayed in the ascendant order. The displayed location number is called by pressing [SEARCH].
- \* When [Next Cass] is pressed when the largest location number is displayed, the smallest location number is displayed.

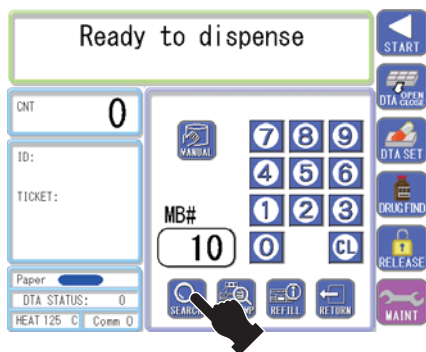
## ■ [Call Cassette]

You can call a desired cassette using its cassette number.

When the cassette is placed on the refilling table on the [Call Cassette] screen, the location number where the cassette was attached to is displayed.



1. Touch [CAN FIND].



- Enter the cassette number and then touch [SEARCH].
- The called cassette moves to the front of the tablet rack.
- Then refill the drug.

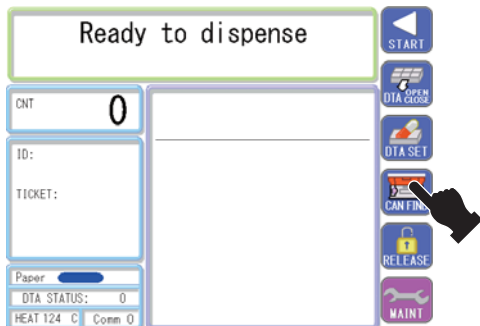


■ [Call Drug]

You can call a desired cassette using a drug name.

1. Touch [CAN FIND].

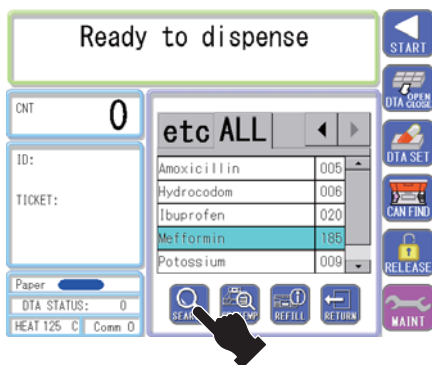
- The screen is switched to the [Call Cassette] screen.
- Then touch [Call Drug]. (The screen is switched to the [Call Drug] screen.)



- Touch the capital letter of the drug to be called. (1)
- Drugs with the selected capital letter are displayed in a list. Touch a desired drug in the list. (2)

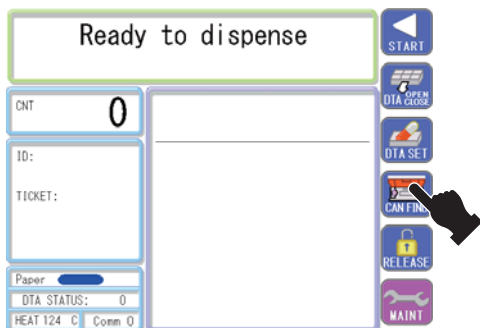


- Touch [SEARCH].
- The called cassette moves to the front of the tablet rack.
- Then refill the drug.



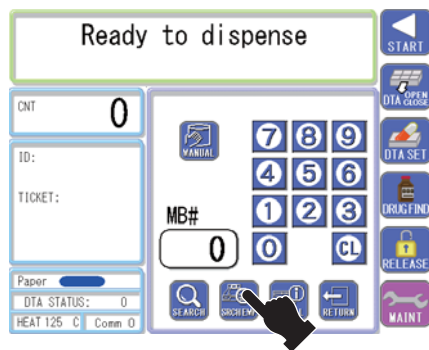
■ [Search]

You can search places where any cassette is not attached (used).  
The cassette condition is displayed by placing the cassette on the refill table on the [Search] screen.



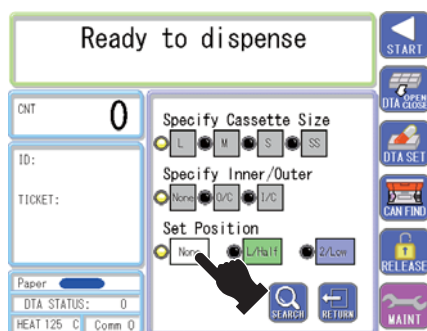
1. Touch [CAN FIND].

- The screen is switched to the [Call Cassette] screen.



2. Touch [SEARCH].

- The screen is switched to the [Search] screen.

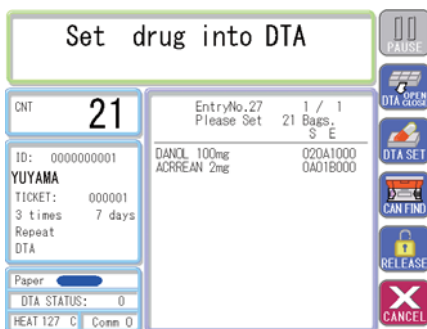


3. Search

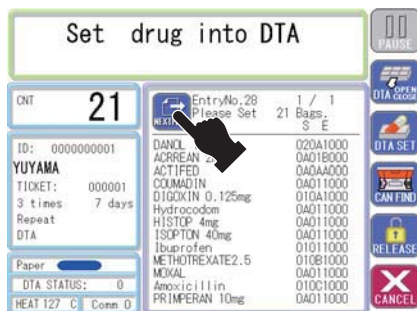
- Select the condition of the cassette to be searched and then touch [SEARCH]. (The cassette size display varies depending on the packing machine type.)
- The place that fits the condition moves to the front of the tablet rack.

■ Details of DTA filling

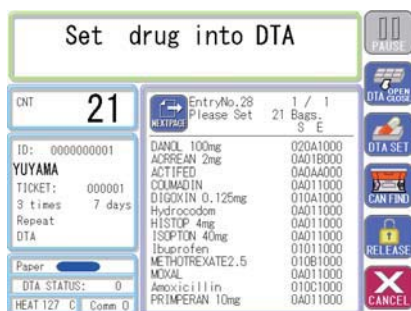
Filling of the drug selected on the DTA drug list screen is displayed.



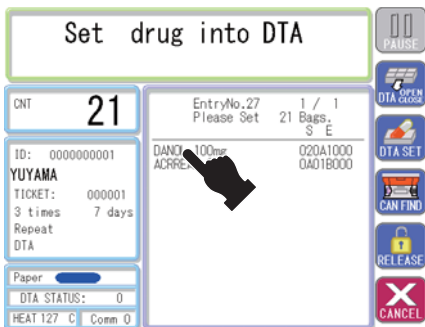
1. The DTA set wait screen is displayed at the time of issuing a DTA prescription or when the second filling is to be performed after the DTA set. (Up to 13 drugs are displayed at one time.)



- If there are 14 drugs or more, press [NEXT PAGE].



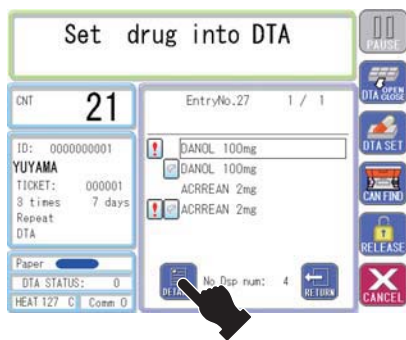
- Other drugs are displayed. You can return to the previous screen displaying the 13 drugs by pressing [NEXT PAGE] again. (The [NEXT PAGE] button is displayed only when there are 14 drugs or more.)



2. Touch the drug name.



3. You go to the DTA drug list screen.



4. Touch the drug name you want to display. Press the [DETAILS] button while the drug name is displayed within the black frame.



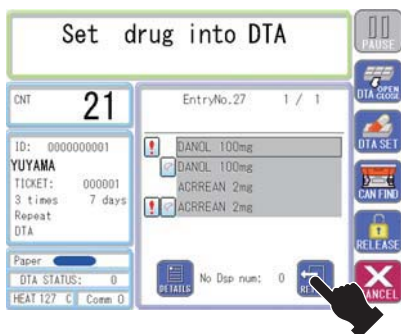
5. How to fill the drug selected in the DTA drug list is displayed.

- Press [NEXT PAGE].



6. How to fill the unfilled drug that is next to the currently displayed drug is displayed.

- When unequal tablets are to be set, a caution message is displayed.
- Press [RETURN].



7. If you return to this screen by pressing [RETURN] on the DTA details screen, you will notice that the background color for the drug name displaying the filling details have been changed, indicating that the drug has been already browsed.

- Set DTA and press [RETURN].



8. Dispensing starts and DTA starts delivering.