

6650 UV ☐
6650 UV/MG ☐

USER MANUAL

CASSIDA 6650 PROFESSIONAL BILL COUNTER
FOR RETAIL WITH ValuCount™

Designed by Cassida Corporation
Assembled in China

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This manual contains important information on safety measures and operational features. Please read it carefully before operating this unit, and keep it for future reference.

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1. INTRODUCTION

1.1 About the Cassida 6650

Thank you for choosing the Cassida 6650 single value counter. We hope you enjoy using it.

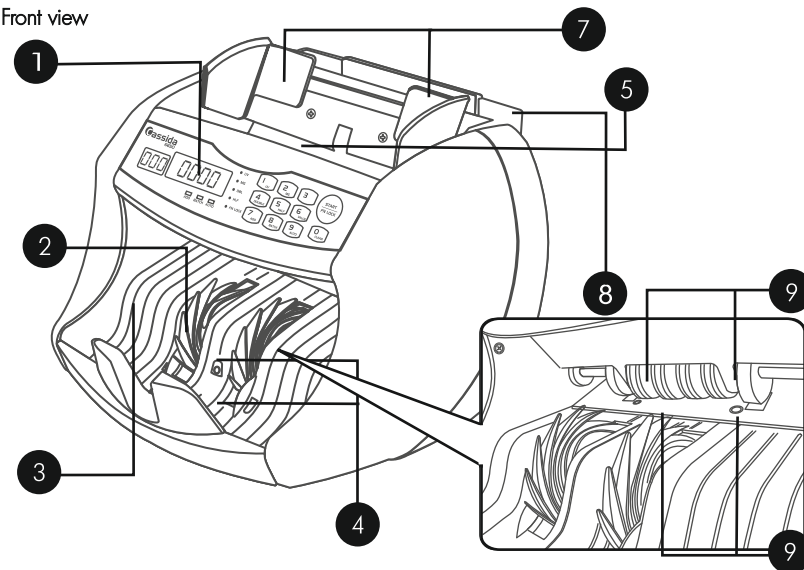
- Steel roller shafts and sturdy parts allow this machine to tackle heavy-duty tasks on an everyday basis.
- Engage the ValuCount™ mode and you'll get a grand total of the bills counted, as well as the total and number of bills in each denomination.
- A built-in count error detection system that uses SD, DD, HLF and CHN parameters. The advanced counterfeit detection system uses UV (and MG for 6650UV/MG models) ink detection, alerting users immediately when suspicious bills are detected. All these features come together with a possibility to easily switch on/off any detection separately on the control panel.
- A user-friendly interface makes this currency counter an invaluable tool in everyday money processing tasks.
- With a built-in self-checking system and advanced software designed to prevent user errors, the Cassida 6650 is truly a "smart" assistant you can rely upon in any type of cash intensive environment.

1.2 Box contents

- Cassida 6650 single value counter
- Power cord
- Spare parts kit (optional)
- User manual
- Maintenance kit (optional)

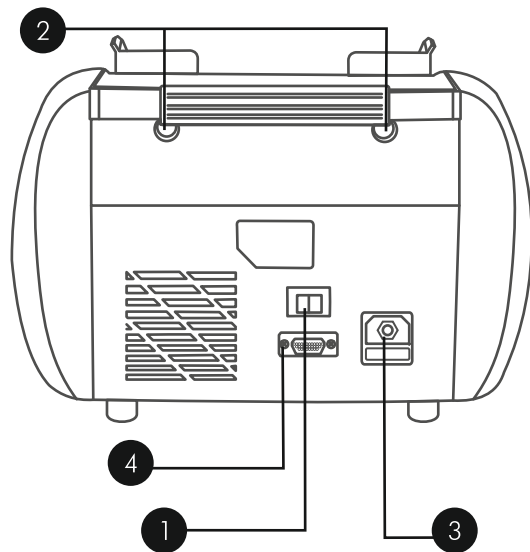
1.3 Front and rear views

Front view



1. Control panel
2. Stacking rollers
3. Stacker
4. Stacker sensors
5. Hopper sensor
6. Hopper
7. Guide for counting bills
8. Carrying handle
9. Counting sensors

Rear view

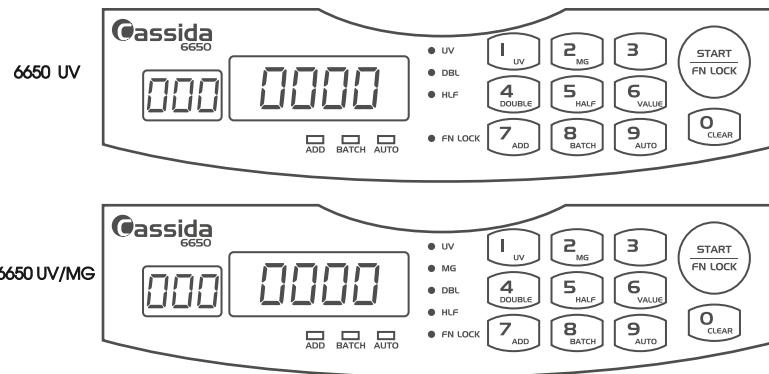


1. Power switch
2. Thickness adjustment screws

NOTE: please do not change this setting unless the machine displays recurrent DBL or CHN error messages. When adjusting, be sure both screws are adjusted equally.

3. Power plug
4. External display connection port RS-232

1.4 Control panel



- UV key – UV counterfeit detection key. Indicator lights up when UV detection is active.
- MG key – MG counterfeit detection key. Indicator lights up when MG detection is active.
- DBL key – Double bill detection key. Indicator lights up when DBL detection is active.
- HLF key – Half bill detection key. Indicator lights up when HLF detection is active.
- VALUE key – Activates the VALUE counting mode.
- ADD key – Add mode selection key. Indicator lights up when Add mode is active.
- BATCH key – Batch mode selection key. Indicator lights up when Add mode is active.
- AUTO key – Automatic start key. In AUTO, counting begins as soon as bills are placed in the hopper. In MANUAL, counting begins when user presses the "START" key.
- CLEAR key – Clears one or both display screens, depending on the operating mode.
- START/FN LOCK key – Starts counting. Press continuously for 3 seconds to activate function keys.
- Keypad – Used to enter custom batch quantities.

Display



- Left side screen -
- ▢ Total number or Denomination
 - ▢ Selected number of bills in Batch mode
 - ▢ Total amount of counted bills in the last stack in Add mode
 - ▢ Selected denomination in Single value bill counting mode (ValuCount™)
 - ▢ Total amount of counted bills from the last stack in Single value bill counting mode (ValuCount™)
 - ▢ Error code
- Right side screen -
- ▢ Total Number or Total Value
 - ▢ Total amount of counted bills in Simple count, Batch, Add modes
 - ▢ Total value of counted bills for a user-defined
 - ▢ TM denomination in mode (ValuCount™)

1.5 Specifications

Counting speed:	1000 bills/min
Hopper capacity:	400
Stacker capacity:	300
Applicable bill thickness:	0.075-0.15mm
Size of countable bills:	50x100 - 100x182mm (2" x 4" - 4" x 7.2")
Value range:	1, 2, 5, 10, 50, 100, 200 (2H), 500 (5H), 1000 (1E) 10, 20, 25, 50, 100 or 1 to 999
Display:	LED 3/4
Detections:	DD, HLF, CHN, SD, UV (UV and MG for 6650 UV/MG)
Power supply:	24VDC adapter, 100-240V / 50-60Hz
Power consumption:	< 80W
Size:	280x250x150mm 11"x9.8"x5.9"
Weight:	5 kg (11 lbs)
Operating humidity:	40% - 90%
Ambient temperature:	32F - 104F (0 - 40C)

1.6 Important safety notes

When using this unit, basic safety precautions should always be observed, including the following:

- Read this manual before operation
- The manual should be available to operator
- Do not use this unit in areas where it may be exposed to water or any other liquids
- Make certain the unit is installed on a flat surface. Do not operate the machine in areas with high temperature, humidity or smoke, as these conditions may prevent proper operation.
- This unit is designed for indoor use in a ventilated environment. Keep the machine away from direct sunlight or strong directional interior lighting and strong magnetic fields. These could interfere with the counterfeit detection sensors.
- During operation, do not touch the moving parts of the unit
- Avoid foreign objects, paper clips, and staples
- Avoid dropping the unit
- When finished be sure there are no bills in the hopper or transport system
- When not using the unit for an extended period of time, disconnect the power cord from the wall outlet
- Unplug the unit from the wall outlet before cleaning. Use a damp cloth or specifically designed maintenance accessories such as an air duster, soft bristle brush, or cleaning cards.
- To avoid the risk of electrical shock, do not disassemble this unit. Disassembly will expose you to dangerous voltages and other safety risks. Incorrect reassembly can cause electrical shock when the appliance is subsequently used.
- Clean the unit regularly
- Take the unit to a qualified technician when service or repair is required. Do not try to replace any parts yourself. Supplied spare parts are intended for use by qualified repair personnel only.

Remember the manufacturer is in no way responsible for damage to the unit or injury to the operator in the event of incorrect operation/care of the unit.

2. GETTING STARTED

2.1 Powering up

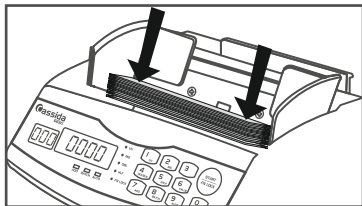
After ensuring the hopper is empty, turn the power switch ON. The machine will conduct a self-check by spinning the counting wheels several times. The large screen will display "0" when the machine is ready.

2.2 Loading the hopper

It is very important to place the bills into the hopper correctly, because the counting process and the speed are highly affected by the arrangement of the bills. Bills should be placed in a neat stack prior to being placed into the hopper.

Adjust the hopper brackets to a size slightly wider (2-3mm on each side) than the width of the bills in the stack. This will help you correctly place the bills in the hopper, and will ensure smooth bill feeding.

Square the stack of bills. Using two hands, place bills flat on the hopper platform.



Please, avoid counting bills that are wet, excessively dirty, spoiled, folded, curled or with foreign material like clips, bands, etc.

It will damage and cause malfunction of the machine.

3. OPERATING MODES

3.1 Auto mode

To turn this mode on, press the "AUTO" key. The "AUTO" indicator will be lit while this mode is on. In this mode, the machine starts counting automatically. All further instructions in this manual assume that the AUTO mode is turned on. If you set the machine to operate with the AUTO mode turned off, the same instructions apply. However, the machine will not start counting automatically; you must press the "START/FN LOCK" key to begin each count.

3.2 Counting mode

To count the bills, place them in the hopper (follow the procedure described in 2.2 Loading bills).

The machine will automatically start to count bills when the hopper sensor detects a bill in the hopper. While counting, the machine will display the number of bills on the LED display. The machine will stop operating and emit a confirmation beep under the condition described below:

+ Errors have occurred

Remove the counted number from the stacker and place more bills into the hopper. The screen will clear itself of previous counts before the machine starts counting the new stack.

Be sure not to accumulate more than the stacker can hold as this will cause jamming and may lead to a motor failure.

• 3.2.1 Simple count mode

This mode can be used for various currencies.

This mode is used to count the total number of the bills.

- After the machine is turned on, it defaults to Simple count mode. To switch to Simple count mode from another mode (Add or Batch), deactivate the mode you were previously using. The unit will automatically revert to Simple count mode.
- To count and control the presence of suspicious bills in the stack, it is possible to switch on counterfeit detection system which uses UV (and MG for Cassida 6650 UV/MG model only) ink detection and alert user immediately for any suspicious bill.
- To clear the display in this mode press CLEAR or START/FN LOCK key.

• 3.2.2 ValuCount™ (Single value count mode)

To start this mode, press the VALUE key, when function keys are activated (to activate fun keys, press continuously for 3 seconds START/FN LOCK key - the blue indicator lights up, when function keys are active). The Value indicator LED is on. "-1" will be displayed on the left screen, indicating that 1 is the selected denomination. Continue to press the VALUE key to select a denomination of 1, 2, 5, 10, 20, 50, 100, 200 (2H), 500 (5H) and 1000 (1E). After selecting the desired denomination, load the bills to be counted into the hopper. Ensure that the denomination value of the bills matches the selected denomination. The Cassida 6650 counts the stack and displays the total value for the bills of a user-defined denomination on the right side screen and shows the total number of bills on the left side screen.

IMPORTANT: If the total value counted exceeds four digits (for example, 10000), the leading digit will appear on the left side screen, replacing the number of bills counted.

To exit this mode or/and clear the display, press CLEAR key.

- The large screen will clear itself of the previous count before the machine starts counting a new stack.
- To clear the display in this mode, press START/FN LOCK key.
- To exit this mode, press CLEAR key.

3.3 Batch mode

This mode is used to count a preset number of bills and then stops counting, even if bills remain in the hopper. This mode can be used for various currencies. To start this mode press the numeric keypad to enter the desired amount or press BATCH key several times (when function keys are activated and FN blue indicator lights up) to select a desired quantity. The selected amount is shown on the left side screen.

The machine will start counting automatically once bills are placed in the hopper. As soon as the machine counts the desired batch number it will stop counting. The right side screen will show number of bills in the counted batch. When stacker is emptied machine will automatically start counting to preset batch number again.

If the number of counted bills in the stacker does not reach the preset batch number, the screen will alert you by blinking the actual number counted.

If you want to complete the batch, just place more bills in the hopper keeping counted bills in the stacker and the unit will automatically count the required number of bills to finish the batch.

• Changing the batch quantity:

To change the batch quantity, wait until the machine completes the current batch. Enter the new batch quantity using the numeric keypad or pressing BATCH key several times. Please be sure to empty the stacker before placing new bills in the hopper.

If the previous batch was completed, the machine will automatically start counting to the newly set batch quantity once the stacker is emptied.

- To clear the display in this mode, press START/FN LOCK key.
- To exit this mode, press CLEAR key.

3.4 Adding mode

This mode can be used for various currencies.

This mode is used to count multiple stacks of bills while keeping track of total amount of bills counted.

To start this mode, press ADD key, when function keys are activated (to activate fun keys, press continuously for 3 seconds START/FN LOCK key - the blue indicator lights up, when function keys are active). ADD indicator is on.

• 3.4.1 ADD + Simple count mode

This mode can be used for various currencies.

- Place the bills in the hopper. The machine will start counting automatically. The number of bills counted will be displayed on the LED screen.
- Refill the hopper - the machine will continue counting and adding.
- Be sure not to accumulate more than the stacker can hold, as this will cause jamming and may lead to a motor failure.
- Left side screen shows the number of bills in the last counted stack. Right side screen shows the total number of all counted bills.

• 3.4.2 ADD + ValuCount™

This mode can be used for various currencies.

- This mode is used to count the total value of stacks of different single denominations and calculate the grand total value of all counted bills.
- To start this mode, press ADD key, when function keys are activated (to activate fun keys, press continuously for 3 seconds START/FN LOCK key - the blue indicator lights up, when function keys are active). ADD indicator is on. Press VALUE key to enter Single value bill count mode and then use VALUE key to select the desired denomination.
- The denomination value may be changed at any time by pressing VALUE key. The machine will start calculating the value of the new selected denomination, adding it to the grand total value.
- To clear the display in this mode, press START/FN LOCK key.
- To exit this mode, press CLEAR key.

• 3.4.3 Add + Batch mode

This mode can be used for various currencies.


- This mode batches the desired quantity of bills and monitors the running total at the same time. To activate this mode, press the ADD and BATCH keys, when function keys are active (FN LOCK blue indicator lights up) until the ADD and BATCH indicators are both on. Use the keypad to enter the desired batch amount or press BATCH key several times.
- The total number of bills counted will appear on the right side screen. The last batch count will be displayed on the left side screen. If the batch is incomplete the left side screen blinks with the number of the bills in the last count.

4. DETECTION FEATURES

4.1 Counterfeit note detection

Cassida 6650UV model:

The Cassida 6650 UV is able to check for counterfeit bills using ultraviolet sensors. Press the UV key to activate UV counterfeit detection. The "UV" indicator will be lit while this feature is enabled.


The machine will beep and stop counting when a counterfeit note is detected, and a  (UV) message will be displayed on the small screen. To continue counting, remove the suspicious bill, which will be the last one in the stacker, and press the START key. The machine will start counting again, and will not add the counterfeit bill to the count. This feature allows you to continue operation without losing count, and is especially time saving in the adding mode.

To disable the UV detection feature, press the UV and MG keys again.

The UV level can be adjusted to accommodate various currencies. When this option is required, contact an authorized Cassida service center or email Cassida Technical Support.

Cassida 6650 UV/MG model:

The Cassida 6650 UV/MG is able to check for counterfeit bills using ultraviolet sensors and magnetic ink detection. Press the UV and MG keys to activate UV/MG counterfeit detection. The "UV and MG" indicator will be lit while this feature are enabled. **IMPORTANT:** Cassida 6650 models sold outside of the UAE use a different procedure for enabling counterfeit detection.

The machine will beep and stop counting when a counterfeit note is detected, and a  (UV/MG) message will be displayed on small screen. To continue counting, remove the suspicious bill, which will be the last one in the stacker, and press the START

key. The machine will start counting again, and will not add the counterfeit bill to the count. This feature allows you to continue operation without losing count, and is especially timesaving in the adding mode.

To disable UV/MG detection, press the UV and MG keys again.

The MG level can be adjusted to accommodate various currencies. When this option is required, contact an authorized Cassida service center or email Cassida Technical Support.

Please note that the 6650 series counters, like all other counters with integrated detectors on the market, cannot guarantee a counted bill to be genuine or counterfeit. There are several reasons a genuine bill may be recognized as counterfeit, or vice versa. Possible reasons include: direct sunlight exposure, worn bills, excessively dirty bills, or highly advanced counterfeiting techniques used to produce the bill. Separate equipment may be required to definitively determine whether or not a bill is counterfeit.

4.2 Double note detection

Bills may stick to each other due to excessive dirt, folding, or various other reasons. The Cassida 6650 uses infrared light (IR) based technology to determine when two bills are stuck together. This feature is automatically activated in all modes for your convenience.

The machine will start beeping, and stop counting when a double bill is detected. A “dbl” message will be displayed on the small screen. To clear the error, all bills must be removed from the stacker. The large screen will automatically be reset. All bills in the stacker must then be placed back in the hopper and recounted.

Smart double note detection in adding mode:

When a double note is detected in adding mode, the machine enables you to continue counting by automatically correcting the total number of counted bills on the large screen. When the machine stops, just remove all the bills from the stacker and machine will not add them to the total count.

4.3 Half note detection

The Cassida 6650 incorporates infrared light (IR) sensors that notify users if a half note passes through the counting mechanism. This feature is activated automatically in all modes for your convenience.

The machine will emit a warning beep and stop automatically when a half note is detected. A “HLF” message will be displayed on the small screen. To clear the error, all bills must be removed from the stacker. The large screen will automatically be reset. All bills in the stacker must then be placed back in the hopper and recounted.

Smart half note detection in adding mode:

When a half note is detected in adding mode, the machine enables you to continue counting by automatically correcting the total number of counted bills. When the machine stops, just remove all the bills from the stacker and machine will not add them to the total count.

4.4 Chain note detection

The Cassida 6650 utilizes a self-checking system that alerts you in rare cases when several notes pass through the counting mechanism at once. This feature is activated automatically in all modes for your convenience.

The machine will emit a warning double beep and stop automatically when a chain note is detected. A “CHn” message will be displayed on the small screen. To clear the error, all bills must be removed from the stacker. The large screen will automatically be reset. All bills in the stacker must then be placed back in the hopper and recounted.

Smart chain note detection in adding mode:

When a chain note is detected in adding mode, the machine enables you to continue counting by automatically correcting the total number of counted bills. When the machine stops, just remove all the bills from the stacker and machine will not add them to the total count.

4.5 Note size detection

The Cassida 6650 incorporates bill size detection, which alerts you when a bill is narrower than others. This feature helps you identify torn and folded bills, and is activated automatically in all modes for your convenience.

The machine will emit a warning double beep and stop counting when a different size note is detected. A “dd” message will be displayed on the small screen. The bills in the last count will not be added to the count. Empty the stacker and restart counting.

Smart note size detection in adding mode:

When a narrow note is detected in adding mode, the machine enables you to continue counting by automatically correcting the total number of counted bills. When the machine stops just remove all the bills from the stacker and machine will not add them to the total count.

5. MAINTENANCE AND TROUBLESHOOTING

5.1 Maintenance



You should always turn the machine off and disconnect the power cord before cleaning the unit.

- Most operational problems can be avoided by regular care and preventative maintenance. Taking regular care of your currency counter will significantly increase its lifetime and help you avoid costly repairs.

To avoid problems:

- Make sure there are no metal clips or rubber bands in the bills you are going to count;
- Be sure to follow the proper procedure for loading the hopper, refer to part "2.2 Loading the hopper"; To get the best results out of your counter the following maintenance is recommended on a daily basis:
 - Use a Cassida air duster and a soft bristle brush to remove any dust or debris from the interior of the machine.
 - When not using your counter for an extended period of time, cover it with a drop cloth or plastic sheeting to prevent dust from settling inside.
 - Complete maintenance service is recommended once every 3 months.

5.2 Troubleshooting

For error messages, please refer to the table below:

Error code	Cause	Solution
UU	Suspicious FL level on the bill	Remove the last bill from the stacker and press START key to continue counting. The suspicious bill will not be added to the counting. Check the suspicious bill.
mg	Suspicious MG level on the bill	
dbl	Duplicated bill passed or passed bill was dirty, glued	Remove all bills from the counter and count again
Chn	2 or more bills passed at the same time	
HLF	Half bill detected or bill passed incorrectly	
dd	Passed bill was too short	
Err A	1. There are bills in the hopper	1. Remove the bills from the hopper to allow the machine to complete its self-check. 2. Clean the sensor with a soft bristle brush and compressed air. Refer to section 5.1.
	2. Hopper sensor may have collected dust.	
Err b	Counting sensors may have collected dust.	
Err C	1. There are bills in the stacker	
	2. Stacking sensors may have collected dust.	

Other possible errors:

Problem description	Cause/Action
Does not operate after turned on.	Ensure power card is plugged in. Verify indicator light is lit on the DC power converter module.
Machine fails to detect a counterfeit note.	The UV sensor may have collected dust. Try cleaning the UV sensor by spraying the counting mechanism using compressed air.
Inaccurate counting.	Feed gap is too wide. This may happen when brand new notes are counted, since their thickness differs greatly from used notes. Narrow the feed gap slightly by turning the feed gap adjustment screws counterclockwise. See section 1.3 "Read view". Adjust 1 turn and retest. Repeat until the gap is properly adjusted.
Bills jam	1. Foreign objects present in bill stack. Turn off the machine. Remove any jammed bills by turning rollers and wheels manually, if necessary. Inspect the machine and remove any foreign objects such as paper clips or rubber bands.
	2. Feed gap may be set too narrow. Widen the feed gap slightly by turning the feed gap adjustment screws clockwise. See section 1.3 "Rear view". Adjust 1 turn and retest. Repeat until the gap is properly adjusted.

5.3 Warranty

Warranty is effective for a period of one year from the date of purchase. In most cases, the malfunction of the machine can be resolved by cleaning the unit.

- Customer should allow Cassida the time and opportunity to test and diagnose the machine to determine warranty and non-warranty claims.
- After receiving and unpacking the units, Customer shall keep the package and its user manual. Warranties are canceled in the event the device is transported in a nonoriginal packaging or operation/maintenance conditions are not met.
- Company is not responsible for unit malfunction due to improper maintenance, storage and transportation including mechanical damage.
- Manufacturer is entitled to introduce updated software, not described in the current user manual.

Non-warranty service:

Cassida can perform maintenance and cleaning for an extra fee. For a non-warranty repair or maintenance quotation, contact Cassida Technical Support.

Warranty service is not available in the following cases:

- Cleaning of the unit from dust and mud
- Absence of a warranty card or an incorrectly filed warranty card
- Operation or maintenance requirements detailed in the user manual are not met
- There is mechanical damage to the unit or the seal portions of the unit have been opened or tampered with
- There are foreign objects or liquid inside of the unit.

Shipping:

The warranty does not cover shipping cost to or from Cassida's Technical Service Center. Before shipping the unit to the Cassida's Technical Service Center the warranty card must be filled out with model full name and number, serial number, cause for service, errors occurred.

5.4 Contact information

Technical Support contact information:

e-mail: fabin.johnny@cassida.me
tel: 042 739 328
www.cassida.me, www.cassidausa.com

When contacting Cassida Technical Support, please have the following:

- Product model – Located on the back side of your currency counter
- Serial number – Located on the back side of your currency counter
- Nature of the problem – What happens, and when did it happen? Did the machine display an error message?
- Steps already taken to resolve the problem, and the results.

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