

**Cassida**<sup>®</sup>  
C850  
*moving money forward*



# USER MANUAL

CASSIDA C850 COUNTER/WRAPPER/BAGGER

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

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# 1. INTRODUCTION

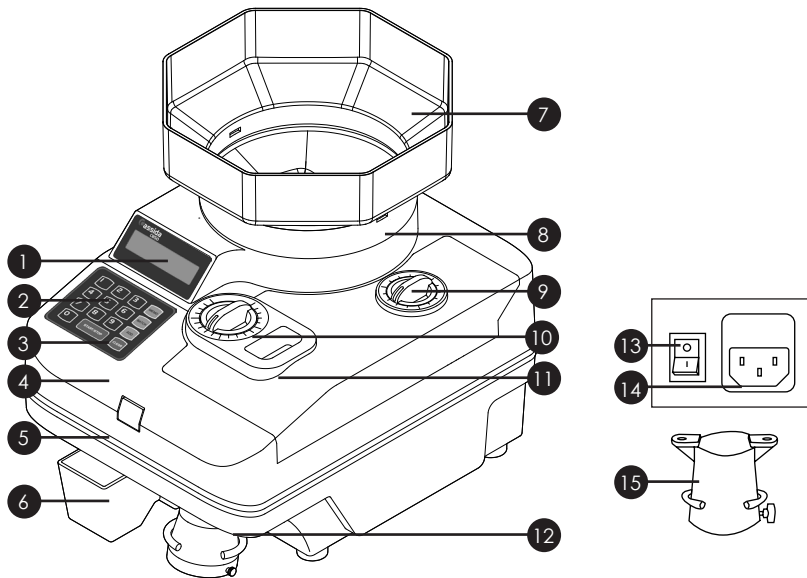
## 1.1 About the Cassida C850

The Cassida C850 is a heavy duty, high speed coin counting machine. It counts, off sorts and can bag coins or wrap them when using the optional Cassida Coin Tubes. Its large hopper holds up to 6,500 coins. It offers counting and batching modes and has additional features like add and memory functions to help you speed through coin processing.

## 1.2 Box contents

- C850 unit
- Power cord
- Off-sort bag adapter
- Off-sort tray
- Hopper extender
- Two belts
- Coin bag

### 1.3 System Overview



- |   |                   |    |                               |
|---|-------------------|----|-------------------------------|
| 1 | Display           | 9  | Coin Thickness Adjusting Knob |
| 2 | Control Panel     | 10 | Diameter Adjusting Knob       |
| 3 | START/STOP Key    | 11 | Side Cover                    |
| 4 | Top Cover         | 12 | Coin Outlet                   |
| 5 | Bottom Cover      | 13 | Power Switch (on back)        |
| 6 | Rejected Coin Box | 14 | Power Socket (on back)        |
| 7 | Hopper Extender   | 15 | Reject Coin Bag Attachment    |
| 8 | Hopper            |    |                               |

## 1.4 Control panel



<u>Key</u>	<u>Function Description</u>
NUMERIC Key	Press the 10 numeric keys for inputting the desired batch number.
BAT	Press this key for setting the desired batch number.
MEM	Press this key for adding the present count number into memory. Hold this key to recall the count put into memory
ADD	Press this key for counting under the Add counting mode.
C	Press this key to clear the present counting number.
START/STOP	Start or stop the machine.

## 1.6 Specifications

Counting Speed	1900 Coins/Min (coins with a diameter of 15 mm)
Hopper Capacity	1690 coins
Hopper Capacity with Extension	6500 dimes
Countable Coin Size	Thickness:1.0 to 3.5 mm. Diameter:15 to 35 mm.
Max Counting Display	9999999
Modes:	Continuous Counting Mode Batch Counting Mode Add Counting Mode
Power Consumption	<60W
Power Requirements	AC 110V - 60Hz
Dimensions	13.39"D x 10.49"W x 13.58"H 340mm D x 265mm W x 345mm H)
Net Weight	19.4 lbs. (8.8 kg)

## 1.7 Important safety notes

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

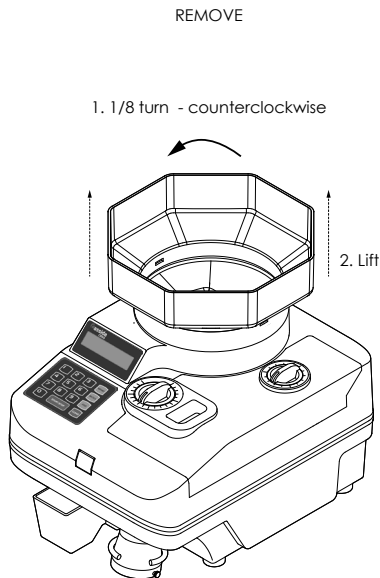
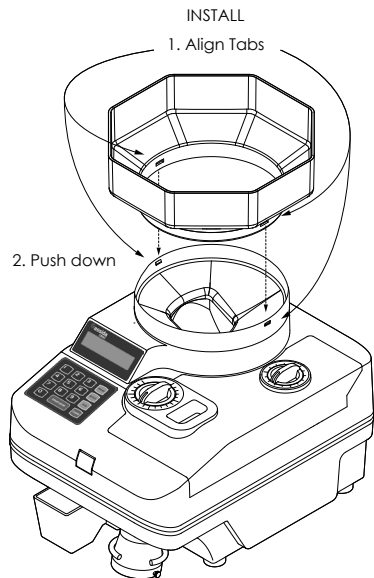
- Before putting coins into the hopper, remove all paper scraps, lint, rubber bands, etc., which may be mixed with coins.
- Foreign objects may cause jamming or faulty counting.
- Do not open the Top Cover when coins are in the Hopper.
- Make sure the unit is installed on a flat surface.
- When using a bag to collect coins, please place the bottom of the coin bag on the floor or on a stand to prevent the machine from tipping forward or over.
- Do not use this unit in areas where it may be exposed to water or any other liquids.
- Use only the power cord supplied with the unit. Plug the power cord into a properly grounded wall outlet. Do not remove the ground pin from the power cord. Failure to properly ground the unit can result in severe injury or fire.
- When not using this unit for an extended period, remove the power plug from the wall outlet.
- Always unplug this unit from the wall outlet prior to cleaning. Use specified cleaning products, such as a can of compressed air, a soft cloth and a soft bristle brush.
- To avoid the risk of electrical shock, do not disassemble this unit. Disassembling it will expose you to dangerous voltages and other risks. Incorrect re-assembly can cause electrical shock when the appliance is subsequently used. Take it to a qualified technician when service or repair is needed.
- Do not operate the machine in areas with high temperature, humidity or smoke: it may prevent it from working correctly.

## 2. OPERATION

### 2.1 Getting started

#### Installing the hopper extender

The hopper extender should be used if you have a large number of coins to count. To install the extender, align the groove in the extender with the hopper lip and press down firmly.



To remove the hopper extender, rotate it counterclockwise approximately 1/8 turn until it loosens.

## 2.2 Powering on

Plug the machine into a properly grounded outlet. Turn on the power switch. After a short test the display will show 0 on the left and "sp1" or "sp2" on the right. Choose the speed you need to run the machine:

Press "CLEAR" key and "1" key at the same time. The display will show SP1 Press the keys again and the speed will change to SP2

- If the diameter of the coin you are counting is <22 mm (US pennies, nickels, dimes and quarters) choose SP2
- If the diameter of the coin you are counting is  $\geq 22$  mm (US 50 cent pieces and dollar coins) choose SP1

## 2.3 Count mode (for single denomination coins)

Set the Coin Diameter Adjusting Knob to the desired coin diameter (in millimeters). Each click equals 0.25 mm.

Set the Coin Thickness Adjusting Knob to the desired coin thickness (in millimeters)

Connect a coin bag to the coin outlet on the bottom right side of the machine. When using a coin bag, place the bottom of the bag on the floor or on a stand to prevent the machine from tipping.

Install the coin reject box onto the front left side of the machine. If you have a lot of small mixed coins, install the reject coin bag attachment onto the reject outlet, then hang the coin bag on it.

Choose the feed rate of the coin hopper:

- If the diameter of the coin you are counting is <22 mm (US pennies, nickels, dimes and quarters) choose SP2
- If the diameter of the coin you are counting is  $\geq 22$  mm (US 50 cent pieces and dollar coins) choose SP1

Refer to Powering On section if you need to reset the speed rate.

Put coins into the hopper and press the START/STOP key. Counting will begin.

To halt counting, press the START/STOP key. To resume counting, press the START/STOP key again and counting will resume. The previous count is retained and the new count will be added to the previous count.

When the count total reaches the batch quantity or all coins have left the hopper, the machine will automatically stop.

When counting is complete:

- You may press the MEMO button and the count will be added to the memory. To recall the count of the coins stored in memory, press and hold MEMO for three seconds. Any count added to memory will remain in memory unit you clear the memory. Clear the memory by pushing the CLEAR and MEMO button at the same time. The displayed amount will show 0 and the memory will be cleared.
- You may press the CLEAR key. This will reset the displayed amount to 0.

NOTE: In the count mode, the displayed count will be reset to 0 when a new coin batch is started.

## 2.4 Add mode

ADD is used in conjunction with the BATCH mode to keep track of the total number of coins counted.

Activate the mode by pushing the ADD button and the display shows ADD on the left side. When you use ADD and BATCH together, the machine will BATCH its pre-set units (50 coins, for example) but the number shown on screen will be the total number of coins counted, showing you the total number of coins counted.

To stop using the ADD mode, press CLEAR. The ADD indicator will disappear from the screen. If you are in BATCH mode, the count on screen will then display only up to the batch amount and will zero out with each new BATCH.



By default the machine uses the ADD mode in its Count Mode, displaying the total count of the coins you counted. In the Count Mode, ADD will not appear on the screen.

## 2.5 Batch mode

In the batch mode, the machine will stop when the total count reaches the batch quantity or when the hopper is empty. To complete a partial batch, load additional coins into the hopper and press the START/STOP key.

See BATCH and ADD mode above for additional information.

### Setting the batch quantity

Press the BATCH key. Input the desired quantity of the batch by using the numerical key pad. Press the START/STOP key to confirm the batching quantity. When the display show BAT on the left side, the BATCH has been set.

### Counting batches

Press the START/STOP button to begin counting. Under this mode, the machine will automatically stop when the count total reaches the batch quantity. Press the START/STOP key to start the next batch.

### Clearing the batch quantity

Press the BATCH key. Input 0 from the numeric key pad. Press the START/STOP key to confirm. When your batch is cleared, the BAT on the left side of the display will disappear.

Note: When BATCH is set to zero, the machine will not stop counting until all coins have been emptied from the hopper.

## 2.6 Sorting mixed coins

Before putting coins into the hopper, remove all paper scraps, lint, rubber bands, etc., which may be mixed with the coins. Foreign objects may cause jamming or inaccurate counting. Largest diameter coins should be counted first. Count in this order: 50 cent pieces, dollar coin, quarter, nickel, penny and dime.

Set the coin diameter adjusting knob and the coin thickness adjusting knob to the value for the biggest and thickest coin in the mixed coins. Note: The coin with the largest thickness may not be the one with the largest diameter.

Connect a coin bag or a coin tube onto the coin outlet. Install the reject coin bag attachment onto the front of the machine. Attach the coin bag to it. Be sure the bottoms of the coin bags are on the floor or on a stand, to prevent the machine from tipping.

Fill the hopper with mixed coins. Press the START/STOP key to begin counting. If a batch has been pre-set, the machine will stop counting when it reaches the BATCH quantity. If no BATCH is set, or the BATCH is set at 0, the machine will continue counting until all the coins from the hopper have been emptied. The counted number shown on the display is the count of non-rejected coins. Smaller coins will be rejected into the reject coin bag.

To continue counting, set the coin diameter and coin thickness of the next largest coin. Then put the remaining rejected coins into the hopper to sort out the next biggest coins. Continue this procedure until all coins have been counted.

## 2.7 Counting tokens or non-US coins

Before counting tokens, foreign coin denominations or coins of unknown dimensions, the physical size (in millimeters) of the coin or tokens must be measured. Coins must be measured both for diameter and thickness.

It is recommended measurements be taken on several coins/tokens using a set of calipers. If the coin/token dimensions are published, those values may also be used as a starting point. Please note that used coins will generally be slightly thinner than new coins.

The Cassida C850 should be set for the proper coin thickness and diameter based on the largest measured value or on published values.

Several trial runs should then be performed to determine the final settings. The following suggestions should help establish the final settings. Coin jamming may occur during trial runs. Please see section 3 for details about clearing jams.

- If coins/tokens are observed in the reject sort box, the coin diameter adjustment should be decreased by 0.25 mm (one click).
- If coin jamming on the coin runway occurs, (see section 3.2) the coin diameter adjustment should be increased by 0.25 mm (one click)
- If double-stacked coins are observed underneath the Lock Plate (see section 3.2), this may indicate the coin thickness setting is too large. Try decreasing the thickness setting by 0.05 mm.
- If centrifugal wheel coin jamming is observed (see section 3.2) it may indicate the coin thickness is set too small. Try increasing the thickness setting by 0.05 mm.

## 2.8 Using plastic coin tubes

Wrapping coins in paper tubes is easy with the C850. Simply loosen the coin tube holder clamping screw on the coin outlet and insert a plastic coin tube. Plastic coin tubes are not included with the C850, but are available from Cassida dealers. To remove the coin tube, loosen the clamping screw.

To wrap coins into preformed paper wrappers: Be certain the plastic coin tube is in place and secure on the C850, as described above. Assure your paper coin wrapper matches the denomination of the plastic coin tube.

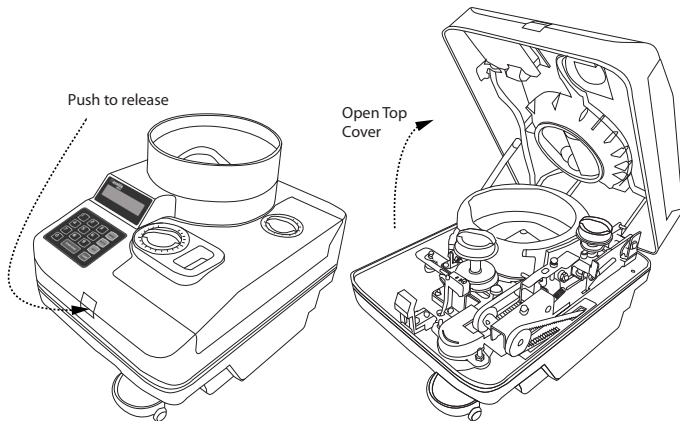
Set the appropriate BATCH for your coins (25 coins for dollars, 50 coins for pennies and dimes, 40 coins for quarters and nickels). With the crimped end of the paper wrapper facing downward, insert the paper wrapper upward into the plastic tube until the top of the paper wrapper abuts the stop on the plastic tube. Press the START/STOP key to begin counting. Use your fingertip to support the paper tube during operation. With BATCH set, the machine will stop counting when it reaches the appropriate number of coins counted. Still supporting the paper wrapper with your fingertip, allow the filled wrapper to drop downward out of the plastic tube. Crimp the open end of the wrapper and you're ready to fill another one.

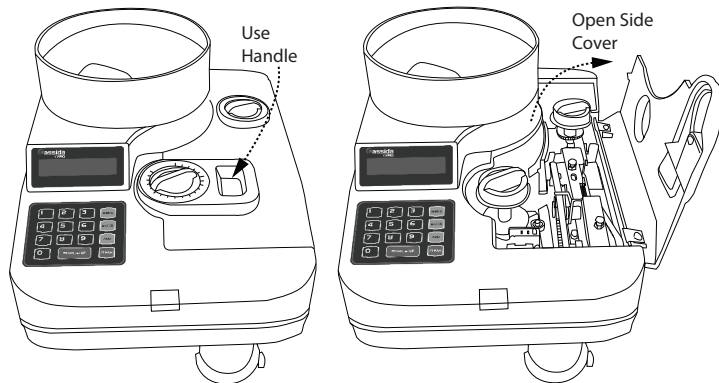
## 3. MAINTENANCE AND TROUBLESHOOTING

### 3.1 Daily maintenance

Keep your Cassida C850 running smoothly by doing the following maintenance checks daily:

1. Turn off the main power and unplug the machine before attempting any daily maintenance.
2. Clean the coin runway and the count sensor at least once a day, using a soft-bristled brush.
3. Inspect the feed belt for dirt and wear. If it is dirty, clean it using a Cassida CleanBill cleaning card or a soft cloth dipped in denatured alcohol. If the belt is worn, replace it with a new belt.
4. If the machine requires service or additional repair parts, please contact your local distributor.
5. The Cassida C850 has a top cover and a side cover.





### 3.2 Troubleshooting

If the machine stops without having counted all coins in the hopper, please perform the following steps:

1. Please make certain the thickness and diameter settings exactly correspond to the size of the coin denomination being counted. Note the current count as it could be cleared in the following step. Press the START/STOP button to restart the count.
2. On smaller coins (dimes and pennies) the machine can occasionally stop without having counted all coins in the hopper. Note the number of coins counted and then press START/STOP to have the machine continue counting. The machine may clear when restarting.

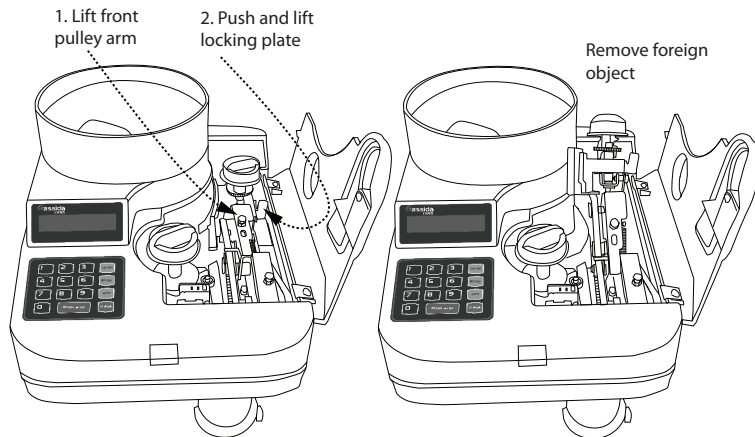
3. Note the current count. Turn the machine off, unplug it and manually remove any remaining coins. Check for centrifugal disc jamming, coin runway jamming and coin jamming under the lock plate. Plug the machine back in. Turn it on and push the START/STOP key to recount the coins.

#### Coin runway jamming:

When coins are jammed in the coin runway, rotate the diameter knob counter-clockwise to release the left guide plate. The jammed coin will fall into the rejected coin box, allowing you to readjust the diameter knob.

#### Centrifugal disc jamming:

If foreign objects are mixed with coins in the hopper, jamming may occur between the Centrifugal Disc and the Coin Guide Plate. If this occurs, follow these steps to stop the jamming:

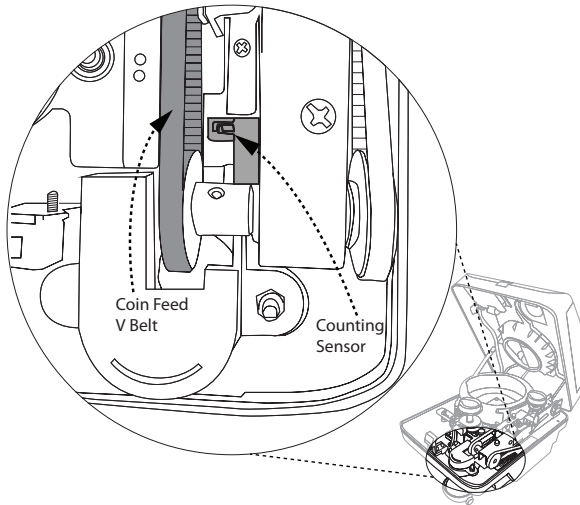


### Coin jamming under lock plate

If double stacking of coins is observed under the lock plate, it indicates the coin thickness setting is not correct. The coin thickness knob should be adjusted for the thickness of the largest coin in the batch being counted. If thickness is set too large, coins may double stack and jam the machine.

### The screen displays "EJ":

If your screen displays the EJ error, this indicates the counting sensor is blocked with debris. To correct this error, turn off and unplug the machine. Open the side cover and swing up the front feed pulley arm and lock plate. Remove the coin feed V-Belt from the front feed pulley arm. Clean the counting sensor using a soft brush and compressed air. Reinstall the V-belt and close the lock plate and front feed pulley arm.





### Other belt replacements

The following should be performed only by a qualified service technician. Do not attempt to perform replacement of the following belts on your own.

- Upper drive belt (V-564)
- Lower drive belt (V-350)

## 4. WARRANTY AND CONTACT INFORMATION

### 4.1 Warranty

#### Warranty and contact information

All Cassida products are warranted 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. Please refer to section 3 Troubleshooting for guidelines.

Please register your product to enable the warranty by visiting <http://cassidausa.com/register.html>

#### Coverage:

The warranty covers defects in materials and workmanship. It does not cover maintenance and cleaning (cleaning parts or sensors of dust, replacing parts such as rubber rollers, V-belts, etc. that are worn out by a natural cycle of work).

#### Shipping:

The customer is responsible for shipping fees to the Cassida Technical Service Center.

#### Non-warranty service:

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

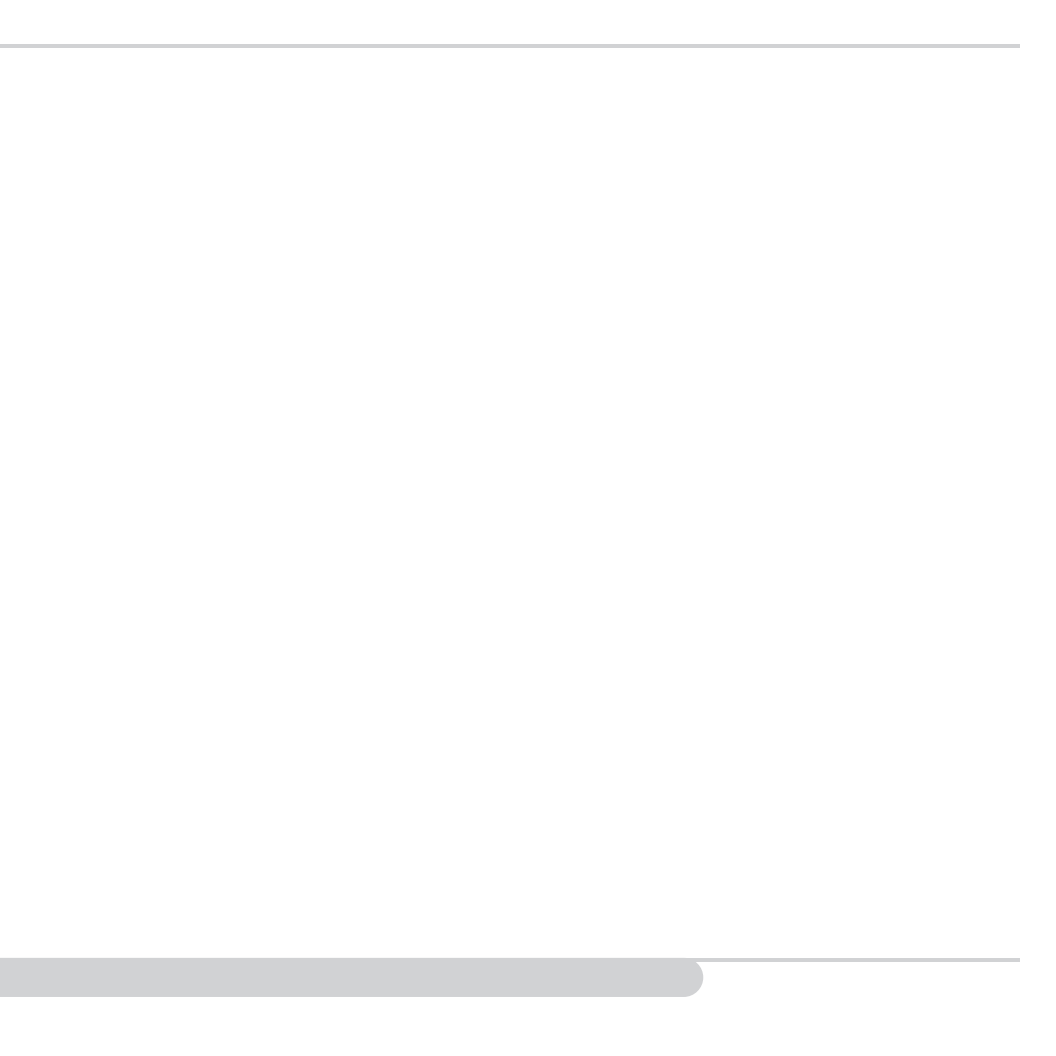
## 4.2 Contact information

Email: [technicalsupport@cassidausa.com](mailto:technicalsupport@cassidausa.com)

Phone: (888) 800-0303

When contacting Cassida Technical Support, please have the following information available:

- Product model – Cassida C850
- Serial number -- Located on the bottom of your coin counter.
- Nature of the problem – What happens? When does it happen? Did the machine display an error message?
- Steps already taken to resolve the problem and the results.





care about  
money



speed



counterfeit  
detection



operation  
ease



design



support



quality

Designed by Cassida Corporation, USA  
Made in China

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