

## 5. General Specifications:

SENSOR SET: Code 85H

CURRENCY AND INTERFACES See Software Description document

### ELECTRICAL SPECIFICATION:

Operating Voltage	Maximum Operating Current	Maximum Current
22...40 V DC	0.6 A	3 A

Use only current limiting CSA or UL recognized CLASS 2 Power Supply.

OPERATING TEMPERATURE: -18 °C to +60 °C

TOTAL WEIGHT: 3.3 kg with Cassette and Recycler

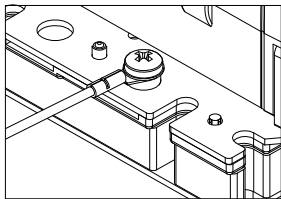
FEATURES: Blue Runway Lights (cassette Up) Bezel, Handled Bill width 66 mm  
Cassette 300 Bills

ENCLOSURE: Bill Validator with Recycler

User's Guide  
Software description  
Accessories:  
Front Label  
MDB Harness,  
Mounting kit for grounding connection, # OPT-MKSM-GND

Part # OPT-HS-MB-MDB  
Nut, # 5310018 4 pcs.

### OPTIONAL ACCESSORIES:



View A

Protective-earth ground terminal must be connected to the automat local electric earth. Electric earth connection must be made by cable OPT-MKSM-GND or another copper wire cable with wire gage 14.... 12 AWG. Use the shortest, practical wire length. Refer to local wiring codes and regulations for grounding requirements



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Web Address: [www.cashcode.com](http://www.cashcode.com)  
Email: [support@cashcode.com](mailto:support@cashcode.com)

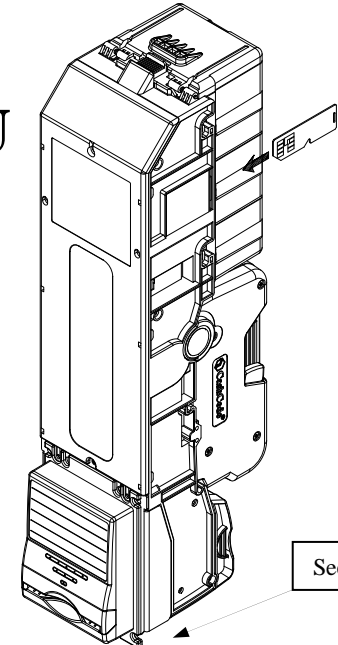


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## Bill Validator with Recycler

Hardware part # **MB-2017U**



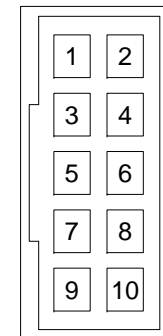
See View A

### 1. DIP Switches Setting

See Software Description document.

### 2. MDB connector pinout

Pin	Circuit
1	Power 34V DC(+)
2	DC Power return
3	N/C
4	Master Receive
5	Master transmit
6	Common
7	Secondary Channel Master transmit
8	Secondary Channel Master Receive
9	GND (Communication Ground)
10	+5V (for test purposes only)



Mating connector:

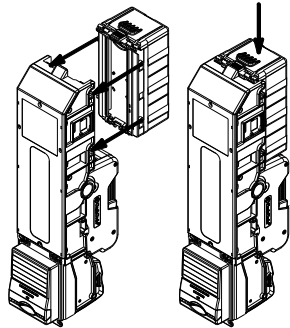
**MOLEX:**

Dual Row Crimp Connector Housing # 90142-0010 - 1 pcs.  
Pins Female Crimp Terminal, # 90119-2110 -10 pcs.

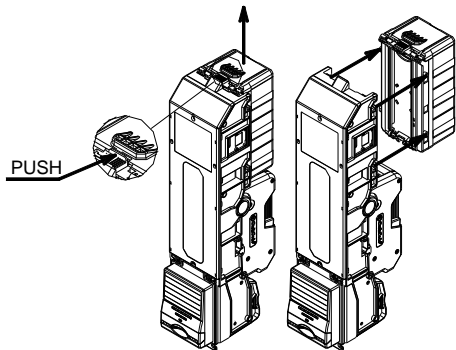
### 3. Diagnostics

Insert a bill in the entry slot while device is in solid red, count the number of flashes and compare with the diagnostic chart below:

## of flashes	Malfunction
1 red on black	Cash box is out of position
2 red on black	Recycling cassette is out of position or communication failure
3 red on black	Cash box is full
4 red on black	Timeout of the stacker motor
5 red on black	Failure of the recycling cassette gate
6 red on black	Optical sensors have failed
7 red on black	Magnetic sensors have failed
8 red on black	Timeout of the transport motor
9 red on black	Failure of the recycling cassette tape
10 red on black	Bill jam in recycling cassette
11 red on black	Bill path isn't empty
12 red on black	Bill drop to the cash box path
1 blue on red	Unable to write program memory
2 blue on red	Firmware integrity error
3 blue on red	Wrong memory card
4 blue on red	Security error
Steady red	Firmware CRC error. Waiting for interface download



To install the drop cassette into the bill validator direct four bosses of the cassette to corresponding slots in the holder up to the stop and push on the cassette top-down.

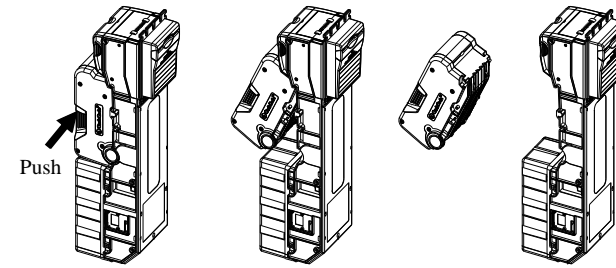


To remove the **drop** cassette, press on latch, raise the cassette and remove it.

#### Removing the Recycling Cassette:

Push the latch on the recycling cassette;

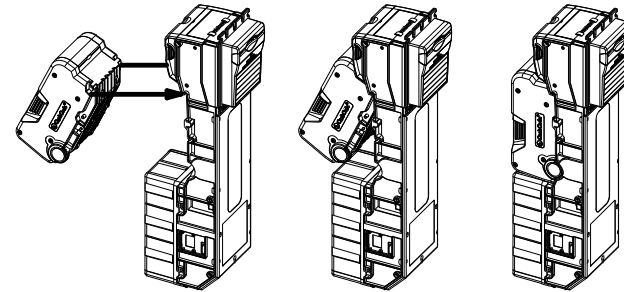
Draw aside the bottom part of the recycling cassette and take out it.



#### Installing the Recycling Cassette:

Direct two bosses of the recycling cassette to corresponding slots in the body of validator up to the stop.

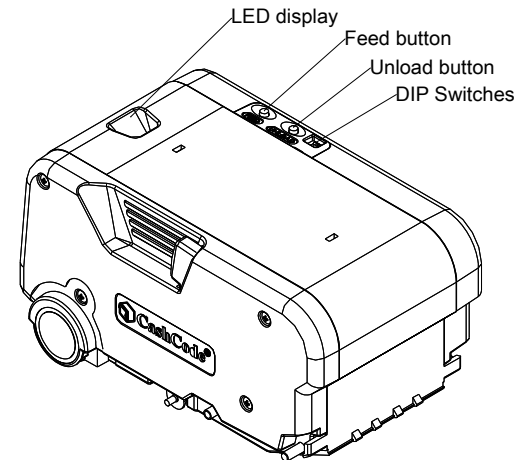
Push on the recycling cassette that the latch has snapped.



The DIP switches are on the top of the recycling cassette and accessible without its dismantling.

A set of 2 DIP switches allows to select a denomination of the bills to be accommodated in the recycling cassette.

A complete description of the switch functions, please find in the Software User's Guide (supplied with any bill validator) or at [www.cashcode.com](http://www.cashcode.com).



#### FEED/UNLOAD BUTTONS

The feed/unload buttons are next to DIP switches on the top of the recycling cassette. The feed button is used for setting a loading mode. This mode makes the entered bills of a selected denomination to be loaded into the recycling cassette. To cancel a loading mode, the feed button must be pressed again. If the bills do not enter within 20 seconds, the loading mode will be cancelled automatically. By pressing the unload button one bill will be dispensed from the recycling cassette through the entry channel. If the feed and unload buttons are pressed simultaneously then all denominations will be unloaded from the recycling cassette into the drop cassette. The number of bills in the recycling cassette is indicated on the two-digit LED display.