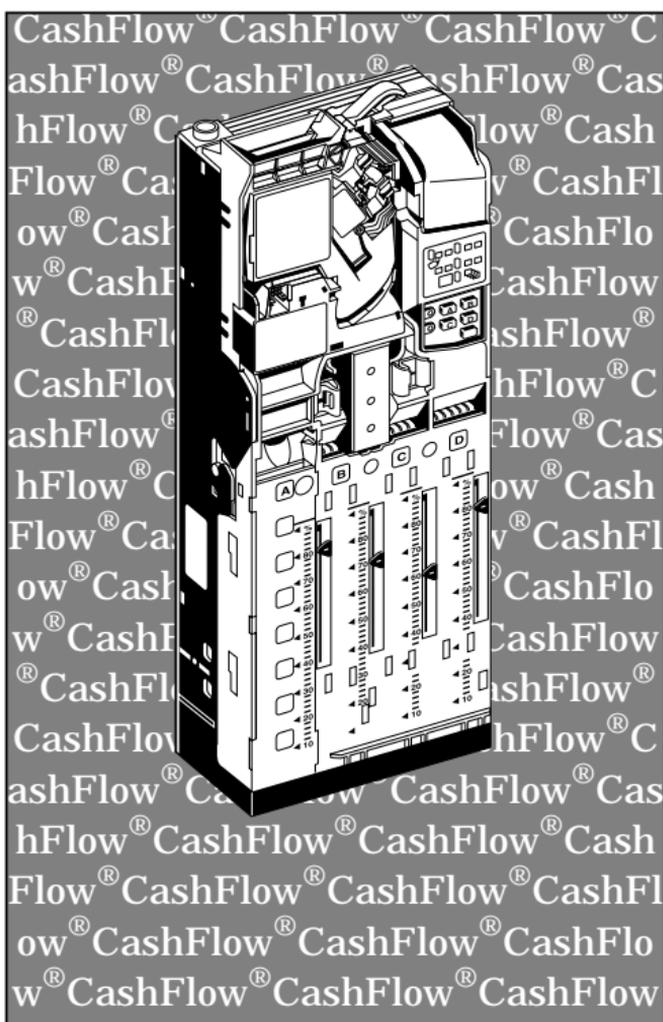


The
CASHFLOW[®] 540
ECONOMY SERIES
CHANGE GIVER
POCKET GUIDE

**ROUTINE MAINTENANCE,
SAFETY, INSTALLATION &
TROUBLESHOOTING**



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CashFlow® 540 change giver Pocket Guide

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WARNING

Before cleaning, servicing, removing or replacing CashFlow® units, **ALWAYS SWITCH OFF** or **ISOLATE** the **ELECTRICITY SUPPLY** to the host machine.

CAUTION

This guide is for use only by personnel trained to carry out electrical installation.

Maximum Operating Voltage

Do not apply more than the voltage specified on the unit.

Dangerous Environments

Do not operate the unit in the presence of flammable gases or fumes, or after the entry of fluid into the machine.

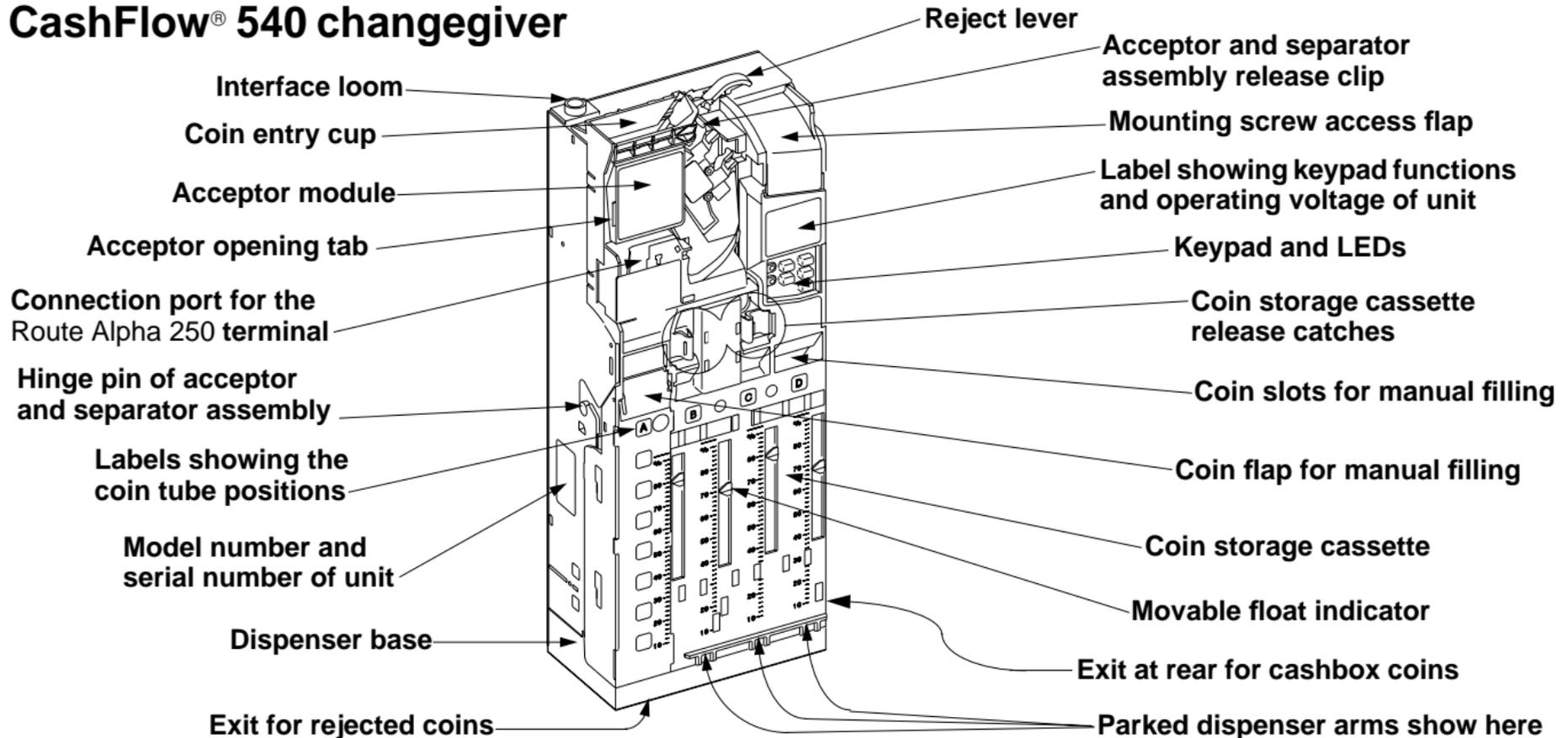
Disposal of Product

If necessary, always dispose of defective units according to local regulations.

Conformance to International Standards

When installed and operated according to the instructions provided for the particular unit, CashFlow® products meet the applicable international and national Safety and Electro Mechanical Conformance standards for any country in which they are used.

CashFlow® 540 changegiver

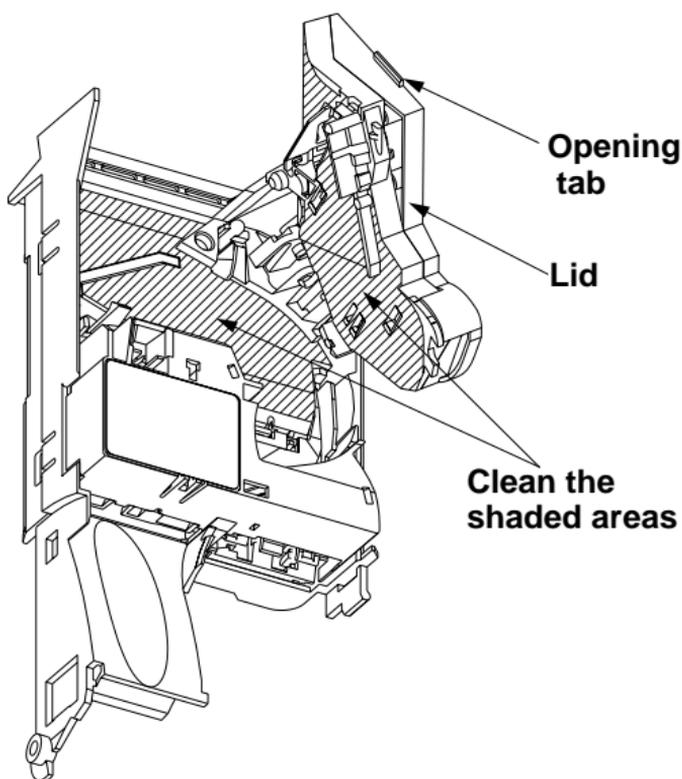


Routine Maintenance

WARNING

Switch off the power to the host machine *before* cleaning the unit

Clean the coin pathway (shown shaded in the figure) regularly with a soft cloth moistened with water. Take care that all the surfaces are dry before you close the lid of the unit, particularly if you have had to clean the unit after the entry of dirt or fluid.



Take care that no drops of water enter the unit during cleaning.

Never use solvents or abrasive creams to clean the unit. These will damage the surfaces. Ensure that the lid is fully closed after cleaning.

NOTE: If you switch the machine on when the lid of the acceptor unit is not fully closed, coins will be rejected, even if you then close the lid.

If this happens, **switch off the power to the machine for at least 15 seconds**, then close the lid again. Make sure the lid snaps shut.

Switch the power on. Check that coins are accepted.

Cleaning the Dispenser Arms

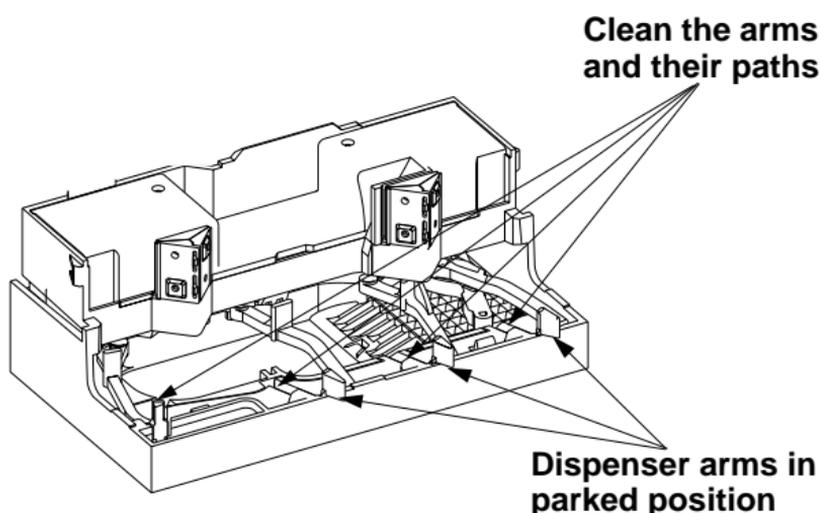
Switch off the power to the host machine *before* cleaning the unit

Squeeze together the two release catches of the coin storage cassette and lift out the cassette.

Clean the dispenser arms and their paths in the dispenser base with a soft cloth moistened with water.

Switch on power to the machine, press the yellow Mode button twice to park the dispenser arms, and replace the coin cassette.

Check that the two release catches snap shut.



You should only **remove** the dispenser and the dispenser arms for cleaning if there is a heavy build up of dirt or other matter in the dispenser.

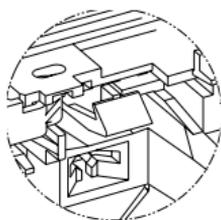
Always refer to the ***Product Maintenance Handbook*** before removing these parts.

Checking and Replacing a Fuse

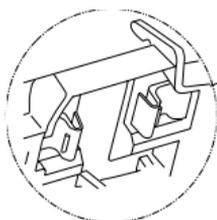
Switch off the power to the host machine *before* checking a fuse

Squeeze together the two release catches of the coin storage cassette and lift out the cassette.

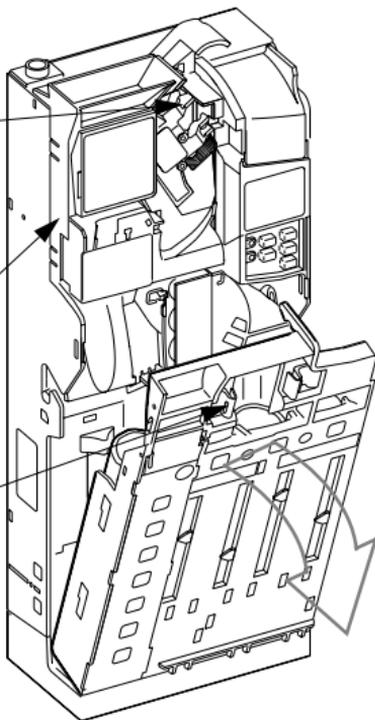
Acceptor release catch



Fuse box cover is located behind creditor



Coin cassette release catches



Press down the blue release catch above the creditor with a small screwdriver. Pull the top of the creditor forward and downwards. Unplug the exposed ribbon cable and lift out the creditor.

The fuses are under a cover in the left hand side of the unit.

Always replace a blown fuse with one of the same rating.

Replace the creditor, reconnect the ribbon cable and press the creditor into place.

Park the dispenser arms and replace the coin cassette.

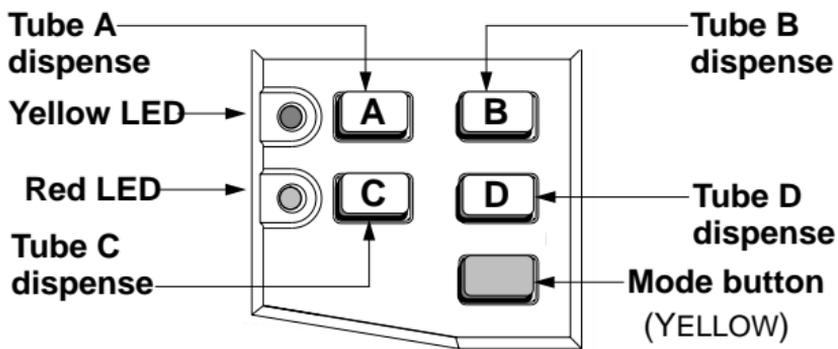
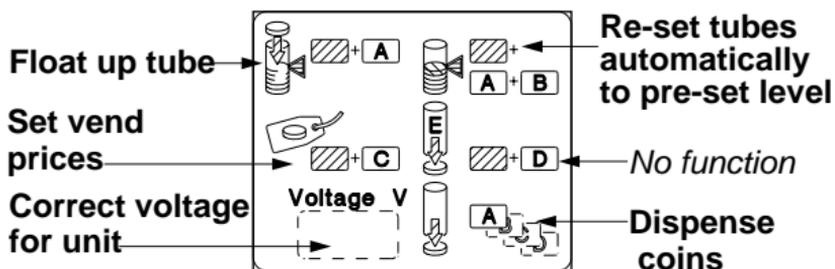
Make sure that the release catches of the creditor and of the cassette snap shut firmly.

Switch on power to the machine. Check that the red LED comes on.

Using the Keypad

Use the keypad to park the dispenser arms, dispense coins, set prices, float the coin tubes up or down, and to re-set the tube counts to their pre-set levels.

The keypad label summarises keypad functions.



| Function | Buttons |
|--------------------------------|-------------------------|
| Dispense coins from tubes ▲ | [A], [B], [C] or [D] ▲ |
| Park the dispenser arms | [Hatched] + [Hatched] |
| Float up tubes automatically | [Hatched] + [A] |
| Float down tube automatically | [Hatched] + [A] + [C] |
| Reset tubes to pre-set levels★ | [Hatched] + [A] + [B] ★ |
| Set the vend prices ◆ | [Hatched] + [C] ◆ |
| Cancel the accumulated credit | [Hatched] + [A] + [A] |

▲ Not applicable with BDV product.

★ If an audit FEM is fitted, **Mode+A+B** is *not* available to reset tubes to pre-set levels.

◆ Not applicable with MDB product.

Using the Keypad

Dispense Coins / Empty Tubes

 **A**,  **B**,  **C** or  **D**

Press a button once to dispense a coin from a corresponding tube. If you press and hold for more than three seconds, coins are dispensed automatically until only a sufficient minimum (the *safe count*) are left to operate the dispense mechanism. To empty a tube or a cassette, you may have to take out the last coins by hand.

Float-Up Tube Counts Automatically

 +  **A**

Press the buttons, then feed tube coins through the acceptor to refill the tubes to their pre-set float level. When float levels are reached, further coins are rejected. If automatic float is left by pressing **B**, tube counts re-set to pre-programmed float levels.

Re-set the Tube Counts

 +  **A** +  **B** ★

Press the buttons to force tube counts to re-set to pre-set float levels. If there are not enough tube coins to meet the pre-set levels, coin counts remain incorrect until recalibration takes place. ★ *If an audit FEM is fitted, reset via **Mode+A+B** is **not** available.*

Automatic Float Down to Pre-set Levels

 +  **A** +  **C**

If the unit is programmed for this function, press the buttons to dispense coins until tube counts reach their pre-set float levels. If the numbers of coins already in the tubes are equal to or below the float levels, no coins are dispensed.

Set the Vend Prices

 +  **C** ◆

Press the buttons. Insert coins equal to the lowest price. Make a selection. A 45-second time-out starts after each coin. *More selections at the same price can be made without inserting extra coins.*

Add coins for the next highest price, and make a selection. Continue until all prices are set. Press **C** to cancel credit and to exit price teach.

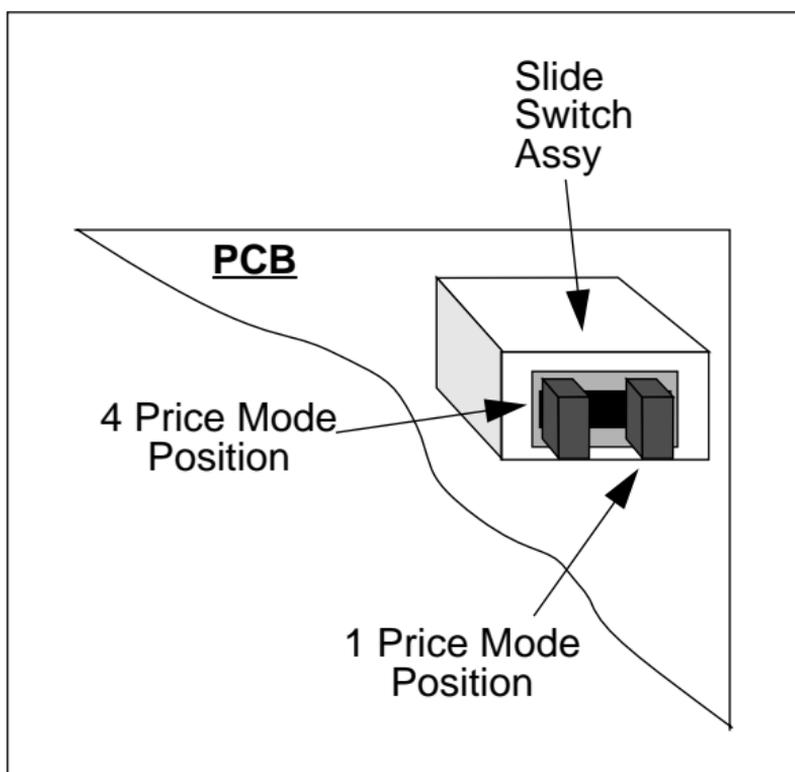
◆ Not applicable with MDB product.

4 PRICE/1 PRICE MODE SWITCH

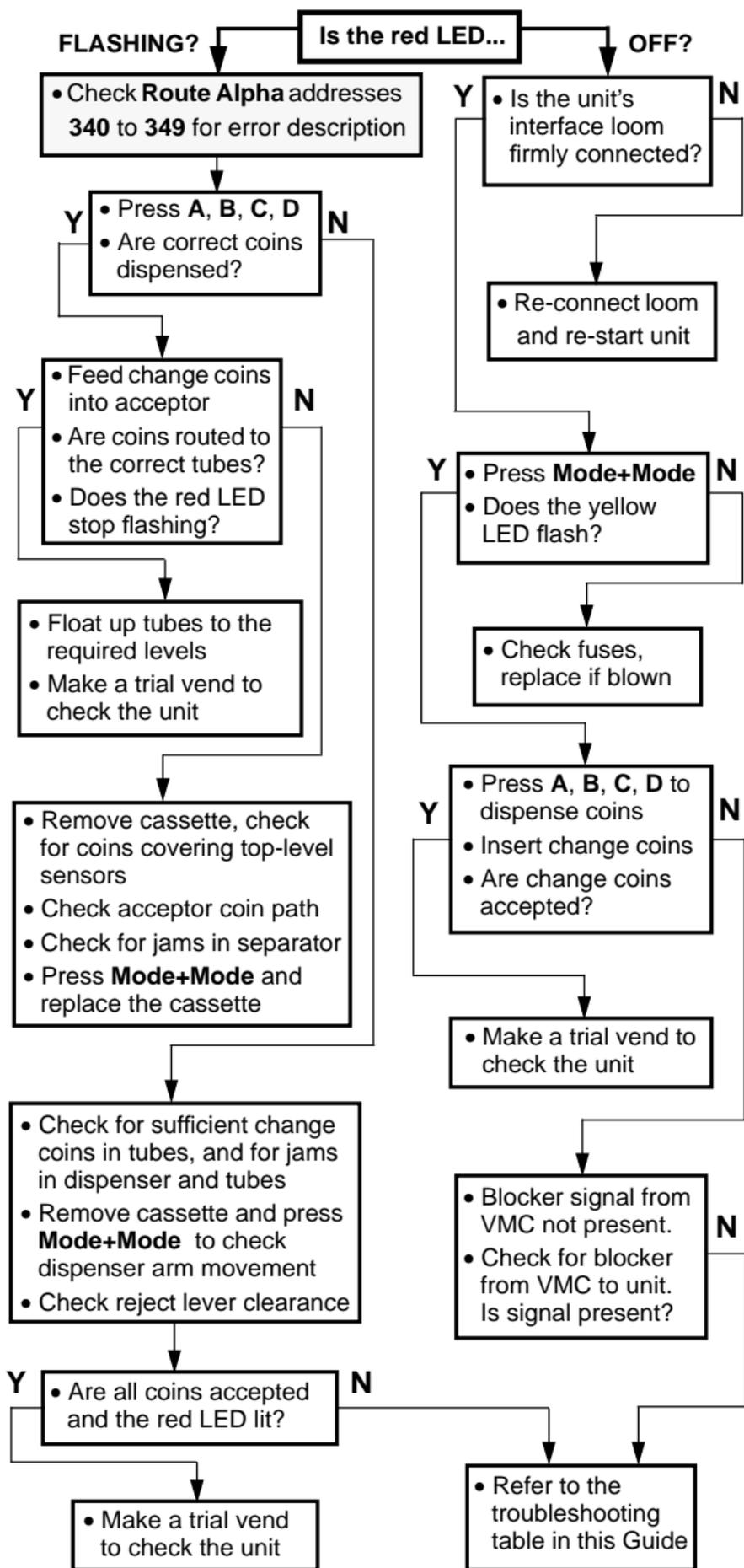
(Multi-Interface Product only)

The multi-Interface product offers a mode switch which, in electro-mechanical operation, allows a 4 price product fitted with a T4 loom to be used in place of a 1 price product fitted with a T3 loom.

The mode switch is located behind the top flap of the keypad cover and is of the slide type. If the switch is to the left the product will be in 4 price mode and if it is to the right the product will be in the 1 price mode.



Troubleshooting the CashFlow® Unit



Troubleshooting the CashFlow® Unit

| Problem | Causes | Actions |
|--|--|--|
| No coins accepted | <p>Blocked accept gate opto's, or build up of dirt in the unit</p> <p>Power loom not inserted correctly</p> | <p>Switch off power to machine, check if the opto's are blocked, and clean the unit. Refer to the <i>Product Maintenance Handbook</i>'s cleaning section before cleaning the opto's.</p> <p>Switch off power to the machine, and check the loom.</p> |
| Poor coin acceptance | <p>Change giver unit is not level</p> <p>Modules are not mounted and aligned correctly</p> <p>Build-up of dirt in the acceptor</p> | <p>Check and re-level the unit if necessary.</p> <p>Check that the coin entry and exit chutes of the machine are aligned with the coin entry cup on the unit and the cashbox on the machine.</p> <p>Adjust the modules until they are aligned accurately.</p> <p>Switch off power to machine, check and clean acceptor.</p> |
| Coins are accepted but no credit is given | <p>Power loom is not inserted correctly</p> <p>Coin jam in the separator module (<i>post gate strobes are covered</i>)</p> <p>Accept gate strobes mechanism blocked or dirty</p> | <p>Switch off power to the machine, and check the loom.</p> <p>Switch off power to the machine, and check the separator for jams.</p> <p>Refer to the <i>Product Maintenance Handbook</i> before attempting to clean the strobes or the opto's.</p> |

| Problem | Causes | Actions |
|--|---|--|
| <p>Unit rejects one type of coin or token</p> <p><u>N.B.</u> With MDB applications the coin mechanism is controlled by the vending machine controller.</p> | <p>Coin or token is inhibited</p> <p>Coin or token is damaged or worn</p> <p>A tube has reached pre-set float level, further coins are rejected because the unit is in <i>float mode</i></p> | <p>Check the coin/token is in the coin set, and has been enabled. Use the Route Alpha 250 terminal to enable the coin</p> <p>Discard the worn or damaged coin/token.</p> <p>Press A to leave <i>float mode</i> and to clear any credit.</p> <p>Check the tube levels, then make a vend to check that the correct change is dispensed.</p> |
| <p>Coins are not routing correctly</p> | <p>The level of coins in a tube is covering a top-level sensor</p> <p>The top-level sensor loom or the separator loom is not connected correctly</p> <p>Wrong acceptor or separator is fitted</p> <p>A tube is disabled</p> | <p>Check tube counts. If they are above the pre-set float levels and automatic tube inventory is set, press Mode+A+C to float-down the coins in the tubes.</p> <p>Switch off the power, remove the cassette and release the acceptor. Check that the top-level sensor and separator looms are fitted correctly. Replace the acceptor and cassette. Switch on power to the unit, insert coins and check routing.</p> <p>Check that the acceptor and separator are the correct versions. Refer to your authorised MEI distributor.</p> <p>Use the Route Alpha 250 terminal to enable the tube.</p> |

| Problem | Causes | Actions |
|--|---|--|
| <p>High-value coins are rejected and exact change light is ON</p> | <p>Too few coins in the change tubes, leaving the low-level sensors uncovered</p> <p>Unit is in <i>No overpay</i> mode. N.B. Does not apply to MDB applications</p> | <p>Re-float the coin tubes through the acceptor until the low-level sensor mirrors are covered.</p> <p>Check Route Alpha 250 address 242.</p> |
| <p>Incorrect change is dispensed</p> | <p>Insufficient change coins are available</p> <p>Incorrect coin values are set. Incorrect prices are set for required selections. N.B. Price control is held in the vending machine in MDB applications, and are <u>normally</u> held in the vending machine in Executive and BDV applications.</p> | <p>If required, float up through acceptor with correct change coins.</p> <p>Check coin values and prices, reset if necessary using the Route Alpha 250 terminal. Press A, B, C and D to check if change coins are dispensed.</p> <p>Check that coins are being routed to the tubes correctly.</p> |

| Problem | Causes | Actions |
|--|---|---|
| No coins are dispensed | <p>Levels of coins in the tubes are below the safe count</p> <p>Dispenser loom not connected, or loose</p> <p>Faulty dispenser module</p> | <p>Check that change coins are available in the tubes. If necessary, float up the tubes with the correct change coins.</p> <p>Switch off power to the machine and check that the dispenser loom is fitted correctly. Refer to the Product Maintenance Handbook.</p> <p>Check that the dispenser module is operating correctly. Refer to Maintenance Handbook's module replacement section before you attempt to service or to replace the dispenser.</p> |
| Red LED is ON, except when a vend is made | Normal operation | No action |
| Red LED is ON but coins are not accepted | <p>Coin jam in the changer mechanism</p> <p>Lid of the acceptor is open</p> <p>Not enough reject lever clearance</p> | <p>Check for jams in the acceptor and in the tubes. Clear the jams. Press Mode+Mode to park the dispenser arms before replacing the cassette, then dispense a coin from each tube to check operation.</p> <p>Switch off the power to the machine. Open and close the lid of the acceptor, wait at least 15 seconds, then switch on again.</p> <p>Check clearance is between 2 - 3mm, and adjust if necessary.</p> |

| Problem | Causes | Actions |
|--------------------------|--|---|
| Red LED stays OFF | <p>No power to the unit, or voltage not correct</p> <p>No power to the unit - loose loom or blown fuse</p> | <p>Check that the power supply to the change giver is at the voltage shown in the window on the keypad label.</p> <p>Test the power supply by pressing the Mode button.</p> <p>If the yellow LED flashes, the power is ON.</p> <p>If yellow LED stays off, switch off power to the machine, and check all power looms and fuses.</p> <p>Replace any blown fuses.</p> <p>Restart the machine and check that the red LED is on.</p> |

| Problem | Causes | Actions |
|--|---|--|
| <p>Red LED is <i>FLASHING</i></p> | <p>Fault with the change giver unit</p> <p>A coin has covered the top-level sensor mirrors</p> <p>A coin is jammed in the dispenser module</p> <p>Fault with the audit module</p> <p>Coin cassette is unclipped</p> | <p>Check Route Alpha 250 addresses 340 - 349. Press A, B, C & D to check if coins are dispensed. If the red LED is still flashing, switch off the power to the machine, wait at least 15 seconds and switch on again. Check that coins are dispensed.</p> <p>Remove the coin cassette and check the tops of the coin tubes.</p> <p>Switch off the power to the machine, remove the cassette and check the dispenser for jams.</p> <p>Clear any blockages and check for damaged coins.</p> <p>Check the Route Alpha 250 audit addresses.</p> <p>Return the unit to your MEI distributor for repair if necessary.</p> <p>Press coin cassette into place firmly, ensure clips snap shut.</p> |

| Problem | Causes | Actions |
|---|--|--|
| Red LED stays OFF and all coins are rejected | No stock available for vending No blocker signal from the machine No polling by VNC - MDB only Faulty transformer | Restock machine if necessary. Check for a full waste bucket. Check if machine is paused halfway through a vend cycle. Complete the cycle if necessary. Check the transformer. If faulty, refer to your MEI distributor. |
| Red LED <i>permanently</i> OFF. No other problems. | Faulty LED or keypad module | Check the keypad module. If it is faulty, refer to your authorised MEI distributor. |
| Red LED is <i>flashing</i> and no coins are accepted | Check Route Alpha addresses 340 to 349 for a description of the error The lid of the acceptor is not closed firmly The acceptor loom is not connected The coin path in the acceptor is dirty | Use the table of Route Alpha 250 error addresses in this manual Switch off power to the machine and open and close the lid of the unit. Make sure the lid snaps shut firmly. Wait at least 15 seconds and switch the power on again. Check the acceptor loom and reconnect it if necessary. Switch off power to the machine and clean the acceptor. |
| Yellow LED is OFF | Normal operation | No action |

| Problem | Causes | Actions |
|---|--|---|
| Yellow LED <i>flashes</i> when coins are accepted | Normal operation | No action |
| Yellow LED remains OFF when Mode button is pressed | No power supply to the vending machine | Switch off power to the machine , check all looms and check all fuses. Replace blown fuses, following the instructions in this manual. |
| Yellow LED is <i>flashing</i> | The change giver is in <i>shifted mode</i> because the Mode button has been pressed | The keypad is available to change the functions of the unit. (<i>To exit from shifted mode, press Mode or wait for 45 seconds</i>) |
| Yellow LED is OFF permanently. No other problems. | Faulty LED or faulty keypad module | Check the keypad module. If faulty, refer to your MEI distributor. |
| Problems in handling coins persist after all solutions have been tried | Faulty unit, or faulty modules | Contact your MEI distributor. <i>To help diagnosis, note the symptoms, and the model and serial number of the unit for reference.</i> These numbers are on a label on the side of the unit. |

Troubleshooting the Unit with the MEI® Route Alpha Terminal

| Address | Parameter | Range | Meaning and Actions | Notes |
|---------|---|----------------|--|-----------|
| 340 | Full tube sensor errors on tube position A, B, C or D | 0 - 255 | <p>Range value = the sum of the codes, where: 1 / 2 / 4 / 8 = tube A / B / C / D</p> <p>128 = post gate strobe error. Values are additive - for example, a value of 6 means faults on tubes B & C.</p> <p>Switch off power to the machine. Check the tops of the tubes for coins covering the sensors. Check and clear any jams in the acceptor.</p> <p>Close the lid of the acceptor firmly, power up and insert a coin to test the unit.</p> | READ ONLY |
| 341 | Disabled tube at position A, B, C or D | 0 - 31 | <p>Range value = the sum of the codes, where: 1 / 2 / 4 / 8 = tube A / B / C / D</p> <p>If necessary, use the Route Alpha 250 terminal to enable the tube.</p> | READ ONLY |

| Address | Parameter | Range | Meaning and Actions | Notes |
|---------|--|--------|--|------------------|
| 342 | EEPROM errors - i <p style="text-align: center;">CAUTION</p> <p>Switch off the power to the change giver for <i>at least 2</i> minutes before inserting or removing the audit FEM. Failure to do this can cause corruption of the FEM and <u>loss of audit data</u>.</p> | 0 - 15 | Range value = the sum of the codes, where: 1 = page 0 EEPROM error <i>Fatal error. Contact your MEI distributor.</i> 2 = page 1 EEPROM error <i>Fatal error. Contact your MEI distributor.</i> 4 = audit FEM corrupt <i>Fatal error. Contact your MEI distributor.</i> 8 = audit FEM removed Switch off power to the machine. <i>Check that audit FEM is inserted firmly in the board.</i> <i>Contact your MEI distributor if the error persists.</i> | <i>READ ONLY</i> |

| Address | Parameter | Range | Meaning and Actions | Notes |
|---------|---------------------------|--------|--|------------------|
| 343 | EEPROM errors - ii | 0 - 15 | <p>Range value = the sum of the codes, where:</p> <p>1 = incorrect configuration version <i>Contact your MEI distributor.</i></p> <p>2 = audit FEM not initialised</p> <p><i>Initialise FEM, if fitted.</i> <i>Refer to the Product Maintenance Handbook before attempting to initialise the FEM.</i> <i>Contact your MEI distributor if the error persists.</i></p> <p>4 = <i>not used</i></p> <p>8 = internal EEPROM write error <i>Contact your MEI distributor.</i></p> | <i>READ ONLY</i> |

| Address | Parameter | Range | Meaning and Actions | Notes |
|---------|-------------------------------|--------|---|-----------|
| 344 | Operational errors - i | 0 - 15 | <p>Range value = the sum of the codes, where:</p> <p>1 = <i>not used</i></p> <p>2 = acceptor initialisation error</p> <p>Switch off power to the machine. Open the lid of the acceptor then close it again firmly. Wait for 15 seconds, then power up the unit.</p> <p><i>Contact your MEI distributor if the error persists</i></p> <p>4 = HI² hardware error</p> <p>Set Route Alpha address 349 to 1.</p> <p><i>Contact your MEI distributor if the error persists.</i></p> <p>8 = HI² transmission error</p> <p>Set Route Alpha address 349 to 1.</p> <p><i>Contact your MEI distributor if the error persists.</i></p> | READ ONLY |

| Address | Parameter | Range | Meaning and Actions | Notes |
|---------|--------------------------------|--------|---|-----------|
| 345 | Operational errors - ii | 0 - 15 | <p>Range value = the sum of the codes, where:</p> <p>1 = cassette removed, or top level sensors covered Switch off power to the machine. Remove coin cassette, check for coins covering the top level sensors. Check acceptor coin path, check for jams in separator. Close lid of acceptor firmly. Power up. Press Mode+Mode to park the dispenser arms. Replace the cassette, ensuring the retaining clips snap shut.</p> <p>2 = protocol A (interface controller) transmission error Check the serial interface loom.</p> <p>4 = protocol A (interface controller) transmission error Check the serial interface loom.</p> <p>8 = cashbox full</p> | READ ONLY |

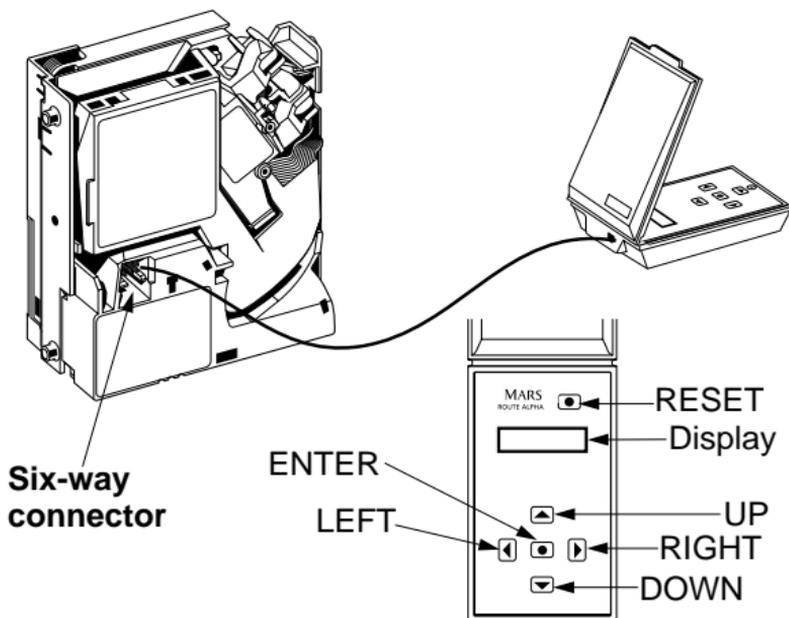
| Address | Parameter | Range | Meaning and Actions | Notes |
|---------|-------------------------|--------|--|----------|
| 346 | BDV errors (i) options | 0 - 15 | 1 = audit timed out 2 = vmc timed out 4 = cpc timed out | BDV only |
| 347 | BDV errors (ii) options | 0 - 15 | 1 = audit incompatible 2 = vmc incompatible 4 = cpc incompatible | BDV only |
| 349 | Reset error flags | 0 - 1 | 0 = do not reset error flags 1 = reset error flags | |

Setting a Unit's Functions with a MEI® Route Alpha 250 Terminal

Each piece of data which determines the unit's functions is stored in a separate address. Use the terminal to read an address and to check or set the unit's functions.

Setting Functions

Insert the plug on the **Route Alpha 250** terminal into the six-way connector in the acceptor unit.



Switch on power to the acceptor, as the **Route Alpha 250** terminal takes its power through the unit. A half-size zero is displayed when the terminal powers up, followed by the software version number and then the first address number with a **dot**, or a **dot and dash (1. or 1.-)**

Functions can be changed only if a dash shows after the address number.

Press UP or DOWN slowly to display addresses one after the other. Hold down a key to display addresses at an increasing speed. Press a key twice quickly to jump large blocks of addresses.

To set a function, press ENTER to display the current value in the selected address, then change the value by pressing UP or DOWN.

Press ENTER again to display the address. Press RESET to store the new value.

NOTE: If an error occurs, four half-size zeros appear. Press RESET to clear this display and to return to the current address.

Troubleshooting the MEI® Route Alpha 250 Terminal

| Problem | Causes | Actions |
|--|---|--|
| Terminal displays an error message at power-up | Communications error | Press RESET |
| Terminal displays an error message when changing between address and data mode | Communications error between terminal and product, or the terminal does not recognise the product it has been connected to | Repeat the last operation. |
| Terminal powers up but addresses cannot be accessed | The product is not compatible with the terminal | Different terminal is needed, or different software needed. |
| Terminal does not power up | Bad connections or faulty cable. No power to the unit (<i>the Route Alpha 250 terminal is powered through the acceptor</i>) | Check connections. Replace lead if necessary. Power up the unit. |
| Terminal powers up but one of the keys does not work | Faulty key | Use the terminal's self-test option. If the key is faulty, send terminal for repair. |
| Non-standard characters printed on the display | Faulty Route Alpha 250 terminal | Send terminal for repair to authorised MEI distributor. |

Route Alpha 250 Address Applications

The symbols below appear together with many of the following Route Alpha 250 address numbers. They can be used as an aid to indicate which variety of product that each address is used with.

▲ = Address used with 1/4 price, BDV and MDB

■ = Address used with 1/4 price and BDV only

* = Address used with BDV only

◆ = Address used with MDB only

Where no symbol is used these addresses apply to 1/4 price electro-mechanical products only.

CAUTIONARY NOTE

Where the application of the Multi-Interface product is changed from Electro-Mechanical (1 price or 4 price) to an MDB (Serial Interface), or vice-versa, then care must be taken to ensure that the relevant Route Alpha 250 addresses are up-dated to suit the new requirements.

Address Settings for Use with the MEI® Route Alpha 250 Terminal

| Address | Usage | Parameter | Range | Meaning |
|---------|-------|--|----------|---|
| 21 - 32 | ■ | Coin types 1 - 12 (Refer to addresses 421-432 for MDB coin types) | 0-2 | 0 = coin 1 = value token 2 = vend token |
| 200 | ■ | Maximum credit | 0-65,535 | maximum credit |
| 201-204 | ■ | Prices1 - 4 | 0-65,535 | value of prices 1 - 4 |
| 205-225 | | Prices 5 - 25 (When audit FEM fitted only) | 0-65,535 | value of prices 5 - 25 |
| 226 | ■ | Single/Multivend | 0 -1 | 0 = single vend 1 = multivend |

| Address | Usage | Parameter | Range | Meaning |
|---------|-------|---|--------|--|
| 227 | ■ | Escrow return inhibit | 0 - 1 | 0 = escrow allowed 1 = escrow inhibited |
| 228 | | Reset mode | 0 - 4 | 0 = blocker reset 1 = delayed blocker reset (30ms) 2 = delayed blocker reset (200ms) 3 = blocker hold reset 4 = after escrow accept signal |
| 229 | ▲ | Coin inhibit, coins 1-4 for multiple coin inhibit, add together e.g. 1 + 8 = 9 so coins 1 & 4 are inhibited | 0 - 15 | 0 = no coins inhibited 1 = inhibit coin 1 2 = inhibit coin 2 4 = inhibit coin 3 8 = inhibit coin 4 |

| Address | Usage | Parameter | Range | Meaning |
|---------|-------|---|-------|---|
| 230 | ▲ | Coin inhibit, coins 5-8 | 0 -15 | 0 = no coins inhibited 1 = inhibit coin 5 2 = inhibit coin 6 4 = inhibit coin 7 8 = inhibit coin 8 |
| 231 | ▲ | Coin Inhibit, coins 9 -12 | 0 -15 | 0 = no coins inhibited 1 = inhibit coin 9 2 = inhibit coin 10 4 = inhibit coin 11 8 = inhibit coin 12 |
| 232 | ■ | Exact change inhibit group Inhibit coins 1 - 4 | 0 -15 | 1 = coin 1 2 = coin 2 4 = coin 3 8 = coin 4 |

| Address | Usage | Parameter | Range | Meaning |
|---------|-------|--|---------|---|
| 233 | ■ | Exact change inhibit group Inhibit coins 5 - 8 | 0 - 15 | 1 = coin 5 2 = coin 6 4 = coin 7 8 = coin 8 |
| 234 | ■ | Exact change inhibit group Inhibit coins 9 - 12 | 0 - 15 | 1 = coin 9 2 = coin 10 4 = coin 11 8 = coin 12 |
| 235 | ■ | Change delay | 0 - 255 | delay in 1 second steps 255 = infinite delay |
| 238 | | Price hold (Protocol A only) | 0 - 1 | 0 = do not hold price 1 = hold price |

| Address | Usage | Parameter | Range | Meaning |
|---------|-------|-------------------------------|-------|--|
| 239 | ■ | Price display options | 0 - 1 | 0 = do not display price 1 = display price |
| 242 | ■ | Overpay inhibit options | 0 - 1 | 0 = overpay allowed 1 = overpay Inhibited |
| 243 | ■ | Clear overpay inhibit options | 0 - 1 | 0 = cleardown allowed 1 = cleardown Inhibited |
| 244 | ■ | Keypad inhibit | 0 - 1 | 0 = keypad enabled 1 = keypad inhibited |
| 245 | ■ | Price teach inhibit | 0 - 1 | 0 = price teach allowed 1 = price teach inhibited |
| 246 | | Fast sense | 0 - 1 | 0 = normal 1 = fast |

| Address | Usage | Parameter | Range | Meaning |
|---|-------|--|----------|---|
| 247 | ▲ | Auto Tube Inventory (float down) | 0 - 1 | 0 = float down disabled 1 = float down enabled |
| 251-254 | ▲ | Tubes A - D float level options | 0 - 255 | number of coins in a tube to be floated to |
| 310 | ▲ | Value of coins in tubes. READ ONLY | 0-65,535 | value of coins in all tubes |
| 311-314 | ▲ | Tubes A - D current coin count READ ONLY | 0 - 255 | current number of coins in tube |
| ADDRESSES 340 TO 349 ARE COVERED IN THE EARLIER FAULT FINDING SECTION | | | | |
| 360 | | Audit module VMC identifi- cation code | 0-65,535 | vending machine ID (ID101) |

| Address | Usage | Parameter | Range | Meaning |
|---------|-------|---|--------|--|
| 361 | | Audit module - printout language | 0 - 4 | 0 = English 1 = French 2 = German 3 = Dutch 4 = Spanish |
| 362 | | Audit module - printout type | 0 - 2 | 0 = basic 1 = basic+interim vend report 2 = basic+interim+free vend report |
| 363 | | Audit module - printout product limit | 0 - 25 | limit details on printout to first few specified price lines |
| 364 | | Audit module - printout - installation day | 1 - 31 | day of installation into machine |

| Address | Usage | Parameter | Range | Meaning |
|---------|-------|--------------------------------------|----------|--|
| 365 | | Audit module - installation month | 1 - 12 | month of installation into machine |
| 366 | | Audit module - installation year | 0 - 99 | year of installation into machine |
| 382 | * | Link Master ID | 0 - 9999 | ID code of link master node |
| 385 | * | Audit unit is BDV | 0 - 1 | 0 = audit unit is not BDV 1 = audit unit is BDV |
| 386 | * | VMC unit is BDV | 0 - 1 | 0 = VMC is not BDV 1 = VMC is BDV |
| 387 | * | CPC unit is BDV | 0 - 1 | 0 = CPC is not BDV 1 = CPC is BDV |

| Address | Usage | Parameter | Range | Meaning |
|---------|-------|----------------------------------|-------|--|
| 388 | ★ | Card reval. allowed | 0 - 1 | 0 = revaluation not allowed 1 = revaluation allowed |
| 393 | ★ | Audit initialisation required | 0 - 1 | 0 = initialisation not required 1 = initialisation required |
| 421-432 | ◆ | MDB changer coin types 1 - 12 | 0 - 2 | 0 = coin 1 = value token 2 = vend token |

Coin, Tube and Designator Options

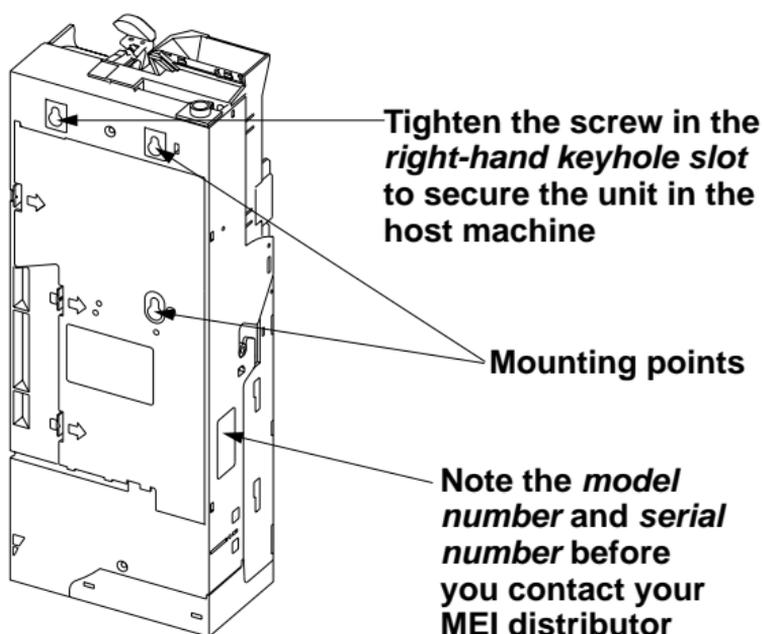
| Country code & coin set | Tube types | Designators | Position | FULL tube count Addresses 261 - 264 | LOW tube count Addresses 271 - 274 | SAFE tube count Addresses 281 - 284 |
|----------------------------|------------|-------------|--------------|--|---------------------------------------|--|
| UNITED KINGDOM (GB) | | | | | | |
| 1 penny | 5 | F - VIOLET | A/B/C | 95 | 12 | 2 |
| 2 pence | 3 | D - GREEN | B/D | 75 | 9 | 2 |
| 2 pence | 3 | D - GREEN | C | 75 | 10 | 2 |
| 5 pence | 6.5 | D - GREEN | A/C | 84 | 11 | 2 |
| 10 pence | 3.5 | D - GREEN | A/C/D | 76 | 10 | 2 |
| 10 pence | 3.5 | D - GREEN | B | 76 | 9 | 2 |

| Country code & coin set | Tube types | Designators | Position | FULL tube count Addresses 261 - 264 | LOW tube count Addresses 271 - 274 | SAFE tube count Addresses 281 - 284 |
|------------------------------------|-------------------|--------------------|-----------------|--|---|--|
| 20 pence | 4 | E - BLUE | A/B/C | 81 | 10 | 4 |
| 20 pence | 4 | E - BLUE | D | 81 | 9 | 4 |
| 50 pence | 2.3 | E - BLUE | B/C/D | 73 | 10 | 4 |
| £1 | 4 | B - ORANGE | A/B/D | 38 | 6 | 2 |
| £1 | 4 | B - ORANGE | C | 38 | 7 | 2 |

Installing, Starting and Testing a CashFlow® Unit

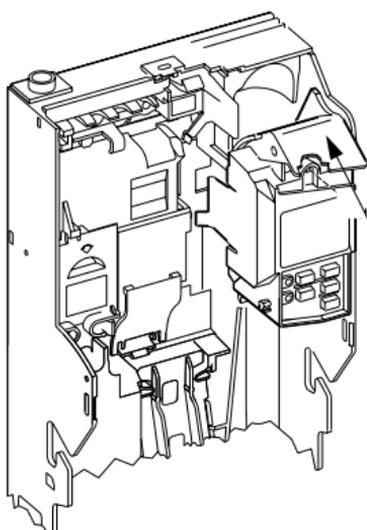
Before installation...

1. Check that the unit's specifications are correct for the host machine.
2. Ensure that the unit's modules are assembled securely.
3. Check that the connector on the unit's loom matches the one on the host machine.
4. Confirm that the voltage of the power supply **to the change giver** is the same as that shown in the keypad window of the change giver.



Fit the change giver onto the locating screws in the machine

1. Ensure that the unit is level on its three keyhole mounting slots.
2. Check that the right-hand mounting screw is at the top of the keyhole slot, and that the unit is **level**.
3. Press down the top cover flap and tighten the right-hand mounting screw to secure the unit in place in the machine.



Push open the top cover flap to get access to the fixing screw and to tighten it

Connect the looms and secure them in their correct positions

1. Check that the looms cannot be trapped by the unit or by the door of the machine.
2. Check that the unit's lid opens fully when the reject button is pressed, and that the lever has 2mm - 3mm of clearance from the reject mechanism of the machine. Adjust the clearance if necessary.
3. **Ensure that the unit's coin entry cup is aligned with the machine's coin entry chute, and that the coin exit chutes are lined up.**
4. With the power off, insert ten of the largest and smallest coins to check the coin routing to the coin return cup.

Switch on the power to the unit

1. Check that the red LED comes on.
2. Set the vend prices with the keypad or with the **Route Alpha 250** terminal.

NOTE: The keypad is suitable if the installation has an electromechanical or Executive interface. If the installation has an electronic serial interface such as MDB, where prices are normally held in the vending machine, it is not appropriate.

Float the coin tubes

Floating the tubes through the creditor

1. Press **Mode + A**, and insert change coins. When the tubes reach the pre-set maximum float level, further coins are routed to the cashbox.

Use the coin entry slots to replace any coin that falls inadvertently through a tube, so that it is not counted twice by the creditor.

2. Press **A** to return to normal operation.

Floating the tubes by hand

NOTE: Do not attempt to float up the tubes by hand if the unit has an audit module fitted. Float the tubes through the creditor.

1. Insert a full coin cassette, or remove the unit's cassette and fill the tubes to the float levels.

If the cassette is difficult to remove, release it and tilt it forward. Push in the coin filling flap, and fill tube **A** through the gap. Fill tubes **B**, **C** and **D** through the coin entry slots.

2. Press **Mode + Mode**, replace the cassette, then press **Mode + A + B**.

3. Insert samples of non-change coins to check that they route to the cashbox.

4. Press **A**, **B**, **C** and **D** in turn to check that coins are dispensed.

5. Press **Mode + A** and refloat the tubes through the creditor.

When the pre-set float level is reached, further coins are routed to the cashbox.

6. Press **A** to return the unit to normal operation.

The unit is now ready for use

MEI Product Manuals

Full technical details of this product are included in the **CashFlow® 540 change giver *Product Maintenance Handbook***, a copy of which is available, with other handbooks related to the product, from your MEI Approved Distributor, or your regional **MEI** sales office.

MEI Product Training

Product training courses are available for **CashFlow®** and other MEI products.

The courses cover the technical features and the maintenance of the product, and give you hands-on experience in servicing **CashFlow®** products quickly and efficiently.

Contact your regional **MEI** Sales Office for more information.

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