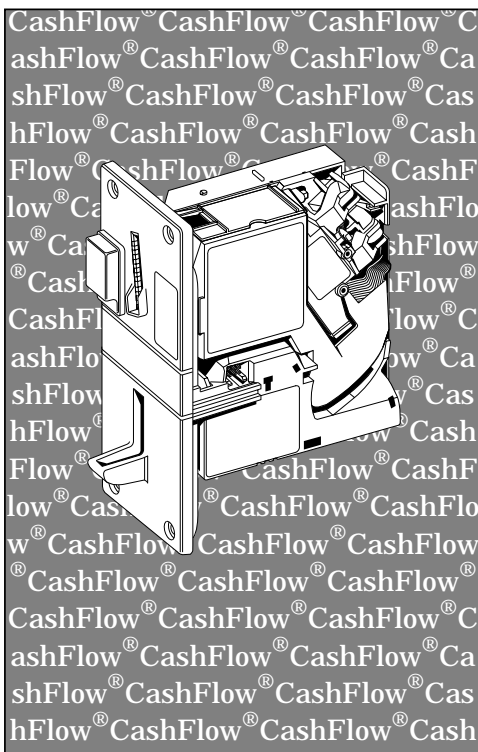


The  
**CASHFLOW<sup>®</sup> 340**  
REFERENCE SERIES  
**CREDITOR**  
**POCKET GUIDE**

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



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For information on translations in your country, please write to the Technical Communications Manager at the above address.

## **CashFlow® 340 creditor Pocket Guide**

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# User Safety Notices

## 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

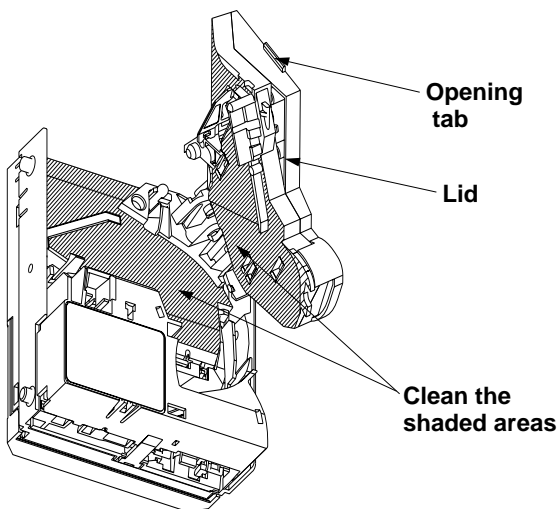
When installed and operated according to the instructions provided for the particular unit, CashFlow® products meet the applicable international and national safety standards for any country in which they are used.

## 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 creditor 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.

# Troubleshooting the Creditor Unit

Problem	Causes	Actions
<p><b>All coins or tokens rejected</b></p>	<p>No power to the module. Looms damaged or dislodged. Build up of dirt in the coin path. The creditor is timing-out when it is switched on after opening the lid, because the lid of the creditor not closed firmly.</p>	<p>Check the voltage supply. Power up again if necessary. <b>Switch off power to the machine.</b> Check looms are installed correctly, and all connectors are making good contact. <b>Switch off power to the machine.</b> Clean the creditor unit. <b>Close the lid firmly.</b> Switch the power on again and retry. <b>Switch off power to the machine. Close the lid firmly.</b> Wait 15 seconds and switch on again. Insert samples of coins or tokens to check the coin path is clear.</p>
<p><b>Poor coin acceptance</b></p>	<p>Modules not positioned correctly. Build up of dirt in the coin path. Lid of creditor not closed firmly.</p>	<p>Check position and alignment of modules. <b>Switch off power to the machine,</b> clean the creditor unit and retry. <b>Switch off power to the machine. Close the lid firmly.</b> Wait 15 seconds and switch on again.</p>
<p><b>Rejects only some coins or tokens</b></p>	<p>Coin/s or token/s inhibited.</p>	<p>Check that the individual coins or tokens are not <b>inhibited</b>. If necessary, use the MMI switches or the <b>Route Alpha 250</b> terminal to enable the coin(s).</p>

Problem	Causes	Actions
<b>Coins accepted but no credit given</b>	Looms not fitted correctly.	<b>Switch off power to the machine</b> and check the installation of the looms.
<b>Coins follow incorrect path</b>	Parts not fitted correctly. Coin jam inside the creditor unit.  Host machine and credit entry/ exit plates are not compatible.	Check that the <b>accept gate</b> and <b>exit plates</b> are fitted correctly. Press the reject button on the front of the machine to open the front of creditor unit, and remove any blockage. <b>Close the lid of the creditor firmly.</b>  Check the components with your MEI representative.
<b>Coins not passing through the machine</b>	Coin jam inside the creditor unit.	Press the reject button on the front of machine to open the front of the creditor unit. Remove any blockage.  Close the lid of the creditor firmly.
<b>No credit being shown on the display</b>	Display parts not fitted correctly.  Faulty display unit.	Check the connections of the display unit. Before correcting any connection faults, <b>switch off power to the machine.</b>  <b>Switch off power to the machine</b> , replace faulty parts.



## Setting a Unit's Functions with the MMI Switches

**Switch off the power to the host machine *before* removing a unit**

Use the Man-Machine Interface (MMI) switches to change the functions of the unit.

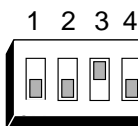
### Setting the MMI Switches

The MMI switches are on a board located behind a cover in the back of the unit.

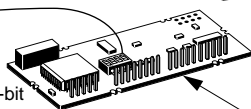
Removable interface board cover

Display connector

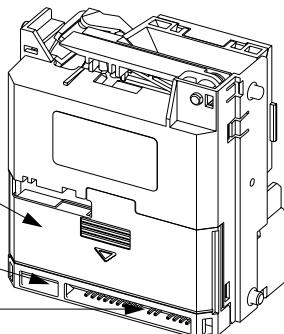
Machine interface connector



Adjustable 4-bit DIL switch



Interface board



**Follow these steps to adjust the switches**

- 1. Switch off power** and disconnect the looms.
- Remove the creditor from its mounting, following the instructions in this guide. Handle a unit with care when it is out of the machine.
- Remove the interface board cover by pressing it downward, then reconnect the looms.
- 4. Switch on power to the creditor unit.**
- Adjust the positions of the MMI switches.

*If the switches are already in the positions you want, change one switch, **turn the power off and then on**, return that switch to its original position and press the reject lever.*

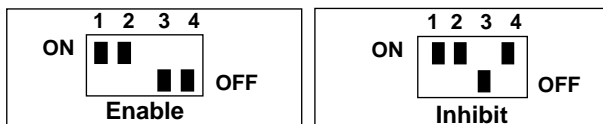
6. Perform the required function - each one is detailed below.

7. **Switch off the power**, disconnect the looms and put back the cover.

8. Replace the unit in the machine. Reconnect the looms. **Switch on the power to the machine.**

## Enabling or Inhibiting a Coin

The creditor can be set to *enable* or *inhibit* any coin or token from its coin set.



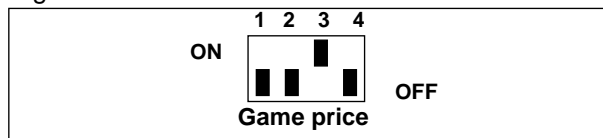
- Set the switches as shown to *enable* or to *inhibit*
- Press the reject lever
- Insert the coin(s) you want to enable or inhibit, and check that they are all accepted.
- Press the reject lever again

Check your settings by inserting the coin(s) you have enabled or inhibited.

**NOTE:** *If more than one channel is used for the same coin (for example, the coin has both wide and narrow channels), use the MEI® Route Alpha 250 terminal to enable or inhibit each of the coin's channels.*

## Setting a Game Price

The *game price* is the credit level at which a game is given.



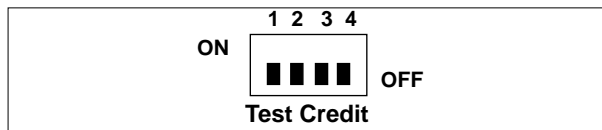
- Set the switches as shown
- Press the reject lever
- Insert coins from the coin set **equal in value** to the game price, and check that they are all accepted.
- Press the reject lever again

The game price is now set.

## Checking the Game Output

The test credit function is used to check that the host machine is receiving a game output from a unit.

No coin insertions are need for this facility.



- Set the switches as shown
- Press the reject lever within the 10 second time-out period
- Check that the host machine receives an output from the unit.

**NOTE: Route Alpha 250 address 64 must be set to 1 to enable the test credit function.**

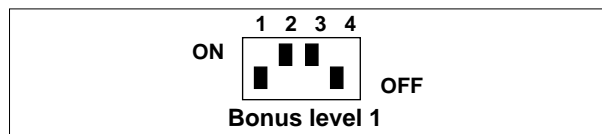
*This function does not give a meter output.*

## Setting the Bonus Levels and Awards

The *bonus award* is the number of games given when the credit reaches the *bonus level* you specify.

There are two levels of *bonus award*.

### Setting the First Bonus Level

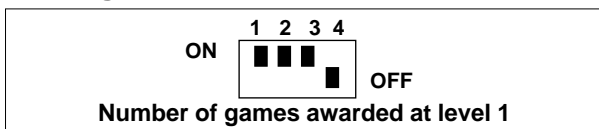


- Set the switches as shown
- Press the reject lever
- Insert any coins from the coin set to the *value* of the first bonus level, and check that they are all accepted.
- Press the reject lever again

A credit level for the first bonus award is now set.

**NOTE: Always check that ALL the coins you insert are accepted when you are setting the unit's functions with the MMI switches.**

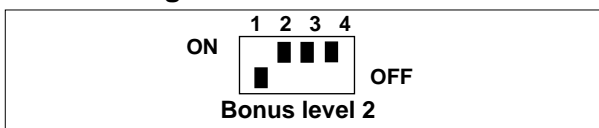
## Setting Games Awarded at Bonus Level 1



- Set the switches as shown
- Press the reject lever
- Insert the **number** of coins equal to the **number** of games to be awarded at level 1, and check that they are all accepted. **The coins can be any from the coin set.**
- Press the reject lever again

The number of games awarded at bonus level 1 is now set.

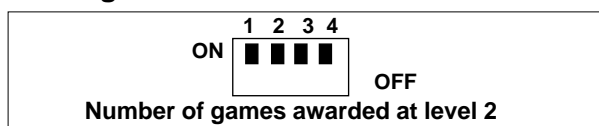
## Setting the Second Bonus Level



- Set the switches as shown
- Press the reject lever
- Insert coins to the **value** of the second bonus level, and check that they are all accepted.
- Press the reject lever again

A credit level for a second bonus award is now set.

## Setting Games Awarded at Bonus Level 2



- Set the switches as shown
- Press the reject lever
- Insert the **number** of coins equal to the **number** of games to be awarded at level 2, and check that they are all accepted. **The coins can be any from the coin set.**
- Press the reject lever again

The number of games awarded at bonus level 2 is now set.

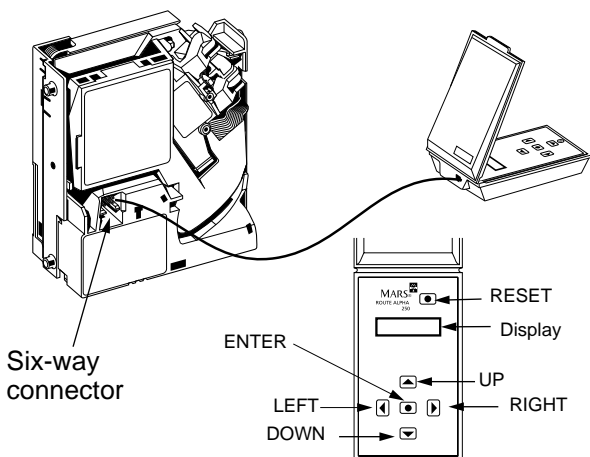
**NOTE: If you want to have only one bonus level and bonus award set, it is important to set**

## 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 get access to an address to check or alter the way the unit operates.

### Setting Functions

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



A half-size zero appears on the display when the terminal powers up. The software version number is then displayed, followed by the first address number with a *dot*, or a *dot and dash* (1. or 1.-).

**Every address value can be displayed, but the function for the address can be set only if there is a dash after the value.**

Press the UP or the DOWN key 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 make the display jump large blocks of addresses.

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

**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 <b>RESET</b>
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 <b>Route Alpha 250</b> 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 <b>Route Alpha 250</b> unit	Send unit for repair to authorised MEI distributor.

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

Address	Parameter	Range	Meaning	Notes
1 - 12	Inhibits coins 1 - 12	0 - 1	0 = Coin allowed 1 = Coin inhibited	
15	Accept direction	0 - 1	0 = Left 1 = Right	
16	Strobes	0 - 15	Range value = Sum of codes 1 = Direction left 2 = Direction right 4 = Post gate left 8 = Post gate right	
21 - 30	Coin types 1- 10	0 - 2	0 = Coin 1 = Value token 2 = Vend token	
41	Price	0 - 65,535	Required credit for game output	
43	Display mode	0 - 3	0 = Incrementing credit 1 = Decrementing credit 2 = Number of games 3 = Number of games & decrementing credit	
44	Display shift	0 - 2	0 = Nil shift 1 = Shift to right by one move 2 = Shift to right by two moves	
45	Position of decimal point	0 - 4	0 = Retain point on right side 1 = Move once to left 2 = Move twice to left 3 = Move three times to left 4 = No decimal point	
60	Bonus mode	0 - 1	0 = disable 1 = enable	
61	Coin meter output	0 - 1	0 = disable 1 = enable	
62	Auxiliary credit input	0 - 1	0 = disable 1 = enable	

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

Address	Parameter	Range	Meaning	Notes
63	Credit Dispense mode	0 - 1	0 = disable 1 = enable	
64	Test Credit mode	0 - 1	0 = disable 1 = enable	
65	Separator drive	0 - 1	0 = disable 1 = enable	
66	Games pulse width	0 - 5	0 = 75ms ON 75ms OFF 1 = 75ms ON 200ms OFF 2 = 100ms ON 200ms OFF 3 = 100ms ON 330ms OFF 4 = 150ms ON 330ms OFF 5 = 330ms ON 330ms OFF	
67	Coin meter pulse width	0 - 3	0 = 50ms ON 50ms OFF 1 = 100ms ON 100ms OFF 2 = 150ms ON 150ms OFF 3 = 200ms ON 200ms OFF	
68	Bonus time width	0 - 15	Time in steps of 2.5 seconds.	
69	Auxiliary credit input units	0 - 255	Real auxiliary credit divided by payment scaling factor	
70	Bonus level 1 award	0 - 127	Games awarded at bonus level 1	
71	Bonus level 1	0 - 65,535	Credit bonus level 1	
72	Bonus level 2 award	0 - 127	Games awarded at bonus level 2	
73	Bonus level 2	0 - 65,535	Credit bonus level 2	
74	Maximum game limit	0 - 127	Maximum number of games allowed	
75	Coin meter value scalar	0 - 255	Number of pulses = credit / coin meter scaling	
80	Payment scaling factor	0 - 255	Coin scaling factor/ auxiliary value	
81-92	Value of coins 1-12	0 - 255	Real coin value divided by payment scaling factor	



## Fitting a Unit into a Maxi Front Plate

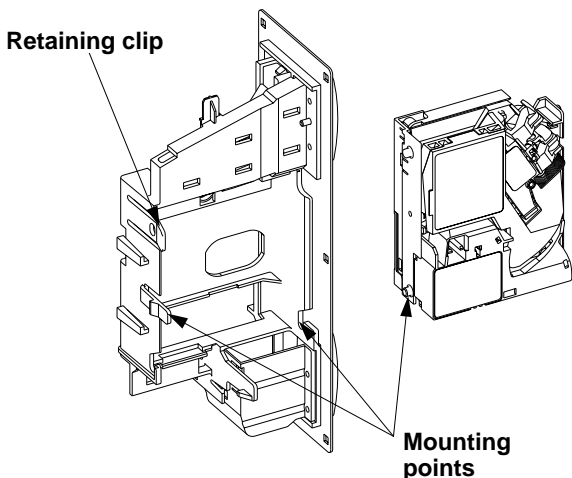
**Always switch off power to the host machine *before* fitting a unit**

Ensure that the maxi front plate has a suitable and secure mounting position on the host machine.

Engage the mounting points at the base of the creditor unit with the mountings on the face of the front plate.

Slide the unit into the retaining clip in the upper part of the front plate moulding.

Connect the interface and display looms.



**Switch on power to the machine** and carry out the start up (initialisation) procedure described in the *Starting and Testing* section of this guide.

## Removing a Unit from a Maxi Front Plate

**First switch off power to the host machine**, then reverse the assembly steps.

## Fitting a Unit into a Mini or a Midi Front Plate

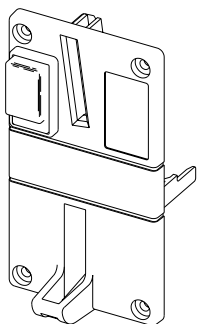
**Always switch off power to the host machine *before* fitting a unit**

Before you fit a creditor unit into a front plate, ensure that the plate being used has a suitable and secure mounting position on the host machine.

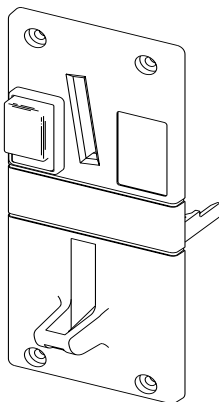
Hold the creditor unit so that it is *squarely aligned* with the front plate, then press the unit gently but firmly into the plate.

**NOTE: Square alignment of both components is essential for easy fitting. Never force the unit into place.**

Make sure that the clip under the unit and the clips on either side of the unit are all engaged.



**Mini** front plate



**Maxi** front plate

Connect the interface loom (and if fitted, the display loom).

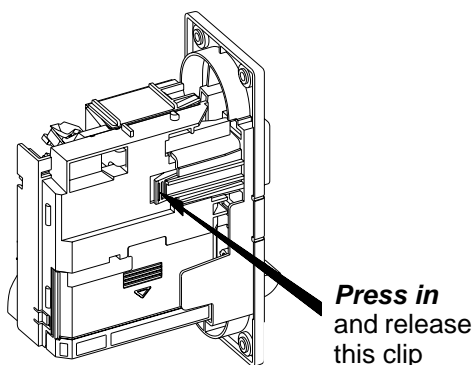
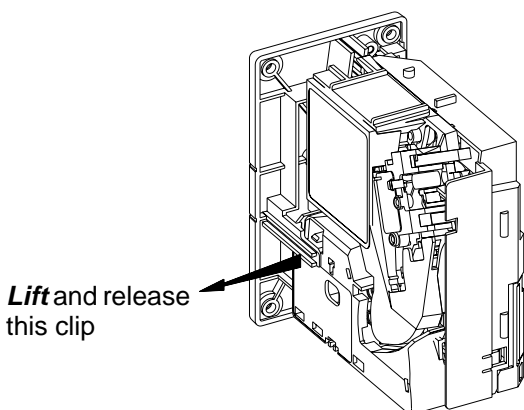
**Switch on power to the machine** and carry out the start-up (initialisation) procedure described in the *Starting and Testing* section of this guide.

## Removing a Unit from a Mini or a Midi Front Plate

**Always switch off power to the host machine *before* removing a unit**

Disconnect the interface loom (and if fitted, the display loom) from the unit.

First, release the retaining clip located *under* the creditor, then tilt the unit upwards. Next, release the clip on the left side of the unit.

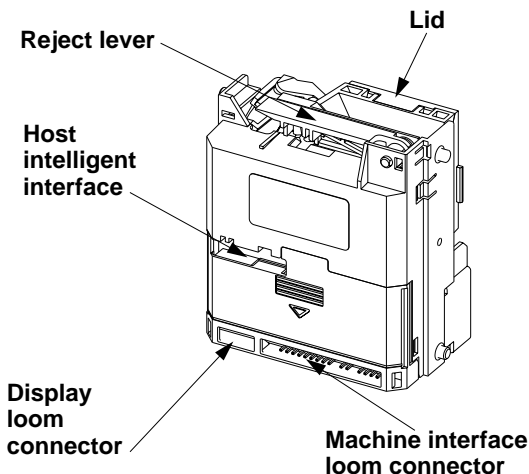


Release the clip on the right side of the unit, tilt the unit outwards and downwards from the front plate, then lift it free.

## Starting and Testing a Unit After It is Installed

If the creditor unit is used in a **top entry application**, check that:

- 1) There is a 2 to 3mm clearance between the *reject lever* on the unit and the *reject mechanism* on the machine.
- 2) The machine's coin-entry chute is aligned with the coin-entry cup on the creditor.
- 3) The creditor's coin exits (reject and accept) are aligned with the machine's coin exit chutes.



Check that the interface loom (and display loom, if fitted) are connected. **Switch on power to the host machine.**

Next, press the reject button on the front plate of the host machine. Check that the reject lever moves freely, and that it opens and closes the lid of the creditor unit. *Take care that the lid is fully closed, or coins and tokens will be rejected.*

Insert at least one of each coin or token in the coin set to check they are accepted. Make sure that all the coins or tokens follow the correct exit path.

If a display is fitted, check that it shows the accumulated credit.

## **MEI Product Manuals**

Full technical details of this product are included in the **CashFlow® 340 creditor *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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