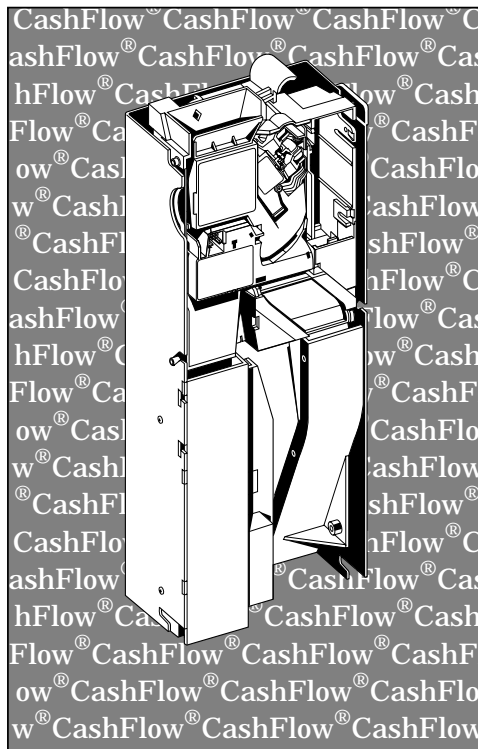




The
CASHFLOW 350
REFERENCE SERIES
TOTALISER
POCKET GUIDE

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



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CashFlow® 350 totaliser 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.

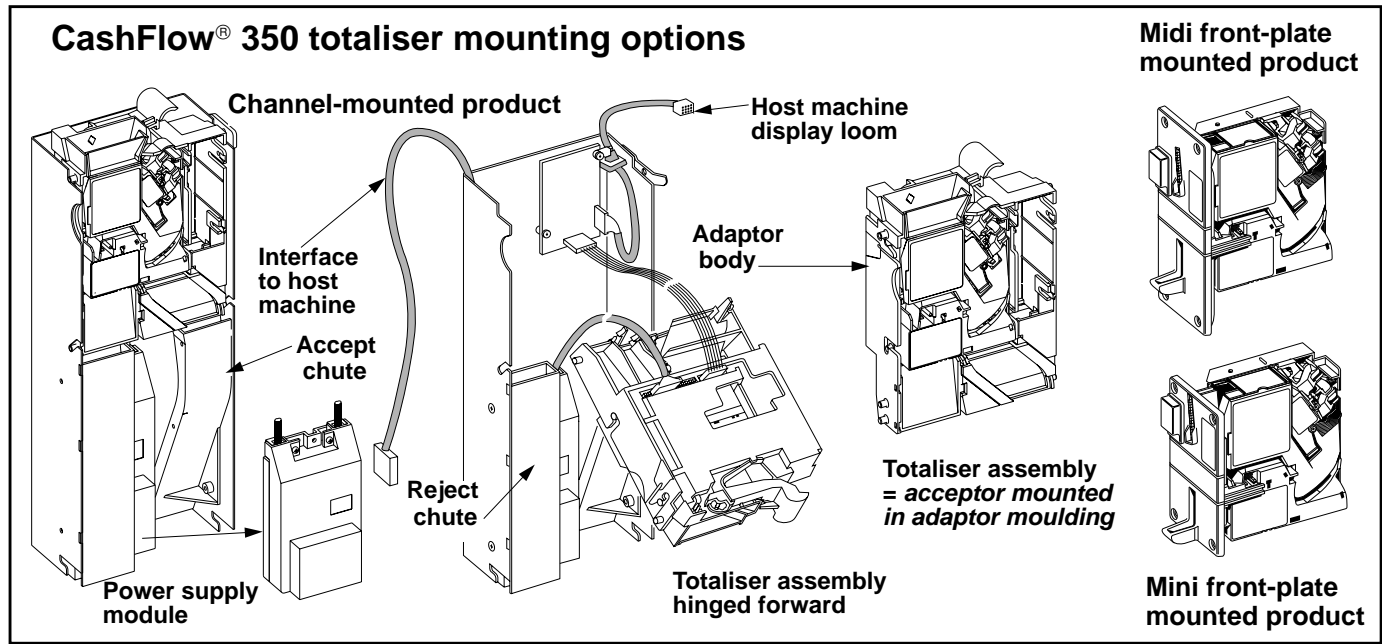
Disposal of Product

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 and Electro Mechanical Compatibility standards for any country in which they are used.





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Routine Maintenance

WARNING

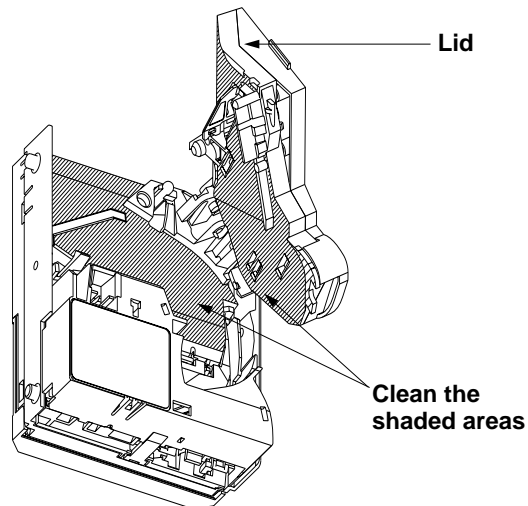
Switch off the power to the host machine *before* cleaning a unit

Clean the coin pathway (shaded in the figure below) regularly with a soft moist cloth. *Take care that the surfaces are dry before closing the lid of the unit.*

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

Never use solvents or abrasive creams to clean this product, as these will damage the surfaces.

Switch on power to the machine, then check that coins are being accepted.



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 host machine for at least 15 seconds**, then close the lid again. Make sure the lid snaps shut. Switch the power back on. Check that coins are accepted.

Troubleshooting

Problem	Possible causes	Remedy
All coins or tokens rejected	No power to the module Looms damaged or dislodged Build up of dirt in the coin path The acceptor is timing-out when power is switched on after opening and closing the lid Lid of acceptor not closed firmly	Check the voltage of the power supply is correct. Power up again if necessary. Check looms are installed correctly, and all connectors are making good contact. Switch power off , clean the acceptor, switch power on and retry. Ensure the lid of the acceptor is closed correctly. Check the coin path is clear. Close lid firmly. Switch power off . Wait 15 seconds and switch power on .
Poor coin acceptance	Unit not mounted upright Build up of dirt in the coin path Lid of acceptor not closed firmly	Check modules are locked securely in place. Check that the unit is level. Switch power off , clean the acceptor, switch power on and retry. Close lid firmly. Switch power off . Wait 15 seconds and switch power on .
Rejects some coins or tokens	Coin/s or token/s are inhibited.	Check that the individual coin(s) or token(s) are not inhibited .
Coins accepted but no credit given	Looms not fitted correctly Coin values incorrectly set to zero	Switch off power to the machine and check the installation of the looms. Set correct values, using Route Alpha terminal and address maps in this Guide.
Coins follow incorrect path	Parts fitted incorrectly Coin jam inside the acceptor unit Coin entry/exit paths not aligned	Check that the accept gate and exit plates are fitted correctly. Press the reject button to open the lid of the acceptor, and remove any blockage. Check the exit plate is securely clipped in. Check the accept gate moves freely. Check entry/exit paths. Re-align unit and host machine entry/exit chutes.
Coins not passing through unit	Coin jam inside the acceptor unit	Press the reject lever to open the lid of the unit, and remove any blockage. Close the lid of the unit firmly .
Nothing shown on the display	Display parts not fitted correctly Faulty display, or interface board	Check the connections of the display interface board. Before correcting any connection faults, switch off power to the machine . Replace faulty parts.

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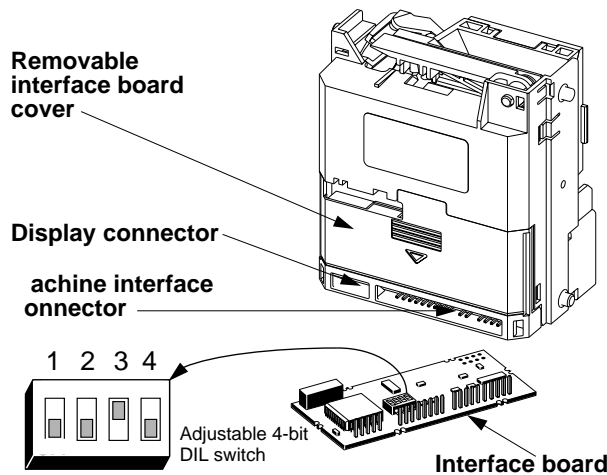
Setting a Unit's Functions with the MMI Switches

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 acceptor.

Setting the MMI Switches

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



Follow these steps to adjust the switches

1. **Switch off power** and disconnect the looms.
2. Remove the acceptor from its mounting, following the instructions in this guide. Handle a unit with care when it is out of the machine.
3. Remove the interface board cover by pressing it downward, then reconnect the looms.
4. **Switch on power to the acceptor.**
5. 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.*

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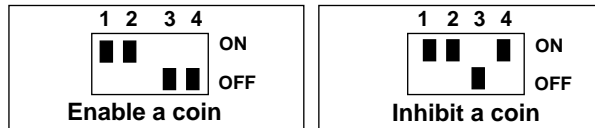
6. Perform the required function - these are detailed below.

7. **Switch off the power**, disconnect the looms and replace 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 acceptor can be set to *enable* or *inhibit* any coin or token from its coin set.



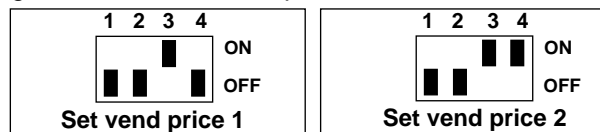
- Set the switches as shown to *enable* or to *inhibit*
- Press the reject lever
- Insert the coin(s) you want to enable or inhibit
- Press the reject lever again

Check your settings by inserting samples of the coin(s) you have enabled, or by making a vend.

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 the Vend Prices

The *vend price* is the credit level at which a vend is given. You can set two prices.



- Set the switches as shown for price 1 or for price 2.
- Press the reject lever.
- Insert coins from the coin set **equal in total value** to the first vend price you want to set.
- Press the reject lever again. One vend price is now set. **Repeat this process to set a second price.**

Make trial vends to check the price(s) you have set.

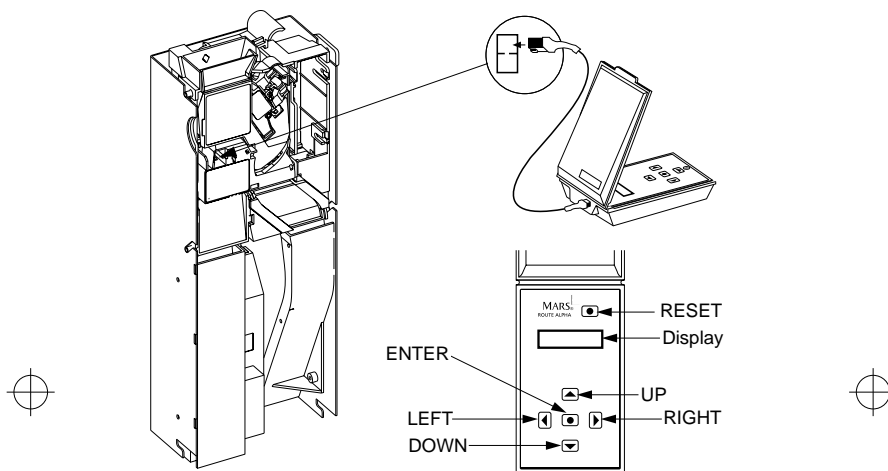
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Setting a Unit's Functions with a MEI® Route Alpha 250 Terminal

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 from the **Route Alpha 250** terminal into the six-way connector on the face of the unit.



The acceptor must be powered up, 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.

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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 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	Inhibit individual coins from coin 1 to coin 12	0 - 1	0 = Coin allowed (enabled) 1 = Coin is inhibited	
15	Accept direction	0 - 1	0 = Left 1 = Right	
16	Strobes	0 - 15	5 = Accept left 10 = Accept right	
21 - 30	Coin types 1 -10	0 - 2	0 = Coin 1 = Value token 2 = Vend token	
41	Price 1	0 - 65,535	Credit required for vending price line 1	
42	Price 2 (<i>two price</i> vend totaliser only)	0 - 65,535	Credit required for vending price line 2	
43	Display mode	0 - 3	0 = Incrementing credit 1 = Decrementing credit	
44	Display shift	0 - 2	0 = No shift 1 = Shift whole display right <i>one</i> place 2 = Shift whole display to the right by <i>two</i> places	

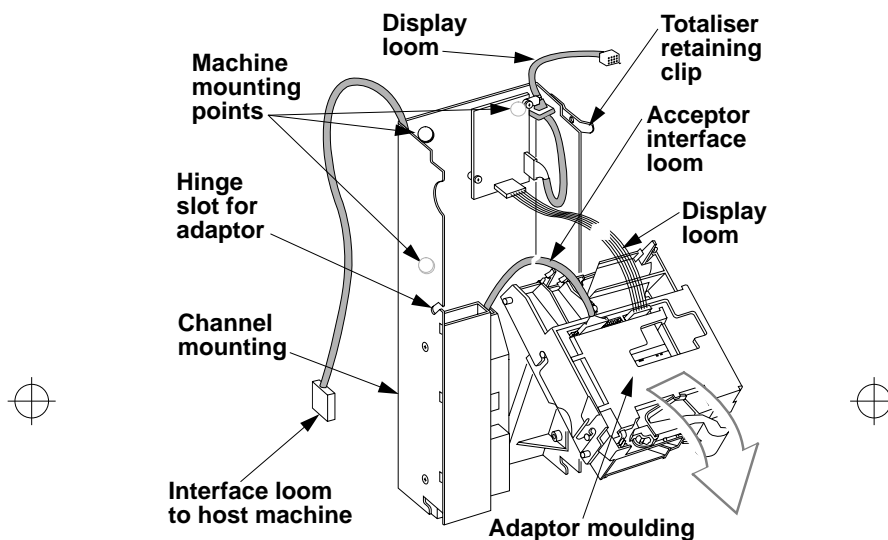
Address	Parameter	Range	Meaning	Notes
45	Position of the decimal point on the display	0 - 4	0 = Keep decimal point on the right-hand side of the display 1 = Move <i>one</i> position to the left 2 = Move <i>two</i> positions to the left 3 = Move <i>three</i> positions to the left 4 = Move <i>four</i> positions to the left	
50	Exact price mode	0 - 1	0 = Disable 1 = Enable	
51	Cancel credit mode	0 - 1	0 = Disable 1 = Enable	
52	Retain credit mode	0 - 1	0 = Credit retained 1 = Credit cancelled	
53	Automatic reset mode	0 - 1	0 = Automatic reset disabled 1 = Auto reset enabled	
54	Blocker mode	0 - 1	0 = Blocker not considered 1 = Blocker considered	
55	Decrementing display mode	0 - 1	0 = Decrementing display disabled 1 = Enabled	

Address	Parameter	Range	Meaning	Notes
56	Time-out period before leaving auto reset mode	0 - 255	Time-out period in multiples of 4 seconds (range value X 4 secs)	
80	Payment scaling factor	0 - 255	Coin scaling factor/auxiliary value	
81 through 90	Value of coins 1-10	0 - 255	Real coin value divided by payment scaling factor	
91	Value of coin 11 Serial totalisers ONLY	0 - 255	Real coin value divided by payment scaling factor	
92	Value of coin 12 Serial totalisers ONLY	0 - 255	Real coin value divided by payment scaling factor	

Preparing and Fitting a Channel-mounted Unit

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

The standard 5-inch channel-mounted product is supplied fully assembled. The acceptor is carried in an adaptor moulding mounted into the channel.



1. Release the retaining clip at the top of the channel. Lift the acceptor out. Unplug the interface loom (and display loom, if fitted) from the acceptor.
2. If required, fit the accept and reject chutes, using the slots and screw holes on the side of the channel. Fit the channel into the host machine. Check the assembly is level. Tighten the fixing screws.
3. Reconnect the interface loom (and the display loom, if fitted) to the acceptor.
4. Replace the acceptor and adaptor assembly back into the channel. *Ensure the retaining clip is engaged and that the front of the coin entry cup is firmly in position. Check the looms are not trapped.*
5. Start the unit as described in the *Testing and Starting* section.

Fitting a Unit into a Mini or a Midi Front Plate

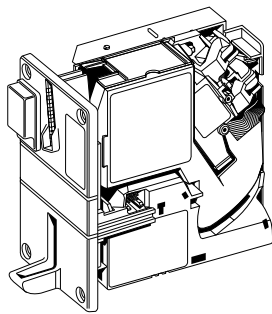
Switch off the power to the host machine *before* fitting a unit

1. Before you fit a unit into a front plate, ensure that the plate has a secure mounting position on the host machine. If the unit uses a separate power supply, this must be fitted firmly to the VMC.
2. If the host machine is providing AC power, a power supply module can be fitted inside the machine. Refer to the ***Applications Design Guide*** before fitting a power supply module.
3. If the host machine has a display fitted, connect the display loom to the acceptor, and then connect the interface loom to the acceptor.
4. Hold the acceptor so that it is *squarely aligned* with the rear of the front plate, then press it gently but firmly into the clips on the plate.

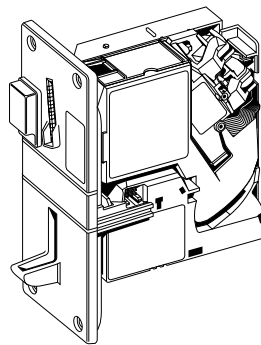
NOTE: Square alignment is essential for easy fitting. Never force the unit into place.

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

Acceptor mounted in a Mini front plate



Acceptor mounted in a Midi front plate



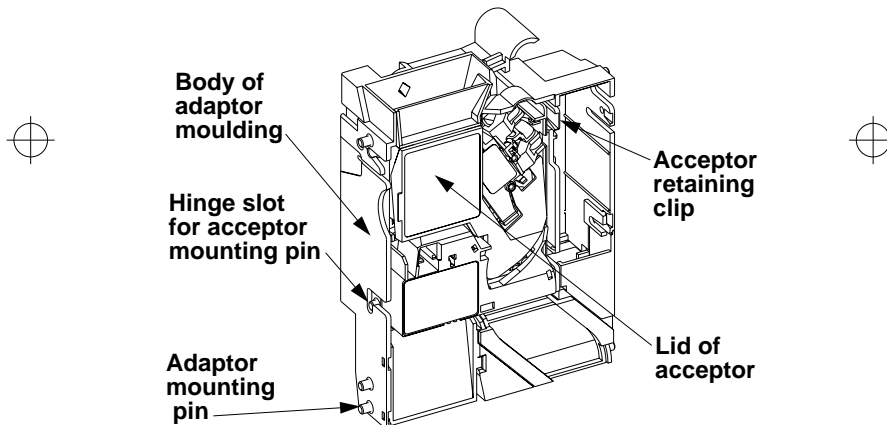
Clips are positioned on either side of and beneath a plate

5. Reconnect the power supply unit to the machine.
6. **Switch on the power**, and start up the unit as described in the *Starting and Testing* section.

Removing an Acceptor from a Top Entry Adaptor

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

1. Pull back the metal retaining clip at the top of the channel, and lift the adaptor and acceptor assembly out of the channel.
2. Disconnect the power supply loom (and the display loom, if fitted) from the back of the acceptor.
3. Release the plastic retaining clip located *inside* the wall of the acceptor, pressing it carefully to the right.
4. Tilt the acceptor forward to free it from the retaining clip, then remove it from the adaptor.



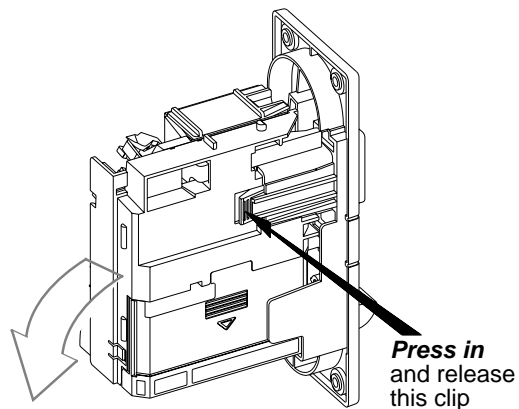
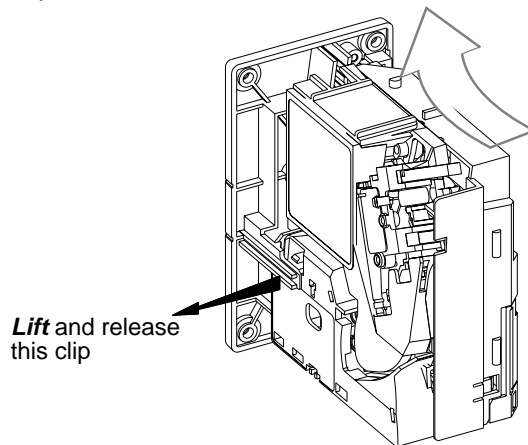
Replacing a Unit into a Top Entry Adaptor

1. Rest the mounting pins of the acceptor unit in the slots on either side of the adaptor moulding. Press the acceptor into the adaptor moulding until the retaining clip snaps shut.
2. Reconnect the interface loom (and where fitted, the display loom) to the acceptor.
3. Rest the hinge pins in the hinge slots of the channel. Press the adaptor assembly into the channel until the retaining clip snaps shut.

Removing a Unit from a Mini or a Midi Front Plate

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

1. Disconnect the power supply loom (and the display loom, if fitted) from the acceptor.
2. Release the retaining clip located *under* the acceptor, then tilt the unit upwards. Next, release the clip on the left side of the unit.

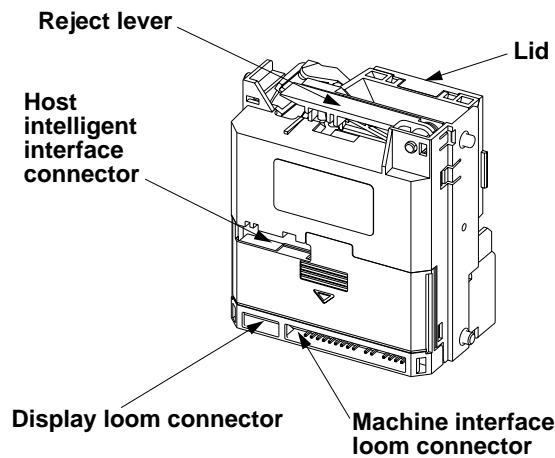


3. Release the clip on the right side of the unit, tilt the unit outwards and downwards from the front plate, then lift it free.

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Testing and Starting a Unit After It is Installed

1. Check that the machine interface loom (and the display loom, if fitted) is inserted correctly in the back of the acceptor.
2. Check that the lid of the acceptor opens and closes fully when you press the reject button on the host machine.



3. Check that the mains power supply is connected correctly to the host machine.
4. Check that the power supply to the acceptor is at the correct voltage.
5. Switch on power to the host machine. Insert at least one of every coin or token from the acceptor's coin set. Check that all the coins or tokens are accepted and routed correctly.
6. Check that the vend prices are correct. Insert coins and make trial vends for each price. **Use the MMI switches to adjust the prices if necessary.**
7. If a display is fitted to the host machine, check that it shows the accumulated credit.
8. Check that all the looms are free from kinks and obstructions, and close the door of the machine.

The unit is now ready for use



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MEI Product Manuals

Full technical details of this product are included in the **CashFlow® 350 totaliser *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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