

TICKET DISPENSER OPERATIONS MANUAL SERIES AC111/115/125

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*Coinco Authorized Service Centers are listed
at the end of this manual (pg. 27)*

Rev. UNTK-1A-A03 06.23.05

Specifications

Operating voltage	120 Volts AC; 50-60 Hz.
Power consumption	Controller: 10W (add Validator and Ticket Dispenser)
Operating temperature	32 - 130 degrees Fahrenheit
Interface to Ticket Disp.	12 Vdc; 0.4A avg., 1.5A Max.
Interface to Validator	24Vdc; 2.5A avg. operating; MDB

Warranty

The **CoinCo MAG52SA** Validator is under warranty for two years from date of purchase.

The **Deltronic Labs DL-1275** Ticket Dispenser and the dispenser's Main Logic Board are under warranty for one year from date of purchase.

COVERED

¥ Defects in workmanship or materials

NOT COVERED

- ¥ Damage caused by physical abuse
- ¥ Misapplication
- ¥ Vandalism
- ¥ End user's attempt to repair item on his own
- ¥ Cleaning & Maintenance

It is the End User's responsibility to follow proper cleaning & maintenance procedures. Any unit coming in for repair requiring only a cleaning will be charged a flat rate of \$65.00 plus shipping and handling.

NOTE:

A Return Material Authorization number (RMA#) must be obtained before returning a unit for repair. A copy of invoices must accompany any and all warranty work.

Attention Please:

To ensure the most trouble-free machine operation, we recommend plugging all our machines into a DEDICATED AC outlet. (This means there are no other machines on location plugged into the same AC line.) A simple way to check if this is true is to turn off the breaker at the fuse box associated with our machine. No other machines on location should lose power or turn off.

If this is a concern for your area of business, we recommend purchasing a surge protector locally
NOTE: A POWER STRIP IS NOT A SURGE PROTECTOR.

AC _____ S/N# _____

Tested By _____

Date _____

**Thank You,
American Changer Corp.**

UNCRATING AND SET-UP

Remove your AC111/115/125 Series ticket dispenser from the shipping box. Open the door. (*The T-handle is a screw-in type and therefore, must be turned at least 10 times counter-clockwise until it opens.*) Inspect for any connectors or components that may have been dislodged during shipping. The lock and keys for your dispenser will be inside the manila envelope along with this manual. To install the lock, insert the cylinder into the round hole in the middle of the T-handle and push until it stops. Now turn the key and lock until you hear it "snap." Turn the key counter-clockwise ¼ turn and remove the keys.

NOTE: The only way to get a duplicate set of keys made is to save the red tag that comes between the keys. This ID # starts with "ACC ####".

TEST:

Before permanently installing the dispenser, do a functional test to verify that there is no shipping damage to your new dispenser(s).

Plug the power cord into a *grounded 120VAC outlet*. The Main Logic Board programming is preset for a default payout of 4 tickets per dollar from the Ticket Dispenser (unless otherwise specified at the time of purchase), and the Bill Validator is ready to accept \$1, \$5, \$10, and \$20 bills.

If not already done, fill the ticket bin with tickets, and load the dispenser by following the instructions on pgs. 4-5. On the Main Logic Board turn the switch on the bottom right corner "ON". *The rocker switch has an "I" and an "O" printed on it. When the "I" is pressed down the ticket dispenser is "ON".* Wait at least 30 seconds after powering ON the unit before inserting any bills to allow it to finish its start-up procedure.

MOUNTING THE AC111 TO A WALL

IF YOU ARE UNSURE IN ANY WAY IN PROCEEDING WITH THE FOLLOWING STEPS, PLEASE HIRE A LOCAL PROFESSIONAL ELECTRICIAN TO MOUNT YOUR TICKET DISPENSER FOR YOU!

1. Disconnect any and all AC power going to the unit. (Unplug AC Line cord from the Main Logic Board and from the wall)
2. Remove the Ticket bin by sliding it up, then out and away from the door. Take off the DL-1275 Dispenser the same way, by pushing up until it 'clicks', then pulling it away from the door.
3. Note: You will need to verify with the building code to see if it is allowable to plug the dispenser into a 3 prong grounded outlet. If it is not, there must be 120VAC run through conduit or other means to the unit to meet local codes. If it is not required, proceed to step #6.
4. Let the electrician run the conduit, install the new breaker, wire and help decide how the wiring will enter the ticket dispenser (from the back or the bottom). This will affect the mounting location.
5. After the conduit has been installed, proceed with the mounting.

6. Locate the 4 punch-outs on the back of the cabinet. Using a screwdriver and hammer, knock the punch-outs out by hitting them from the inside of the dispenser.
7. Find an appropriate wall to bolt the ticket dispenser to. The wall should have studs or be constructed of concrete. Consult a professional with any questions you may have.
8. **NOTE: HANGING THE TICKET DISPENSER FROM LESS THAN THOSE HOLES PROVIDED MAY BE DANGEROUS. EACH HOLE NEEDS A BOLT THROUGH IT MOUNTED SECURELY TO THE WALL. MOUNTING THE DISPENSER IN ANY OTHER WAY MAY RESULT IN THE UNIT BEING TORN OFF OR FALLING OFF THE WALL RESULTING IN PERSONAL OR CUSTOMER INJURY ALONG WITH ELECTRICAL SHOCK.**
9. Choose a height to mount the dispenser keeping in mind that a handicapped person in a wheelchair should still be able to insert a bill into the bill validator. (We recommend no higher than 4 feet above the ground.)
10. Have someone hold the ticket dispenser against the wall while someone else marks the holes. **CAUTION: THE TICKET DISPENSER WEIGHS 35 POUNDS; DO NOT EXERT YOURSELF SO THAT YOU MAY CAUSE AN INJURY.**
11. **BEFORE DRILLING THE MARKED HOLES, ENSURE THAT THERE ARE NO ELECTRICAL WIRES, TELEPHONE LINES, GAS OR WATER LINES BEHIND THE WALL WHICH DISRUPTING MAY CAUSE A LOSS OF LIFE OR PERSONAL INJURY!**
12. Hold the dispenser back up to the wall. Thread and tighten bolts.
13. Verify that the machine is securely mounted.
14. If the dispenser is permanently connected through a conduit, proceed to step #16.
15. Feed the AC line cord out of the bottom or the back of the cabinet by moving the 'L' bracket if necessary, and then perform the following:
 - A. Plug the male end into the AC wall outlet. ***Do not use an extension cord unless allowed by the building electrical code.***
 - B. Installation is finished and you can proceed to the "Setting the Payouts" section.
16. In order to continue you will need to purchase numerous electrical components. We highly recommend HIRING a qualified electrician to perform the following!
 - A. Install the conduit box on the conduit entering the cabinet in the lower back or bottom of the cabinet.
 - B. Secure the 3 wires (hot, neutral, and ground) to the AC wall outlet and the ground wire should also be directly attached to the cabinet ground terminal.
 - C. Plug the male end into the AC outlet just installed.
 - D. Properly fold the line cord to avoid sharp corners and any other damage.

Proceed to the "Setting the Payouts" section.

MOUNTING THE AC115/125 INTO A WALL

IF YOU ARE UNSURE IN ANY WAY IN PROCEEDING WITH THE FOLLOWING STEPS, PLEASE HIRE A LOCAL PROFESSIONAL ELECTRICIAN TO MOUNT YOUR TICKET DISPENSER FOR YOU!

1. Disconnect any and all AC power going to the unit. (Unplug AC Line cord from the Main Logic Board and from the wall)
2. Remove the Ticket bin by sliding it up, then out and away from the cabinet. Take off the DL-1275 Dispenser the same way, by pushing up until it 'clicks', then pulling it away from the interior cabinet wall.
3. Note: You will need to verify with the building code that it is allowable to plug the ticket dispenser into a 3 prong grounded outlet. If it is not, there must be 120VAC run through conduit or other means to meet local codes to the dispenser. If it is not required, proceed to step #6.
4. Let the electrician run the conduit, install the new breaker, wire and help decide how the wiring will enter the cabinet (from the side or the bottom). This will affect the mounting location.

Note: Feeding the AC line cord from the bottom may be required when banking two or more dispensers together. Simply remove the nuts that secure the 'L' bracket, then rotate it and re-secure with the same nuts.

5. After the conduit has been installed, proceed with the mounting.
6. Find an appropriate wall to bolt the ticket dispenser into. The wall should have studs (use a stud finder) or be constructed of concrete. Consult a professional with any questions you may have.
7. **NOTE: SECURING THE TICKET DISPENSER WITH LESS THAN 4 BOLTS OR WELDED ANGLE IRON MAY BE DANGEROUS. EACH HOLE NEEDS A BOLT THROUGH IT MOUNTED SECURELY INTO THE WALL. MOUNTING THE DISPENSER IN ANY OTHER WAY MAY RESULT IN THE UNIT BEING TORN OUT OR FALLING OUT OF THE WALL, RESULTING IN PERSONAL OR CUSTOMER INJURY ALONG WITH ELECTRICAL SHOCK.**
8. Choose a height to mount the ticket dispenser keeping in mind that a handicapped person in a wheelchair should still be able to insert a bill into the bill validator. (We recommend no higher than 4 feet above the ground.)
9. Have someone hold the dispenser inside the wall while someone else marks the holes from the inside of the machine. **CAUTION: THE TICKET DISPENSER WEIGHS 35 POUNDS; DO NOT EXERT YOURSELF SO THAT YOU MAY CAUSE AN INJURY.**
10. **BEFORE DRILLING THE FOUR MARKED HOLES ENSURE THAT THERE ARE NO ELECTRICAL WIRES, TELEPHONE LINES, GAS, OR WATER LINES BEHIND THE WALL WHICH DISRUPTING MAY CAUSE A LOSS OF LIFE OR PERSONAL INJURY!**
11. After drilling the holes, put the dispenser back into the wall. Thread and tighten bolts.
12. Verify that the machine is securely mounted.
13. If the ticket dispenser is required to be permanently connected through a conduit, proceed to step #16.
14. Plug the power cord back into the Main Logic Board and into an AC wall outlet. ***Do not use an extension cord unless allowed by the building electrical code.***

15. Installation is finished and you can proceed to the "Setting the Payouts" section.
16. In order to continue you will need to purchase numerous electrical components. We highly recommend hiring a qualified electrician to perform the following!
 - A. Install the conduit box on the conduit entering the cabinet in the lower left side of the cabinet.
 - B. Secure the 3 wires (hot, neutral, and ground) to the AC wall outlet and the ground wire should also be directly attached to the cabinet ground terminal.
 - C. Plug the AC line cord back into the bottom of the Main Logic Board.
 - D. Plug the male end into the AC outlet just installed.
 - E. Properly fold the line cord to avoid sharp corners and any other damage.Proceed to the "Setting the Payouts" section.

TICKET LOADING

It is not necessary to detach the Ticket Dispenser from the door (AC111) or cabinet (AC115/125) in order to load tickets.

1. If there are tickets remaining in the dispenser, remove them before proceeding, and empty the ticket bin. Loosen the grip of the Validation/Embossing rollers by pressing the metal plate and metal spacer toward each other, using your thumb and forefinger (apply pressure at the points indicated by the two white arrows in Fig. 1). While the rollers are being held apart, use your other hand to pull the tickets out of the mechanism.
2. Refill the ticket bin with a fresh box/pack of accordion-style folded tickets.

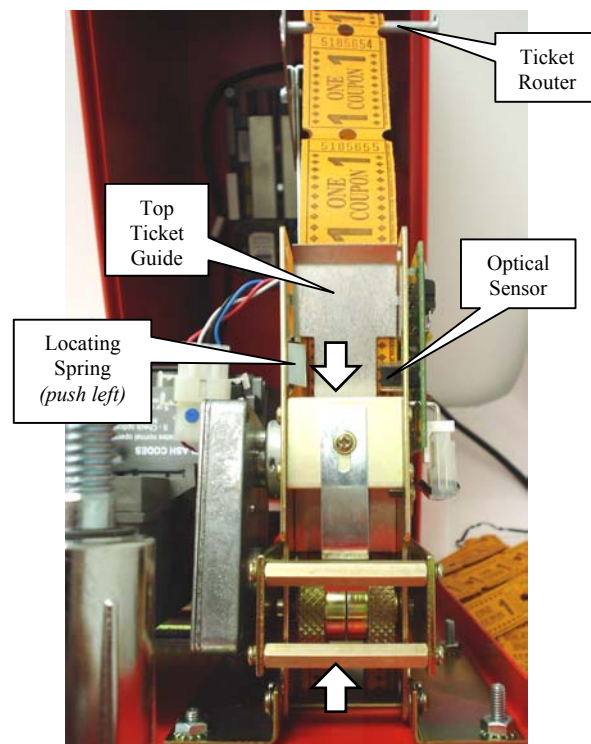


Fig. 1: DL-125 Ticket Dispenser, top view (AC111 Shown)

3. Pull the top row of tickets up, directing them around the Ticket Router as seen in Fig. 1, and feed them face-up into the entrance of the ticket dispenser mechanism, between the top and bottom metal ticket guides. If necessary, gently push the Locating Spring out of the way with one hand while feeding the tickets with the other.
4. Making sure the tickets pass through the channel in the Optical Sensor, continue to push them in until the front ticket presses against the Validation/Embossing rollers.
5. Locate the UP button on the Main Logic Board (see figure 2). Press and hold the UP button for approximately 3 seconds until the Ticket Dispenser's motor begins to run, and then release the button; this initiates the ticket Auto-Feed feature on the Main Logic Board. During the Auto-Feed procedure, the tickets are pulled through the dispenser's ticket path, and automatically fed to their appropriate "standby" position, which is flush with the front of the machine. *Note: One or more tickets may be fed through the slot during the Auto-Feed operation; these may be torn off and discarded.*

**PROGRAMMING THE AC111/115/125 SERIES
TICKET DISPENSER**

CAUTION: The software settings on the Main Logic Board are programmed at the factory, and do not need to be altered under normal circumstances. Only if you wish to change the operation of your ticket dispenser should you enter the Program Mode to make changes.

The following is a description of the various menu options that are available in the Ticket Dispenser software (refer to Table 1 for a chart showing all of the software options). *NOTE: Not all of the menus are used in the AC111/115/125 series Ticket Dispensers.* Read the following for a detailed explanation of the menus that are used, as well as instructions on how to access the Program Mode and to make and save your desired changes.

STANDBY OPERATION

Power-ON the changer, and allow it to run through its start-up procedure, which may take up to thirty seconds or more, before attempting to dispense any tickets. During this time, you may hear the validator motors cycling as the Main Logic Board (MLB) checks them; this is normal. Once all motion has ceased, and all indicator lights are showing a "Ready" condition, the Ticket Dispenser is in its Standby state, ready to accept bills. In this state, the MLB display's backlight will be ON continuously, and the screen will show the current count of total dollars accepted by the machine (00000). Additionally, the board's red LED will blink a heartbeat every second to indicate that the unit is getting power and functioning normally (see Fig. 2).

ACCESSING THE PROGRAM MENUS

The AC111/115/125 Series Ticket Dispenser's default operational settings are easily reprogrammed to meet your requirements. Programming is done using the three buttons and LCD display located on the Main Logic Board as an interface (see Fig. 2).

Table 1 – UNTK-1A-A03 Software Menu Tree

BILLS	ACCEPT	\$1: Choose Yes, No, or Exit	
		\$2: Choose Yes, No, or Exit	
		\$5: Choose Yes, No, or Exit	
		\$10: Choose Yes, No, or Exit	
		\$20: Choose Yes, No, or Exit	
	SECURITY (SEC.)	SECURITY: Choose High, Low, or Exit	
	EXIT		
PAYOUT	TICKET: Set Value (\$00.05 – \$20.00)		
	\$1: Set Payout (000 – 999)		
	\$2: Set Payout (000 – 999)		
	\$5: Set Payout (000 – 999)		
	\$10: Set Payout (000 – 999)		
	\$20: Set Payout (000 – 999)		
	EXIT		
HARDWARE (HARDWR.)	HOPPERS	HOPPERS: Choose ccTalk, None!, or Exit	
	COIN ACCEPTOR (COINACC.)	ccTALK	CURRENCY: Select US, Canada, or Exit
		PULSE	ENABLE: Choose High, Low, or Exit
		NONE!	
		EXIT	
	STRING	YES (Y)	MAX \$: Set Dollar Amt. (\$20 – \$200)
			MAX TIME: Set Time (5 – 120 min.)
			SHUT OFF: Choose Period (15, 30, 45, 60 minutes or Reset)
		NO (N)	
		EXIT	
DUMP	DUMP: Choose Yes, No, or Exit		
MODE	TICKETS: Select One, Many, or Exit		
EXIT			
EXIT			

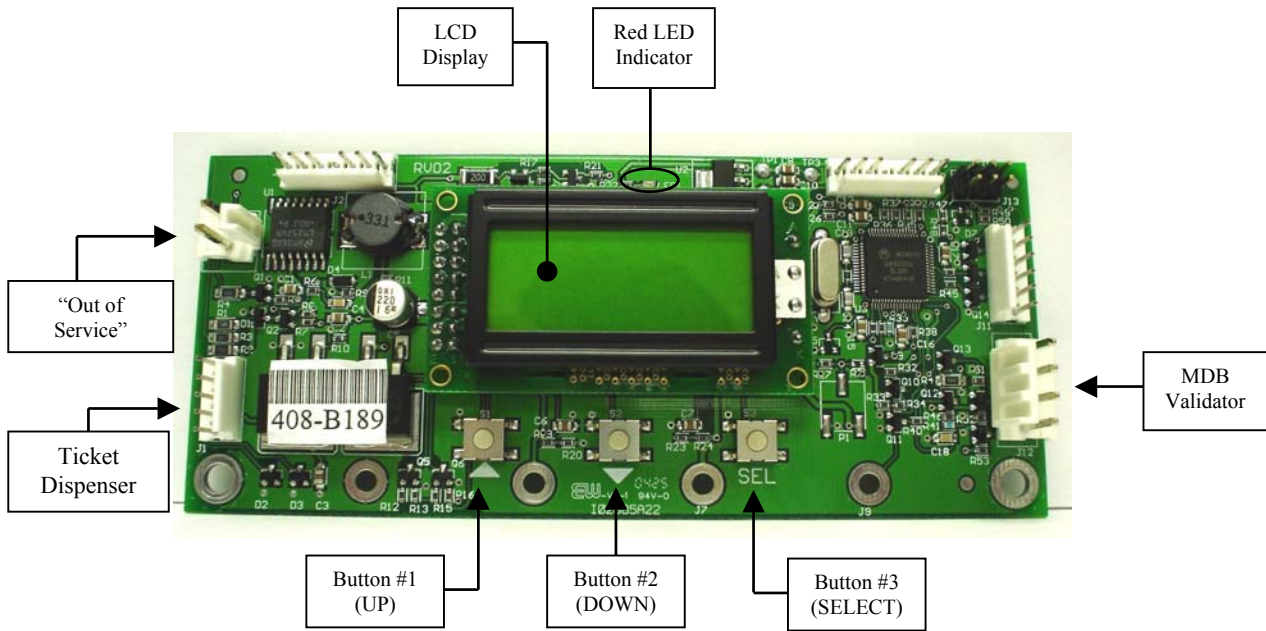


Fig. 2: AC111/115/125 Series Main Logic Board (MLB)

When the unit is in the Standby mode, pressing the ‘SEL’ (SELECT) button enters the Setup mode initially, and then, once entered, it selects and saves your choices within the menus that follow. Buttons #1 and #2 (UP and DOWN) are used to move the cursor, and to increase or decrease user-set values. Many of the menus contain submenus, which may be accessed by pressing the SELECT button when the appropriate menu item is displayed or highlighted. Choosing ‘Exit’ in any menu will take the program out of Setup back to Standby mode. *Note: Some of the menu items contain a series of settings. For example, the ‘Accept’ submenu under ‘Bills’ contains five bill denominations to choose whether to accept or deny. These settings must be done in sequence all the way through for any changes to be saved. Choosing ‘Exit’ at any point in the middle of a series will return the program to Standby mode WITHOUT saving any changes. Also, after programming is complete and the changer is back in Standby mode, turn the MLB power OFF then back ON again before resuming operation.*

SETTING BILL ACCEPTANCE

BILLS:

The first menu item contains settings that affect the bill validator.

Accept: This submenu is used to specify which bill denominations will be accepted by the validator. Choose whether to accept (Y) or deny (N) each bill denomination in sequence. *Note: The validator also has DIP switch settings for individual denomination acceptance. Both the validator and the Logic Board must be set to ‘Yes’ or ‘Accept’ for a bill to be accepted. Check the validator section in this manual for information on the validator’s DIP Switch settings (Factory default settings from American Changer enable all bills on the validator’s DIP switches, so they need not be changed; all settings can be made in the Main Logic Board software).*

AC111/115/125 series Ticket Dispensers do not have the ability to make change, so keep this in mind when selecting which bill denominations will be accepted. For example, using a \$5 bill to pay for a 3-dollar ticket will cause the machine to dispense 1 ticket and hold two dollars in escrow. These two dollars can only go towards the purchase of another ticket, i.e. by inserting another dollar. If the machine does not accept \$5 or higher bills, the customer can only pay with ones, and will receive a ticket for every three that he/she inserts.

Security: This setting applies to ALL bills. Set whether to use high or low security scanning of bills by the validator. High security scanning, basically, tightens bill acceptance parameters and makes it more difficult to pass a counterfeit bill. For this reason, though, high security may require a “crisper” or newer bill for acceptance, and may not accept an older “tissue-paper”, yet legitimate, bill that low security might.

SETTING TICKET PAYOUTS

PAYOUT:

Enter this menu to set or reset the price of tickets. To access this menu, enter the Setup mode, press the DOWN key once, so that the word “Payout” is highlighted, and then press SELECT. The first setting that is displayed is the individual ticket price, called “Ticket”; it is shown as a dollar amount printed across the bottom of the screen. Use the UP and DOWN buttons to change this value to an amount anywhere between 5 cents and 20 dollars in 5-cent increments. When you are finished, press the SELECT button to save it and continue.

The next few settings in the sequence are ticket payouts for each accepted bill denomination. Setting ticket payouts this way enables you to dispense bonus tickets when certain bill denominations are used. The bill denominations are set sequentially, starting with the lowest value above the

individual ticket price and increasing in order to the highest enabled value. If no bonuses are desired, then set all bill denomination payouts to "000". Setting the bill payouts to "000" will not pay out zero tickets, rather, the individual ticket price set in the first step will be used for all additional tickets (see examples below for further explanation). **CAUTION:** *When ticket payouts are set to non-zero numbers for individual bill denominations, those numbers override the individual ticket price, and will be the number of tickets dispensed when that bill is accepted. If the individual ticket price is to be used for all tickets, with no bonuses, then set all bill payouts to "000".*

EXAMPLE #1: To pay out 6 tickets per dollar, with a one-dollar bonus payout for \$5 bills, a three-dollar bonus payout for \$10 bills, and an eight-dollar bonus payout for \$20 bills, make the following settings:

Ticket = any value less than \$1.00 – \$0.25 for simplicity

\$1 = 006 (\$1 x 6)

\$2 = 012 (\$2 x 6)

\$5 = 036 (\$5 x 6 plus \$1 x 6)

\$10 = 078 (\$10 x 6 plus \$3 x 6)

\$20 = 168 (\$20 x 6 plus \$8 x 6)

EXAMPLE #2: To dispense \$7.00 tickets with NO bonuses, i.e. \$7 for 1 ticket, \$14 for 2 tickets, \$21 for 3 tickets, etc., make the following settings:

Ticket = \$7.00

\$10 = 000 (\$1, \$2, and \$5 do not appear)

\$20 = 000

For these settings, when a \$20 bill is inserted, two tickets will be paid out. Insert a \$1 bill next, and a third ticket is paid. Alternatively, insert four \$1 bills, and then a \$10 bill, and two tickets will be dispensed.

NOTE: *Always run tests using every accepted bill denomination once the ticket payouts have been set, to be sure they are correct and how you want them before final installation of the dispenser. The payouts can be set and reset as much as needed, and can be changed at any time to meet your requirements.*

HARDWARE SETTINGS

HARDWARE:

The ticket dispenser's hardware settings are mostly dependent on what hardware is installed in the unit. Aside from the "String" submenu, the hardware options should not be altered unless they are accidentally changed, or as part of troubleshooting if the unit is not working. The following describes the proper factory settings in case they need to be reset.

Hoppers: AC111/115/125 series Ticket Dispensers are not available with hoppers, so this submenu should always be set to the option "None!".

Coin Acceptor: AC111/115/125 series Ticket Dispensers are not available with a coin acceptor, so this submenu should always be set to the option "None!".

Dump: This option controls the unloading of a hopper, which is not available on AC111/115/125 series Ticket Dispensers. Setting this option to either Yes (Y) or No (N) has no effect on the operation of the dispenser, so it may be left in its current state.

Mode: Two modes of operation are not available on AC111/115/125 series Ticket Dispensers, only the "Many" mode, where the amount of money accepted by the validator is entirely changed to tickets. Setting this mode to either "One" or "Many" has no effect on the operation of the dispenser, since it defaults to "Many", so it may be left in its current state.

ANTI-STRINGING PROTECTION

HARDWARE: STRING:

The third submenu inside the 'Hardware' menu is used for setting up or disabling options that help protect the changer from "stringing". Select 'String', and then choose either to enable stringing protection (Y), or to disable it (N). If YES is chosen, there is a series of three settings that will follow, explained next, that together control the behavior of the changer with regard to stringing.

Max \$: This setting is the maximum dollar amount that can be accepted by the machine within the user-set time limit (next setting) before triggering the anti-stringing protection. The dollar amount can be chosen anywhere between \$20 and \$200 in \$5 increments.

Max Time: The time entered here is the time limit for the changer accepting the user-set maximum dollar amount (previous setting). If the changer accepts the maximum dollar amount within the amount of time set here, anti-stringing protection will be triggered. The length of time can be set to anywhere between 5 and 120 minutes in 5 minute increments.

Shut Off: This setting controls the anti-stringing protection, which is the shutting down of the changer for the time specified here. The changer can be set to shut down for 15, 30, 45, or 60 minutes, or until the Logic Board is reset by turning the power off then back on ('Reset').

---[END PROGRAMMING SECTION]---

FUSE

High voltage fuse: This is the primary transformer AC fuse for the main logic board and the validator, and it is located directly below the ON/OFF switch on the Logic/Power Supply board. Any direct short of the Transformer or validator will cause this fuse to blow. Replace this fuse with a 2-½ Amp, 250 Volt AS fuse only. **REPLACING THIS FUSE WITH ANYTHING OTHER THAN A 2-½ AMP, 250 VOLT "AS" MAY RESULT IN A FIRE OR AN UNSAFE WORKING CONDITION!!**

OUT-OF-SERVICE CONDITIONS

Out-of-Service conditions occur in the AC111/115/125 Series ticket dispensers for the following reasons: blown fuse, validator fault, or out of tickets.

Blown Fuse: An AC power spike in line voltage or a bad transformer on the Power Supply board can cause a blown fuse. If the primary fuse blows, the indication is that the green LED on the power supply will not light.

1. Replace the fuse. If the green LED now lights then there was a spike.
2. If it does not light and the fuse blows again, disconnect the validator and ticket dispenser connectors and try again. If the green LED stays lit, reconnect each component one at a time until you find the one blowing the fuse.
3. If the fuse still blows with all components removed from the MLB, the power transformer is shorted. To test the transformer, use a multimeter set for ohms and measure across the primary (40ohms) and the secondary (1.5ohms).

Validator Faults: When a validator fault occurs, the validator's EEPROM shuts down the validator and flashes an error code on the red LED located on the side of the validator's logic board (refer to pg. 15 for error code descriptions). The validator also sends a message to the Logic Board's LCD display; the possible error messages are detailed below. The Out-of-Service light on the front of the machine will illuminate for a validator fault.

1. **Validat. Full** – The Bill Stacker is full of bills and should be emptied.
2. **Validat. Motor** – Motor failure. Either the Stacker or Transport motor has failed; replace the unit.
3. **Validat. Jammed** – Something is blocking one or more of the validator's sensors. Check for a bill jam; make sure the validator's lower housing is pushed all the way in, until it 'clicks'.
4. **Validat. Sensor** – One of the sensors inside the validator has failed. Check for a jammed bill; if that is not the cause, repair or replace the validator.
5. **Validat. Checksum** – Checksum failure. The validator's Logic Board programming has been corrupted; repair or replace the validator.
6. **Validat. CashBox** – The Bill Stacker has been removed from the validator and should be replaced.
7. **Validat. NoComm** – There is a communication failure between the changer's Main Logic Board (MLB) and the validator. This may be a temporary condition while one of them is completing some task, or the cable harness may be loose or unplugged, or the validator may need to be repaired or replaced.
8. **Validat. Disabled** – The MLB cannot enable the validator, due to an internal error inside of the validator. This may be a communication issue, and may be temporary.
9. **Validat. String** – The changer's Anti-Stringing protection has shut down the machine's operation. Basically, more money has been paid out in less time than allowed by the system's settings (see pg. 7 for Anti-Stringing protection setup). Wait the allotted time, or reset the MLB to resume operation.
10. **Validat. Pulse** – The pulse validator being used has been disabled. Check the unit and repair or replace as necessary.
11. **Busy** – This message is displayed whenever the validator is in the process of validating (accepting) or stacking a bill.

Out of Tickets: The ticket dispenser does not have specific sensors for monitoring when the tickets run out. Instead, the main logic board reads its optical notch sensor output and applies a time-out to determine when the ticket bin is out of tickets. During normal operation, the logic board turns on the dispenser and monitors the notch sensor output to turn it off when the correct number of tickets has been dispensed. If too much time passes before a notch is read, the bin is deemed to be out of tickets. An error message, "**Ticket Timeout**", is displayed on the logic board LCD screen. Also, the ticket dispenser and validator are shut down, and the Out-of-Service LED is turned ON. Follow the ticket loading procedure on pgs. 4-5 to refill the dispenser.

EQUIPMENT INDICATOR LIGHTS

Main Logic Board:

1. Red LED
 - A. Heartbeat – 24, 5, and 3.3Vdc present; the changer is operating normally.
2. LCD Display Backlight
 - A. ON Steady – Normal operation; this applies to both Standby and Programming modes.
 - B. Blinking – Error condition present; the backlight blinks synchronously with the Red LED (see pg. 8 for error message descriptions).

Power Supply Board:

1. Green LED
 - A. ON: AC power applied to the board, and 24 VDC present on secondary side. Main fuse is good.
 - B. OFF: No power. Make sure the ON/OFF switch is in the "I" position; check the AC power cord connection; check the main fuse; check for shorts of the validator, ticket dispenser, or main transformer.

Validator logic board:

1. Red LED
 - A. ON Steady - Standby mode; waiting for bill to be inserted.
 - B. Flashing - Error mode; see page 15 for error code descriptions.
 - C. OFF - The "Out-of-Service" LED is lit and the Main Logic Board has shut down the validator, or the unit is not receiving power.

WIRE HARNESS COLOR AND DEFINITIONS

Ticket Dispenser Harness:

Connector J1

- Red - +12VDC Supply
- White - Motor Enable
- Black - Ground
- Blue - Notch Sensor

MDB Validator harness:

Connector J12

- White - +24 VDC
- Brown - Ground
- Red - Data Pin, Master Transmit
- Black - Data Pin, Master Receive

"Out-of-Service" Light harness:

Connector J2

- Orange - +24 VDC
- Brown - Switched Ground

MAG BILL ACCEPTOR

Operation and Service Manual

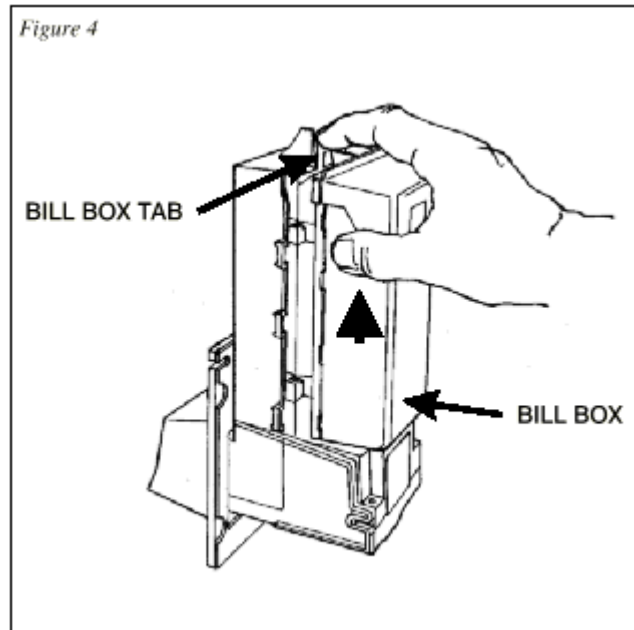


COINCO MAG52SA VALIDATOR SECTION

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Removing a Bill Jam	10
Setting the Bill Types Accepted	11
Cleaning the Sensors	12-13
Cleaning a Salted Unit	13
Replacing the Belts	14
Troubleshooting & Error Codes	15

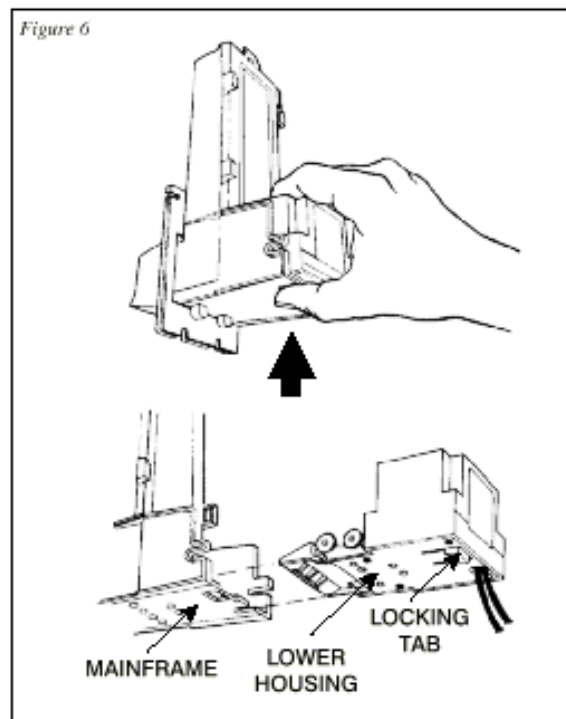
REMOVING THE BILL BOX

To remove the 500-bill staker from the CoinCo validator, follow the picture below.



REMOVING A BILL JAM

From time to time a foreign object or ripped bill will become caught in the validator. Follow the picture below to remove the item.



SETTING THE BILL ACCEPT DIP SWITCHES

Figure 1

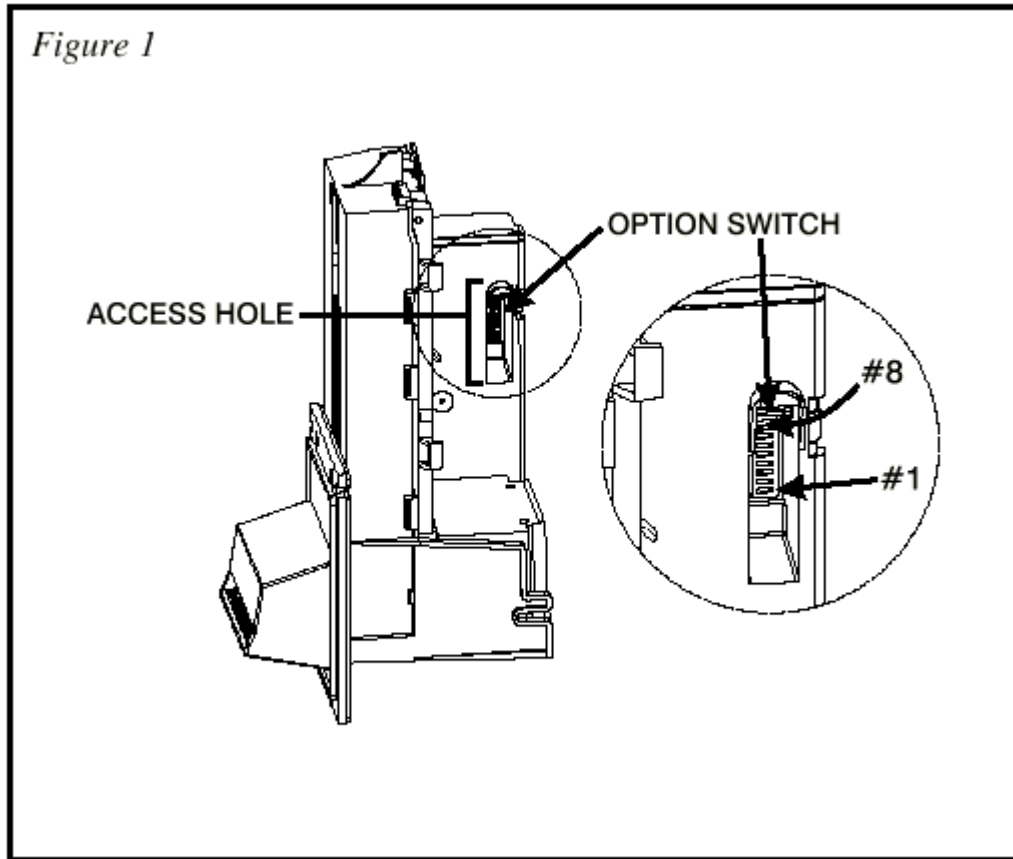
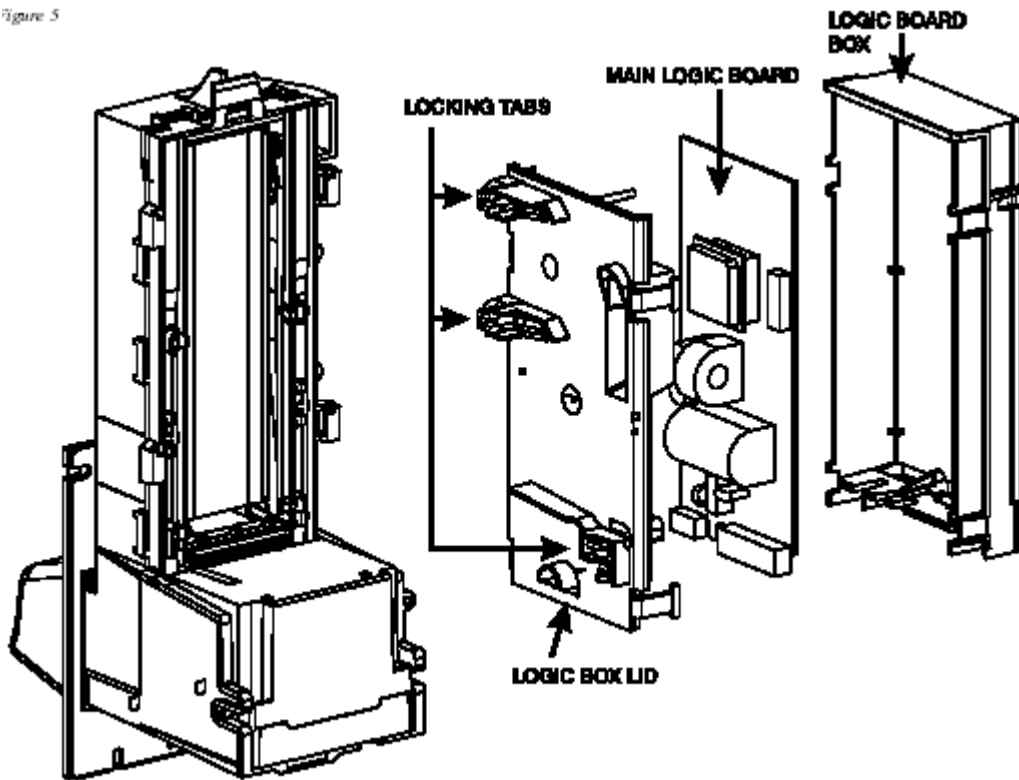
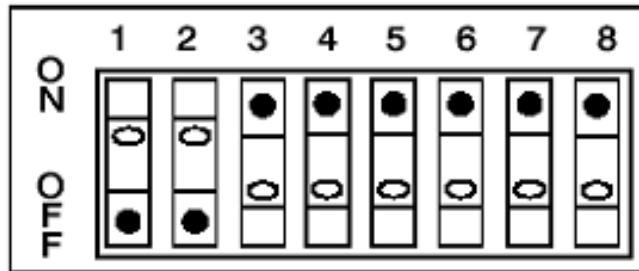


Figure 5



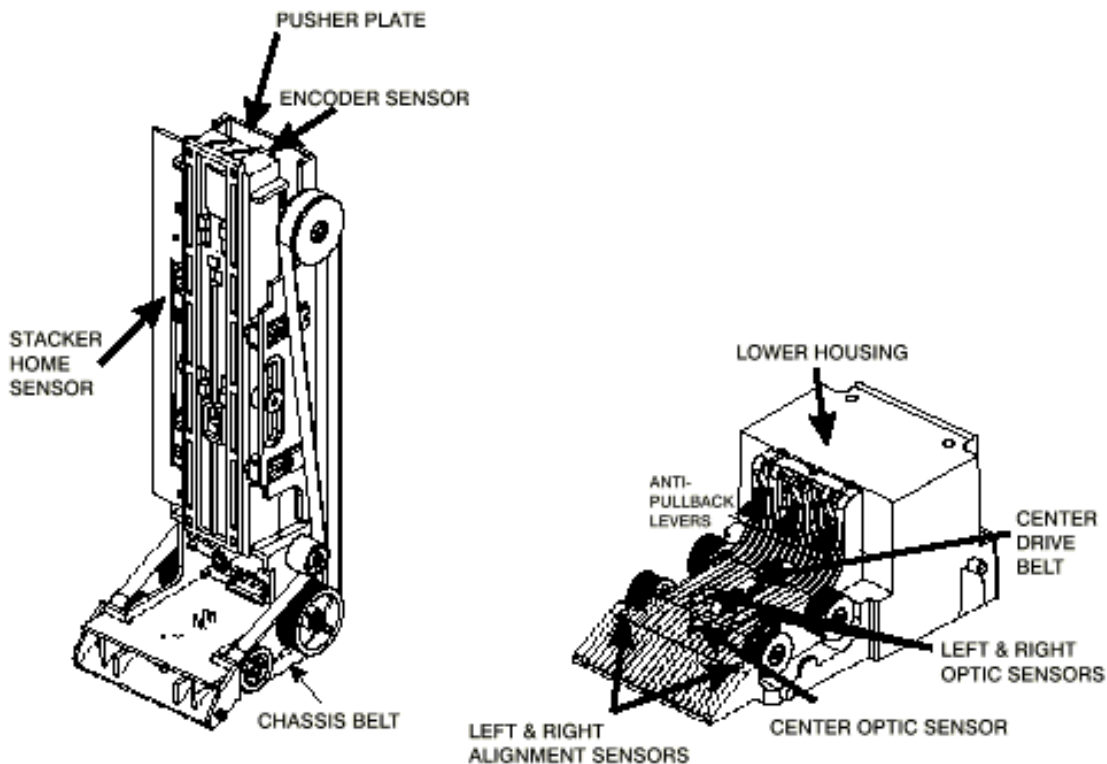
SWITCH	ON	OFF
1	High Security	Standard Acceptance
2	Accepts bills in one directions only (face up, green seal first)	Accepts bills in both directions (face up)
3	Serial or Parallel Interface	Pulse Interface
4	\$20 Accept	\$20 Reject
5	\$10 Accept	\$10 Reject
6	\$5 Accept	\$5 Reject
7	\$2 Accept	\$2 Reject
8	\$1 Accept	\$1 Reject



(FACTORY DEFAULT SETTINGS)

CLEANING THE BILL VALIDATOR

Refer to the pictures and the procedure on the next page to clean the bill validator every 4-6 months.



MAG CLEANING: IF ANY OF THESE PROCEDURES ARE PERFORMED TO YOUR VALIDATOR AFTER IT IS RETURNED UNDER A WARRANTY REPLACEMENT, YOU WILL BE SUBJECT TO A \$65.00 LABOR FEE.

CLEANING AND MAINTENANCE:

Note: *Petroleum-based cleaners and freon-based propellants can damage plastic and some electronic components. Scouring pads and stiff brushes may harm the protective conformal coating on the circuit boards and can mar the plastic. These items should never be used when cleaning the MAG bill acceptor.*

The MAG should be cleaned every 7,000 bills or every 4 -6 months (or as needed, depending on the environmental conditions of the location). Dust can be removed with a soft brush or cloth or it can be blown out using compressed air.

Procedure:

1. Disconnect power from the bill acceptor.
2. Remove the bill box and use a soft cloth to wipe the dust from around the intermediate frame and stacker plate.
3. Remove the lower track.
4. Using compressed air or a soft brush, blow or brush the dust off of the optic sensors and out of the recessed sensor openings.
5. Remove dust from around the belts and wheels on the lower housing and the sensors on the upper sensor board. The upper sensors are located directly above the lower housing sensor when the lower housing is installed.
6. The bill path can be cleaned to remove further dirt and oil using a soft cloth moistened with a mild soap and water solution.
7. Clean the magnetic head using a swab and isopropyl alcohol.
8. Once the lower housing is dry, place it back into the mainframe so that the tab on the bottom locks into place.
9. Blow the dust out of the encoder wheel and its sensors. (It may be necessary to extend the stacker plate to access the encoder wheel. Supplying power to the unit momentarily can do this, so that the stacker plate extends.)
10. Remove dust from the transport belt areas and from any other places of build up.
11. Remount the bill box.
12. Apply power and insert bills to verify that the unit is functions property.

MAG CLEANING PROCEDURE FOR SALT WATER POLLUTED UNITS:

Note: *Petroleum-based cleaners and freon-based propellants can damage plastic and some electronic components. Scouring pads and stiff brushes may harm the protective conformal coating on the circuit boards and can mar the plastic. These items should never be used when cleaning the BA30 bill acceptor.*

Procedure:

1. Remove power from the bill acceptor.
2. Remove the bill acceptor from the vending machine.
3. Open the bill box lid and verify that the stacker plate is in the stand-by/home position. If it is not in the home position, apply power and observe that the stacker plate returns home.

Warning: *If moisture is present, allow the unit to dry thoroughly before applying power to avoid possible shock hazard. If the stacker plate does not return to the home position, remove power and carefully remove the bill box to avoid damaging the bill box and/or stacker plate.*

4. Remove the lower housing.
5. Remove the bottom cover from the lower housing.
6. Run hot water (1101/4-1401/4F) over the lower housing from the top and bottom. Using a soft brush, gently clean any residual salt. Use a soft absorbent cloth to clean any residue off the lower housing. If the transformer gets wet, allow the unit to dry for 24 hours before applying power.
7. Remove the front mask. Using hot water and a soft brush, clean the front mask, upper sensor board, main frame anti-pullback levers and position sensor mount.
Caution: The motors are not protected from water, therefore the unit must be held in a manner that prevents water from running over the intermediate frame crossbar.
8. Remove the position sensor cover on the crossbar and carefully lift the LED from its mount. (Early models only.)
Caution: Protective coating on the LED leads should not be damaged. Clean all salt residue from the mount, sensor hole and detector area. The detector can be seen through the sensor hole, and is located in the chassis. Replace the position sensor cover. (Early models only.)
9. Verify that the anti-pullback levers move freely and that the spring returns them to their open position.
10. Allow the unit to dry thoroughly.
11. Clean the magnetic head using a swab and isopropyl alcohol.
12. Replace the front mask
13. Replace the lower housing cover.
14. Replace the lower housing into the main frame.
15. Remount the bill box.
16. Apply power and insert bills to verify that the unit is functioning properly.

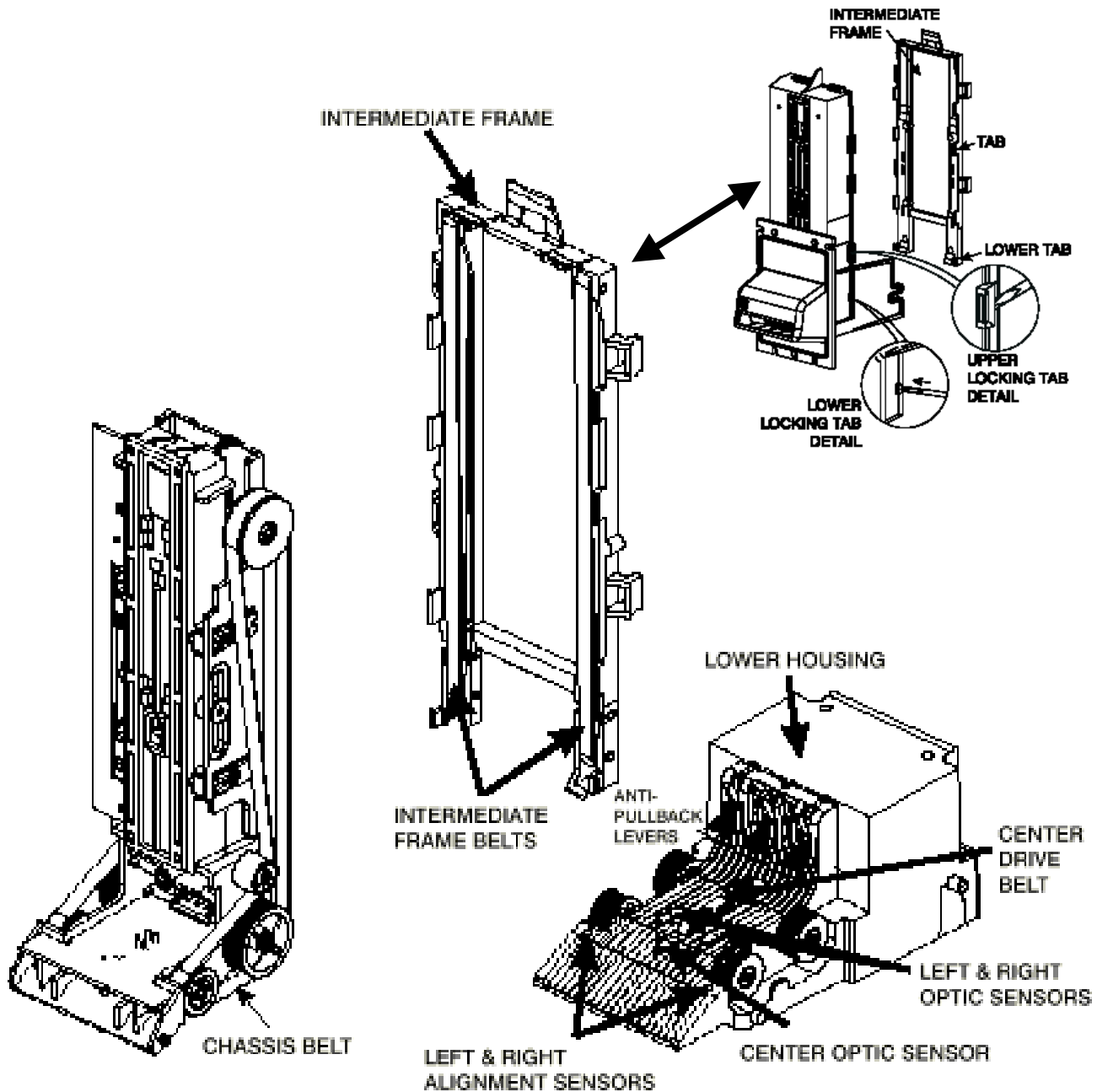
6 OR 7 ERROR CODE FLASHES

The cleaning procedure for this common occurrence is listed below. Just follow these steps.

1. If this code has occurred on a new machine or one that the validators DIP switches were just changed, Ensure that all the white plugs on the side of the validator board away from the red LED are plugged in securely.
2. Remove the bill box.
3. Turn the Changer ON then OFF in an attempt to stop the metal push plate so that it COASTS into the fully outward position.
4. Using an air compressor or a can of compressed air blow out the area behind the push plate until it is completely free of all dust and lint.
5. Turn the changer power back on so that the push plate returns to the inward position. If the same error code persists, repeat steps 1 - 3 concentrating on the top center area behind the plate.
6. Replace the bill box.

REPLACING THE BELTS

Every 2-3 years the belts on the CoinCo will wear out. To replace them, remove the validator components down to the picture show. Refer to the parts diagram at the end of the manual for help getting to this point.



MAG TROUBLESHOOTING GUIDE

This Troubleshooting Guide is intended to help locate problems within the bill acceptor. If a bill acceptor cannot be repaired by following this guide, return the unit to American Changer or the nearest Coinco Service Center for repair along with a complete description of the problem you are having with the bill acceptor.

Logic troubleshooting minimizes the time spent in removing and replacing parts that are not defective. Some failures are caused by minor problems such as dirt or loose/faulty connections. Please check the following before replacing any parts:

- Clean any dirt or dust from the bill path.
- Coin changer inventory tubes are filled to their correct levels.
- Connectors are inserted correctly.
- Connector pins are not bent or broken.
- All wires are properly secured.

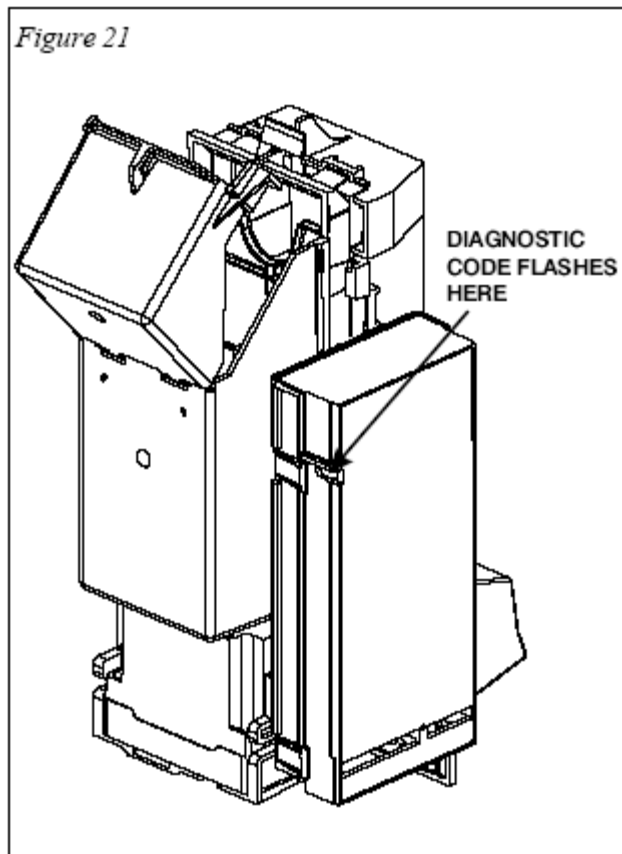
MAG DIAGNOSTIC CODES

Troubleshooting can be done by reading the number of flashes or blinks of light from the LED located inside the logic board cover. Since the red LED is normally ON, the number of flashes is the number of times it blinks OFF. These flashes can be seen on the side of the logic box.

Diagnostic codes 2, 8, 14, and 18 are not used. Codes 1, 3, 4, 5, 15, and 16 may appear during normal servicing of the MAG. If the MAG is flashing a #5 code, turn off power to the MAG for 10 seconds. Reapply power to the MAG and diagnostic codes 6, 7, 9, 10, 11, 12, 13, and 17 will appear for approximately 30 seconds. After 30 seconds these codes will revert back to the #5 code. If more than one error exists, the lower number code will appear until its condition is corrected. The left and right sensors referenced in the code descriptions are given viewing the MAG from the front.

# Of Flashes	Description of Diagnostic Codes
1	Bill Box Full
2	(Not Used)
3	Check Bill Path
4	All Bill Accept Switches Are Off
5	Check Optical Sensors
6	Stacker Motor/Home Sensor
7	Transport Motor/Encoder Sensor
8	(Reserved for Future Use)
9	EEPROM Check Sum Error
10	RAM or ROM Check Sum Error
11	Center Optic Sensor
12	Right Optic Sensor
13	Left Optic Sensor
14	(Not Used)
15	Right position Sensor
16	Left Position Sensor
17	Lower Board Anti-Pullback Lever Sensor
18	(Not Used)

Figure 21



DELTRONIC LABS, INC.



MODEL DL-1275 TICKET DISPENSER

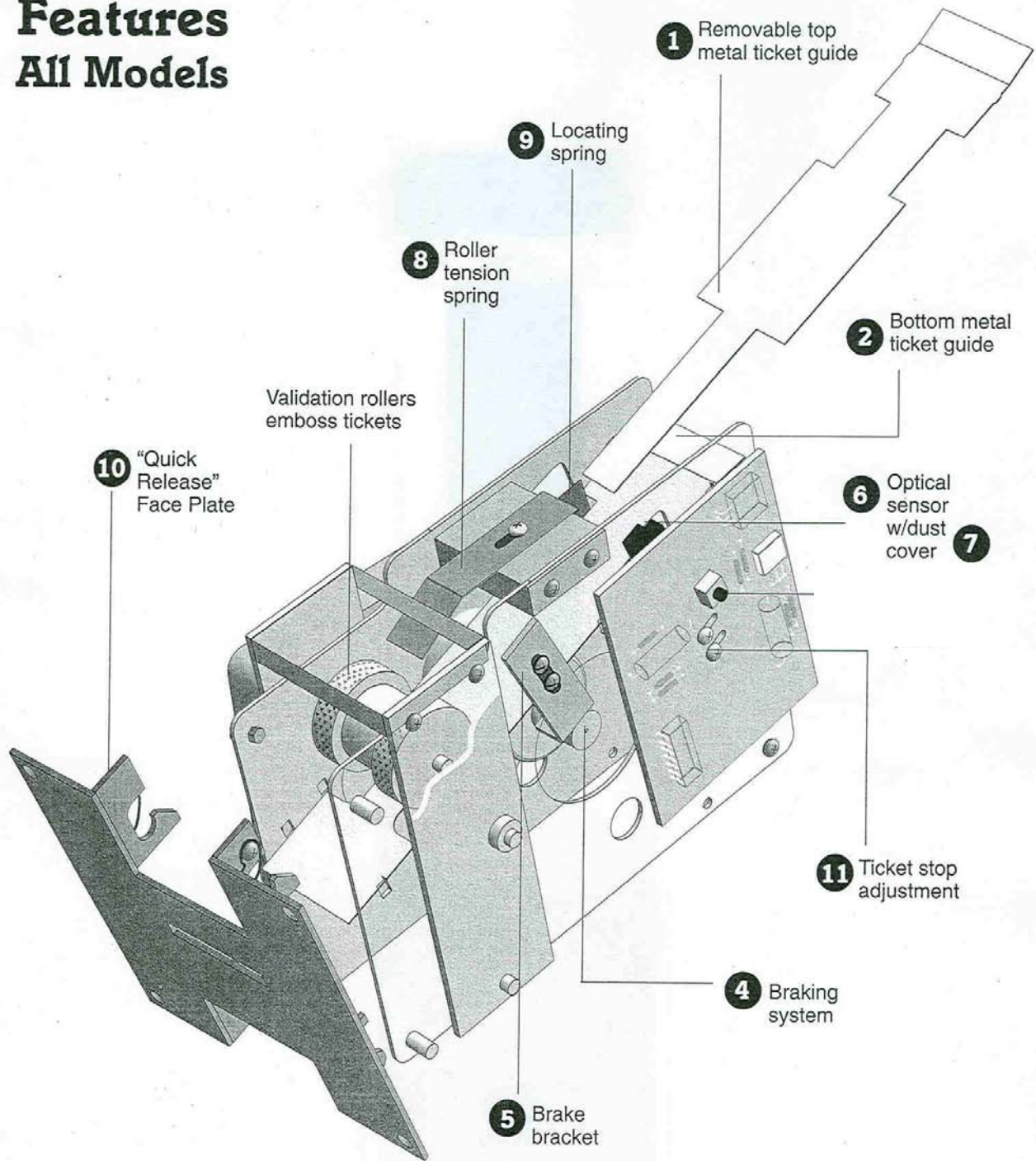
DELTRONIC LABS, INC. MODEL DL-1275 TICKET DISPENSER SECTION

	PAGE
Ticket Dispenser Diagram	17
Ticket Dispenser Feature Descriptions	18
Dispenser Specifications	18

"Quick Release" Ticket Dispenser

Features

All Models



DL-1275 TICKET DISPENSER FEATURE DESCRIPTIONS

- (1) TOP METAL TICKET GUIDE** – For servicing, the top metal ticket guide can be removed and replaced. With the unit facing you, gently spread side plates with thumb and index finger. Rotate guide to the right (clockwise, as viewed from the front of the dispenser) to a 45° angle, snapping the left side tab out of its slot, and pull straight back. When replacing, simply reverse these steps. Note there is no need to spread side plates while replacing guide. Tilt to right and insert right tab first. *Note: When PCB has opto-sensor cover, guide is inserted over sensor then directed down to right. Be sure guide is **BELOW** brake bracket screws when replaced.*
- (2) BOTTOM METAL TICKET GUIDE** – The longer, more durable ticket guide extends through the faceplate allowing for better guidance. Plus, a larger opening in the faceplate prevents curled tickets from catching.
- (4) BRAKING SYSTEM** – Our impressive new braking system eliminates brake slippage allowing foolproof, accurate dispensing. The new design also reduces wear and tear on the dispenser.
- (5) BRAKE BRACKET** – The brake is easily accessible and can be adjusted to engage immediately when a ticket is pulled (Minimum of 1/8” from brake wheel).
- (6) OPTO-SENSOR** – Included as part of the controller is an opto-electronic beam sensor, which detects the notch between tickets. The output of the ticket sensing circuitry is an open collector transistor.
- (7) OPTO-SENSOR DUST COVER** – In addition, an optical sensor dust cover is also included to eliminate the possibility of ticket dust accumulating on the optical sensor. This increases the accuracy of the ticket count and reduces maintenance.
- (8) ROLLER TENSION SPRING** – The roller tension springs keep constant tension on tickets to insure proper delivery and to prevent the tickets from being “pulled through” when the dispenser is idle. To increase the tension, loosen the screw and move the spring forward. Tension is correctly adjusted when tickets cannot be pulled from the dispenser and the validation rollers lightly emboss the tickets.
- (9) LOCATING SPRING** – The ticket guide spring insures that the notches in the tickets pass through the opto-sensor. To decrease tension, loosen the screw and move the outer tension spring up. This changes the tension on the inner spring. The tickets should be snug between the spring and the side plate, but not deformed by the excess tension. The spring is adjusted at the factory for 1-5/32” wide tickets and positioned 1/8” from the ticket guides.
- (10) “QUICK RELEASE” FACE PLATE** – The dynamic new design allows the ticket dispenser to “quickly release” from its face plate on your cabinet or ticket door. This can be done manually and no tools are needed. This gives you complete access to the front of the rollers and to the ticket guides. Plus, you can “snap out” one ticket dispenser and immediately replace it with another in just seconds.
- (11) TICKET STOP ADJUSTMENT** – The ticket stop adjustment allows you to position the tickets while the machine is off. The tickets should protrude through the slot at least 1/16”. The ticket dispenser PC board is mounted on spacers with two screws and washers in two slotted holes. Loosening the screws and moving the board forward will allow the tickets to stop further out beyond the edge of the slot.

DISPENSER SPECIFICATIONS

The quick release faceplate greatly improves serviceability and reduces maintenance. Now standard on all Deltronic Labs Ticket Dispensers.

- Low voltage operations, only 12V DC
- Solid-state output allows interfacing with electronic games
- Compact size, only 3-1/8”W x 4”H x 5-1/2”L
- Weight: 2-1/4 lbs.
- Validation “diamond” mark identifies tickets that have been dispensed
- Adjustable ticket stop
- Dispenses 2”L x 1-5/32”W tickets (STANDARD)
- Dispenses 4”L x 1-5/32”W tickets
- One year warranty
- Standard faceplate: 4”H x 3-3/4”W
- 12V meter output
- CE (when requested)

TROUBLESHOOTING GUIDE

TO USE THE TROUBLESHOOTING GUIDE, MATCH UP THE PROBLEM, THEN FOLLOW THE SOLUTION SUGGESTIONS. After every step re-try operating the dispenser to see if the problem has been solved.

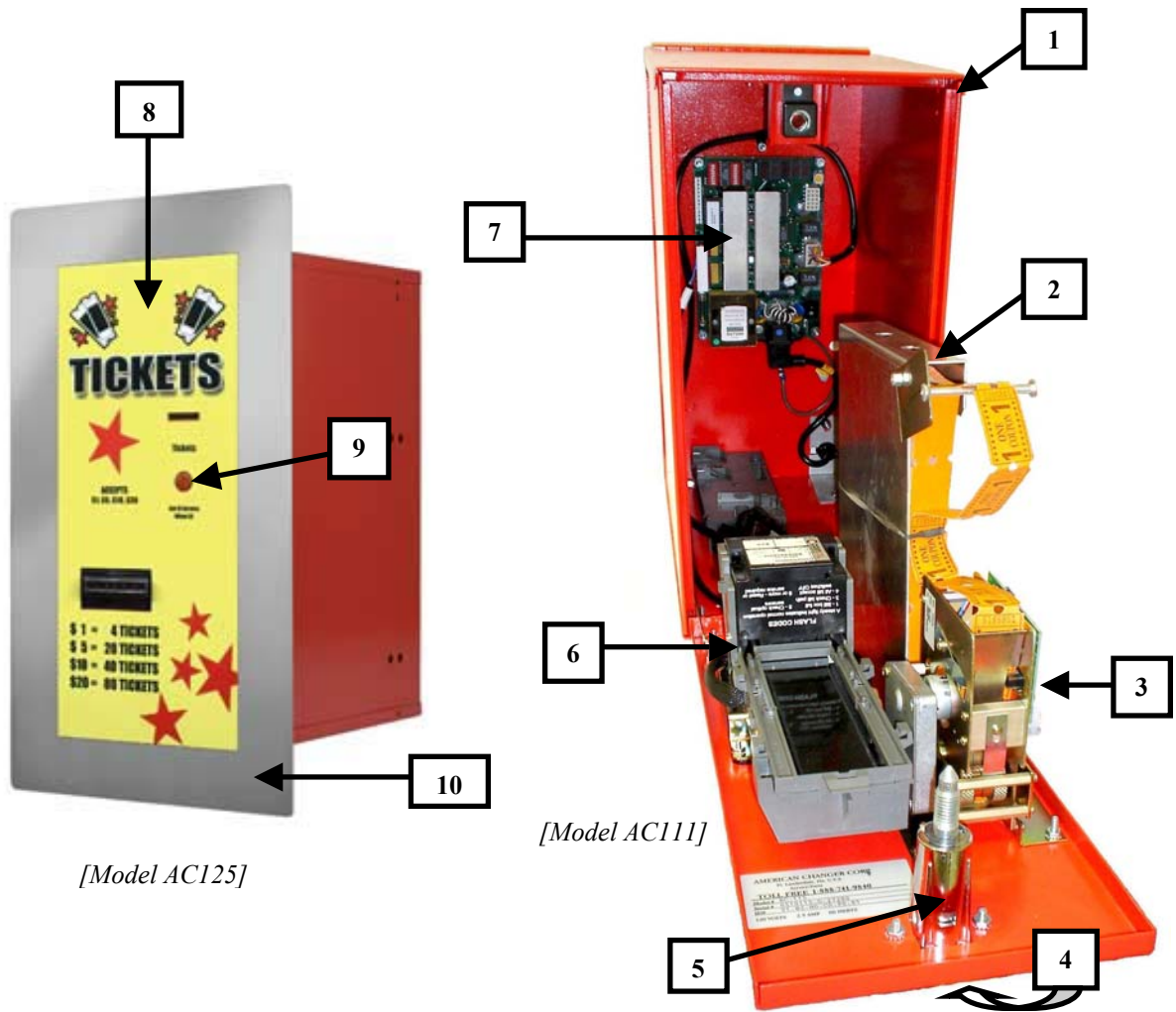
<i>Problem:</i>	<i>Solution:</i>
<p>A. The ticket dispenser is completely dead. (The green LED on the Power Supply Board is not lit)</p>	<ol style="list-style-type: none"> 1. Ensure the AC power cord is plugged in. 2. Ensure the ON/OFF switch is rocked to the “I” position (up). 3. Unplug the female end of the line cord from the main logic board AC connector and plug it in again tightly. 4. Measure the AC voltage at the outlet or check the breaker/fuse box. You can also plug another item into the AC wall outlet to ensure there is power present at the outlet. 5. Inspect the AC line cord for cuts or abrasions. 6. Check the Fuse on the Power Supply Board. 7. Replace the line cord. 8. Replace the Power Supply Board.
<p>B. The “Out-of-Service” LED is lit</p>	<ol style="list-style-type: none"> 1. Ensure the ticket dispenser has not run out of tickets. It is possible that the ticket bin has tickets, but that the string of them was broken due to a snag or misfeed. In either case, reload the dispenser per the instructions on pgs. 4-5. 2. Clear any tickets or foreign material that may be jamming the Dispenser or its exit slot, preventing tickets from moving freely. 3. Check the Ticket Dispenser wiring harness. Ensure that the red 5-position connector is pushed all the way onto the Logic Board pins, and the two white 4-position connectors are fastened securely. If necessary, pull the connections apart and reattach them properly. 4. Check for a validator fault. Refer to pgs. 8 and 15 listings of validator error codes and common solutions. 5. Replace the Ticket Dispenser wiring harness. 6. Replace the Ticket Dispenser.
<p>C. The green LED on the Power Supply Board is lit, but there is no red LED “heartbeat” on the Main Logic Board.</p>	<ol style="list-style-type: none"> 1. Bad 5vdc or 3.3vdc regulator on the main logic board. 2. The validator or ticket dispenser is shorted. 3. Replace main logic board. 4. Replace validator. 5. Replace ticket dispenser
<p>D. Bill validator will not accept the bill, but the “Out-of-Service” LED is not lit</p>	<ol style="list-style-type: none"> 1. Ensure the Orange and Black wires going to the “Out-of-Service” LED are connected its Red (+) and Black (-) connectors, respectively. 2. Check for +24VDC between the Orange and Black wires. If voltage is present, replace the LED. 3. Verify that the validator is not flashing an error message. If it is, refer to pg. 15 for error code information. 4. The bill denomination may not be enabled. Check the validator’s DIP Switches #4-#8 and make any necessary adjustments. 5. Replace the validator harness. 6. Replace the validator. 7. Replace the Main Logic Board.

TROUBLESHOOTING GUIDE

TO USE THE TROUBLESHOOTING GUIDE, MATCH UP THE PROBLEM, THEN FOLLOW THE SOLUTION SUGGESTIONS. After every step re-try operating the dispenser to see if the problem has been solved.

<i>PROBLEM:</i>	<i>SOLUTION:</i>
E. The validator pulls in the bill slightly, then rejects it	<ol style="list-style-type: none"> 1. Clean the validator (refer to pgs. 12-13 for instructions). 2. Remove the lower housing of the validator (see pg. 10). Ensure the center wheel spins freely. Push straight down on it gently to loosen. 3. Replace the bill validator.
F. The bill validator's red status LED is ON steady, but it still will not accept the bill	<ol style="list-style-type: none"> 1. Pull out the validator's lower housing (see pg. 10) and look for something obstructing the bill path, i.e. gum, paper, tickets, coins, foreign objects, etc. 2. Look inside the validator's plastic logic board box (see pg. 11) attached to the bottom of the cabinet. Ensure that all the logic board's wire harness connectors are plugged firmly into their white female sockets.
G. The validator's red status LED flashes a "5" error code	<ol style="list-style-type: none"> 1. Clean the validator's Optic LED sensors (see pgs. 12-13). 2. Check for a bill jam 3. Make sure the validator's lower housing is pushed all the way in. 4. Look inside the validator's plastic logic board box (see pg. 11) attached to the bottom of the cabinet. Ensure that all the logic board's wire harness connectors are plugged firmly into their white female sockets. 5. Turn to the last page of this manual and check for a Coinco service center in your area to repair your bill validator.
H. The validator's red status LED flashes a "6" or "7" error code	<ol style="list-style-type: none"> 1. Take the bill stacker off the bill validator. Cycle the power ON / OFF using the switch on the main logic board to try to catch the plastic push-plate so that it stops in its fully extended position. Blow out the area behind the push-plate with high pressure or canned air. Concentrate on the encoder wheel in the area top center behind the push-plate. 2. Turn to the last page of this manual and check for a Coinco service center in your area to repair your bill validator.
FOR TECHNICAL SERVICE OR TO OBTAIN A RETURN MATERIAL AUTHORIZATION NUMBER CALL (888) 741-9840	<u>ANY REPAIR RETURNED WITHOUT A RETURN MATERIAL AUTHORIZATION NUMBER (RMA#) WILL BE REFUSED!</u>

AC111/115/125 PARTS LIST



[Model AC125]

[Model AC111]

AC111/115/125 PARTS

#1	AC2210	CABINET FOR AC111 (FRONT LOAD)
	AC2210.1	CABINET FOR AC115 AND AC125 (REAR LOAD)
#2	AC6041.3	TICKET BIN
#3	AC6041	DELTRONIC LABS DL-1275 TICKET DISPENSER
#4	AC1093	LOCK & KEY
#5	AC5080	SCREW-IN "T" HANDLE ASSY.
#6	AC9002	COINCO MAG52SA (PRO) BILL VALIDATOR
#7	AC1065	MAIN LOGIC BOARD w/ LCD DISPLAY - <i>NEW!</i>
	AC1066	AC-01 POWER MODULE BOARD - <i>NEW!</i>
#8	AC1069	FULL-FACE LEXAN FRONT
#9	AC2060-20	"OUT-OF-SERVICE" LED
#10	AC6041.4	STAINLESS STEEL FRONT (AC125 ONLY)
	AC6041.5	TICKET DISPENSER WIRING HARNESS
	AC9002-H	COINCO VALIDATOR WIRING HARNESS
	AC2060-01	AC POWER CORD

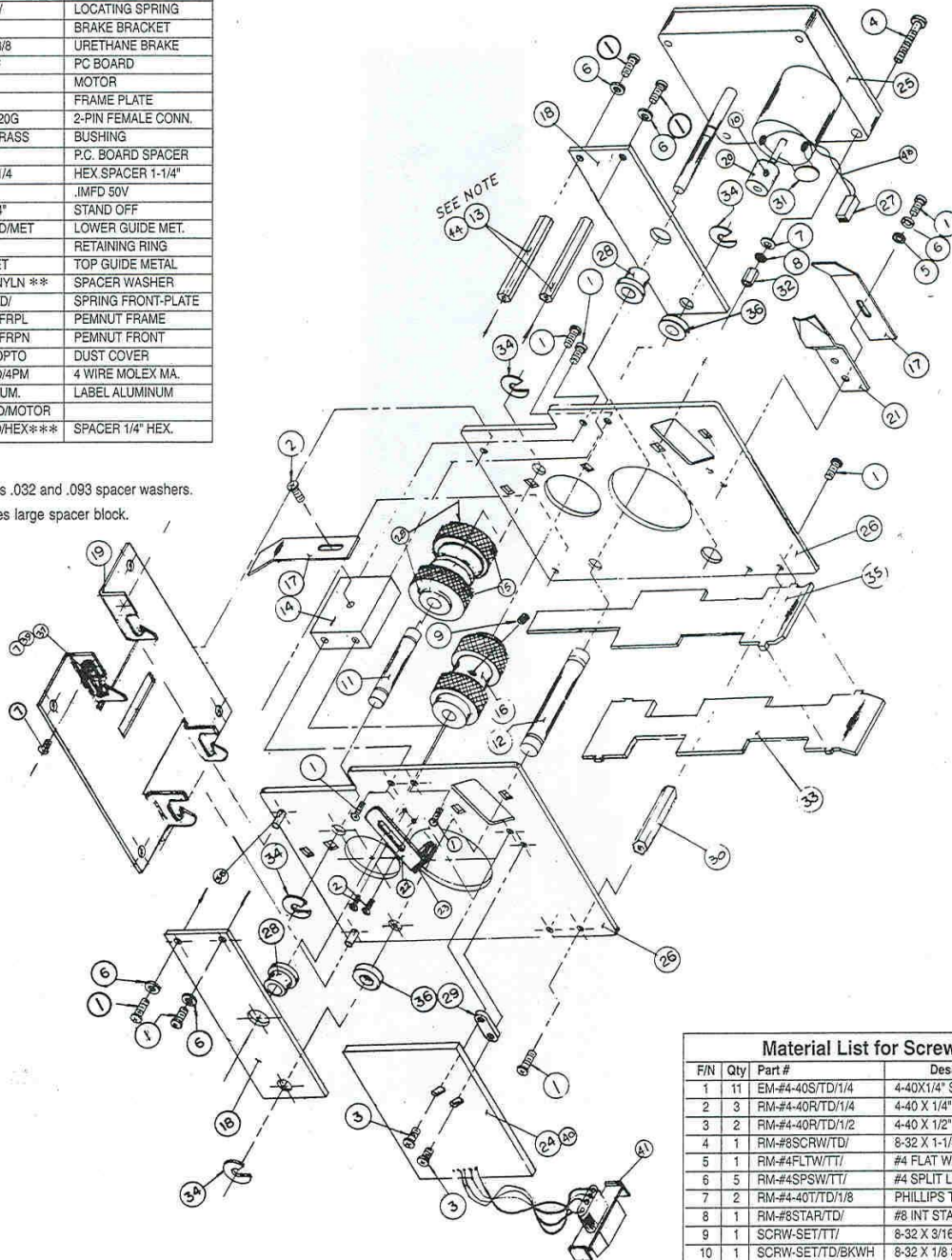
DL-1275 TICKET DISPENSER ASSEMBLY PARTS

Details of Parts			
F/N	Qty	Deltronic Labs P/N	Name
11	1	SHFT-IDLRLR/TD/	IDL. ROLLER SHAFT
12	1	RM-SFTMTR/TD/	MOTOR PIVOT SHAFT
13	1	SPAC PIVBLK/TD/4HOL	PIVOT BRACKET SPAC
14	1	RM-SPCPB/TD/	SPACER BLOCK
15	2	RM-RLRIDJ/TD/VALD	IDLER ROLLER
16	1	RM-RLRDRV/TD/VALD	DRIVE ROLLER
17	2	SPRG-TENSN/TD/	TENSION SPRING
18	2	RM-BKTPVT/TD	MTR PIVOT BKT.
19	1	RM-PANLFT/TD/NOPM	FRONT PANEL
20	1	RM-WHLBRK/TD/	BRAKE WHEEL
21	1	SPRG-LOCAT/TD/	LOCATING SPRING
22	1	RM-BKTBRK/TD/	BRAKE BRACKET
23	1	RM-BKTUB/TD/3/8	URETHANE BRAKE
24	1	PCBD-1275/TD/ *	PC BOARD
25	1	RM MOTOR/TD/	MOTOR
26	2	RM-PLATFR/TD	FRAME PLATE
27	1	RM-CONN2P/TE/20G	2-PIN FEMALE CONN.
28	4	BRNG-F312/TT/BRASS	BUSHING
29	1	SPAC-PCBD/TD/	P.C. BOARD SPACER
30	1	SPACHEX/TD/1-1/4	HEX SPACER 1-1/4"
31	1	RM .1M/TT/50V	JMFD 50V
32	1	SPAC-HEX/TD/1/4"	STAND OFF
33	1	GUID-BOTTOM/TD/MET	LOWER GUIDE MET.
34	4	RING-E25RT/TT/	RETAINING RING
35	1	GUID-TOP/TD/MET	TOP GUIDE METAL
36	2	PULY-SP212/TE/NYLN **	SPACER WASHER
37	2	SPRG FRONTP/TD/	SPRING FRONT-PLATE
38	4	RM-PEMNUIT/TD/FRPL	PEMNUIT FRAME
39	2	RM-PEMNUIT/TD/FRPN	PEMNUIT FRONT
40	1	COVR-H21A/TD/OPTO	DUST COVER
41	1	CONN MOLEX/TD/4PM	4 WIRE MOLEX MA.
42	1	RM-LABEL/TD/ALUM.	LABEL ALUMINUM
43		WIRE-REDBLK/TD/MOTOR	
44	2	SPAC-PIVBRK/TD/HEX***	SPACER 1/4" HEX.

* Order by Model #

** Note: F/N #36 replaces .032 and .093 spacer washers.

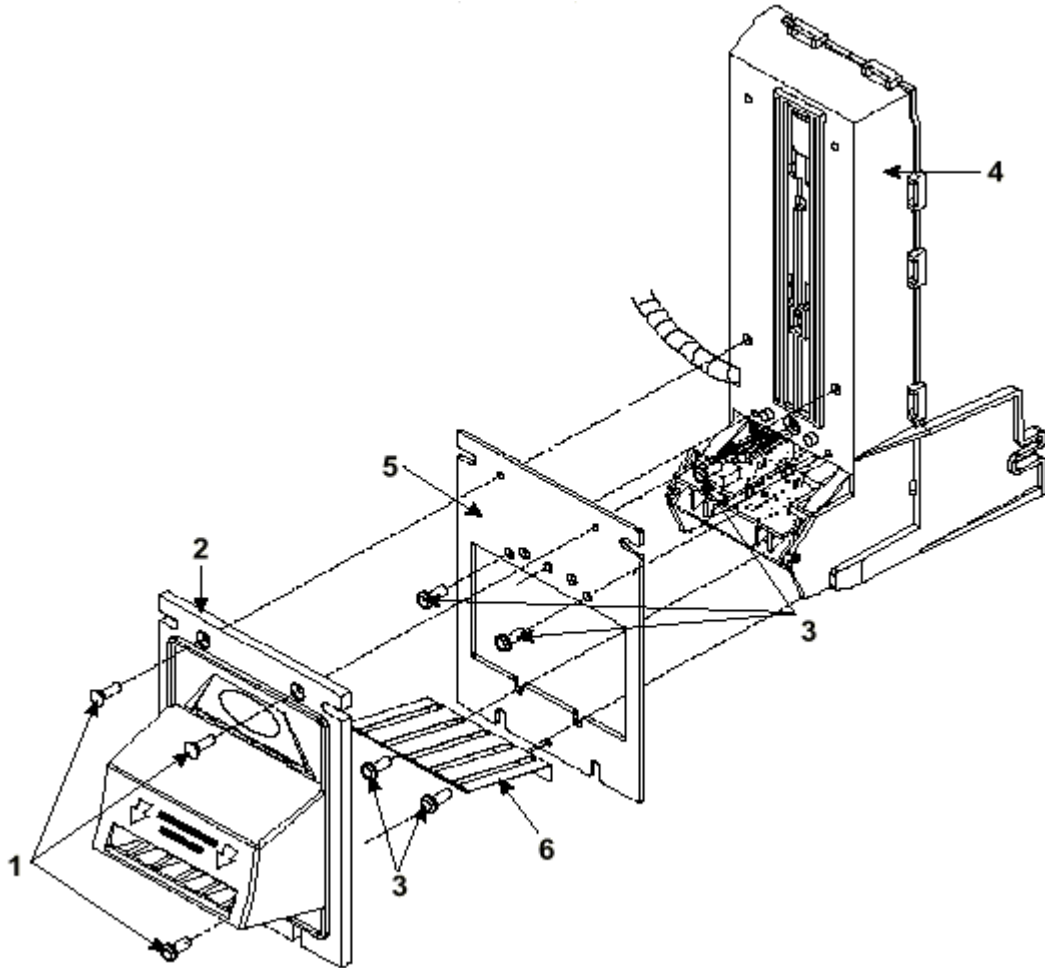
*** Note: F/N #44 replaces large spacer block.



Material List for Screws			
F/N	Qty	Part #	Description
1	11	EM-#4-40S/TD/1/4	4-40X1/4" SCREW
2	3	RM-#4-40R/TD/1/4	4-40 X 1/4" WASHER HE
3	2	RM-#4-40R/TD/1/2	4-40 X 1/2" WASHER HE
4	1	RM-#8SCRW/TD/	8-32 X 1-1/4"
5	1	RM-#4FLTW/TT/	#4 FLAT WASHER
6	5	RM-#4SPSW/TT/	#4 SPLIT LOC. WASHER
7	2	RM-#4-40T/TD/1/8	PHILLIPS TRUSSHEAD
8	1	RM-#8STAR/TD/	#8 INT STAR WASHER
9	1	SCRW-SET/TT/	8-32 X 3/16" SET SCREW
10	1	SCRW-SET/TD/BKWH	8-32 X 1/8 SET SCREW

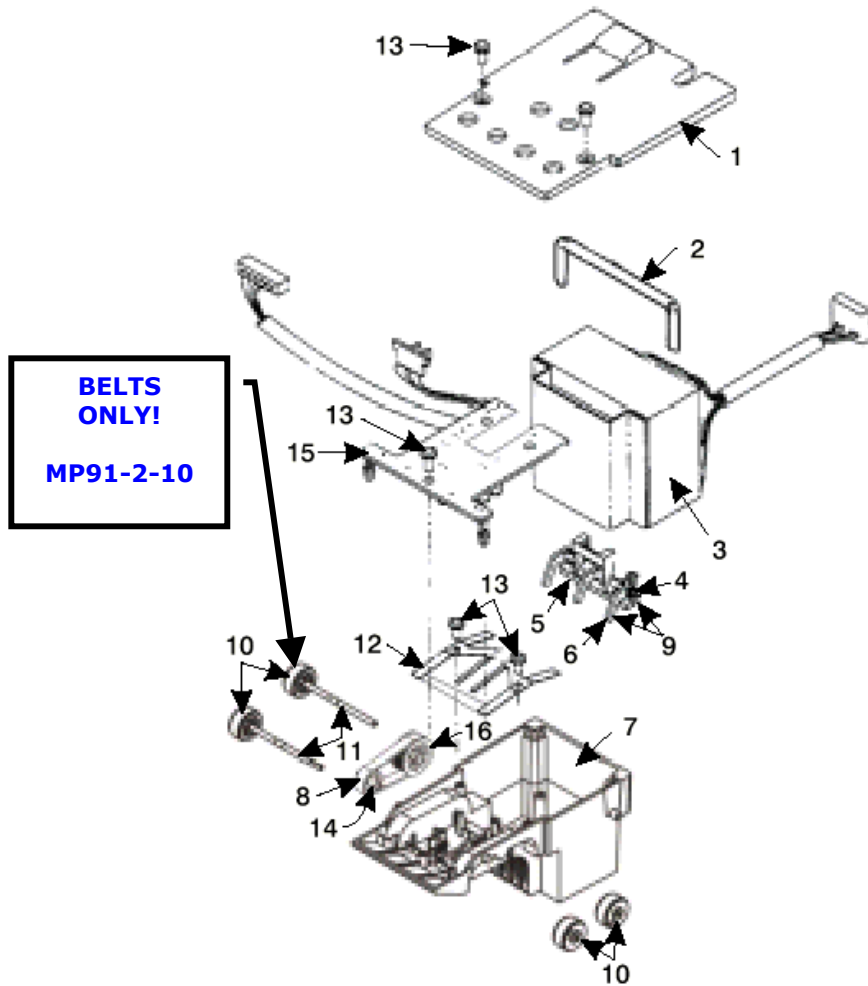
COINCO PARTS LIST

MOUNTING ASSEMBLY PARTS BREAKDOWN



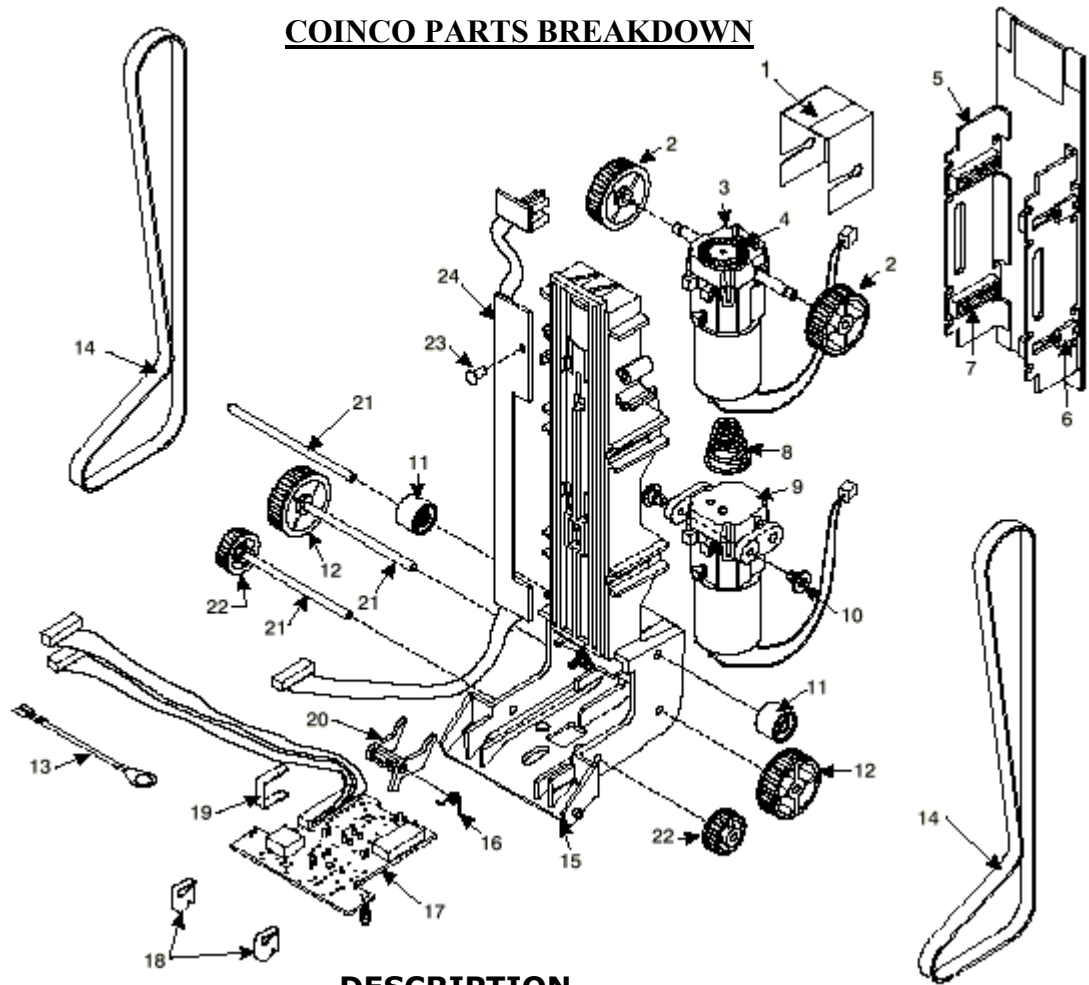
<u>PICTURE #</u>	<u>PART #</u>	<u>DESCRIPTION</u>
#1	MP90-1-1	Machine Screw
#2	MP90-1-2	"Snack Mask" Black Plastic
#3	MP90-1-3	Machine Screw
#4	MP90-1-4	Main Frame, Plastic
#5	MP91-1-5	Mask Gold Mounting Bracket
#6	MP90-1-6	Bill grounding spring
#7	MP91-1-7	Machine Nut

COINCO PARTS BREAKDOWN



<u>PICTURE #</u>	<u>PART #</u>	<u>DESCRIPTION</u>
#1	MP90-2-1	Bottom Lower Housing Cover
#2	MP90-2-2	Transformer holding hose
#3	MP90-2-3	120VAC Transformer
#4	MP90-2-4	Lower Spring, Anti-Cheat Lever
#5	MP91-2-5	Lower Mounting, Anti-Cheat Lever
#6	MP90-2-6	Lower Anti-Cheat Lever
#7	MP90-2-7	Lower Housing Assembly, Complete
#8	MP90-2-8	Belt, Center
#9	MP90-2-9	Lower Anti-Cheat Assembly, Complete
#10	MP90-2-10	Plastic Wheels & Rubber Belts
#10	MP91-2-10	Rubber Belts ONLY (Each)
#11	MP90-1-11	Shaft, Drive
#12	MP90-2-12	Spring, MAG
#13	MP90-2-13	Screw, #4, Plastic
#14	MP90-2-14	Roller, Idler
#15	MP91-2-15	Sensor Board, Lower
#16	MP91-2-16	Pulley & Hub Assembly, Complete

COINCO PARTS BREAKDOWN

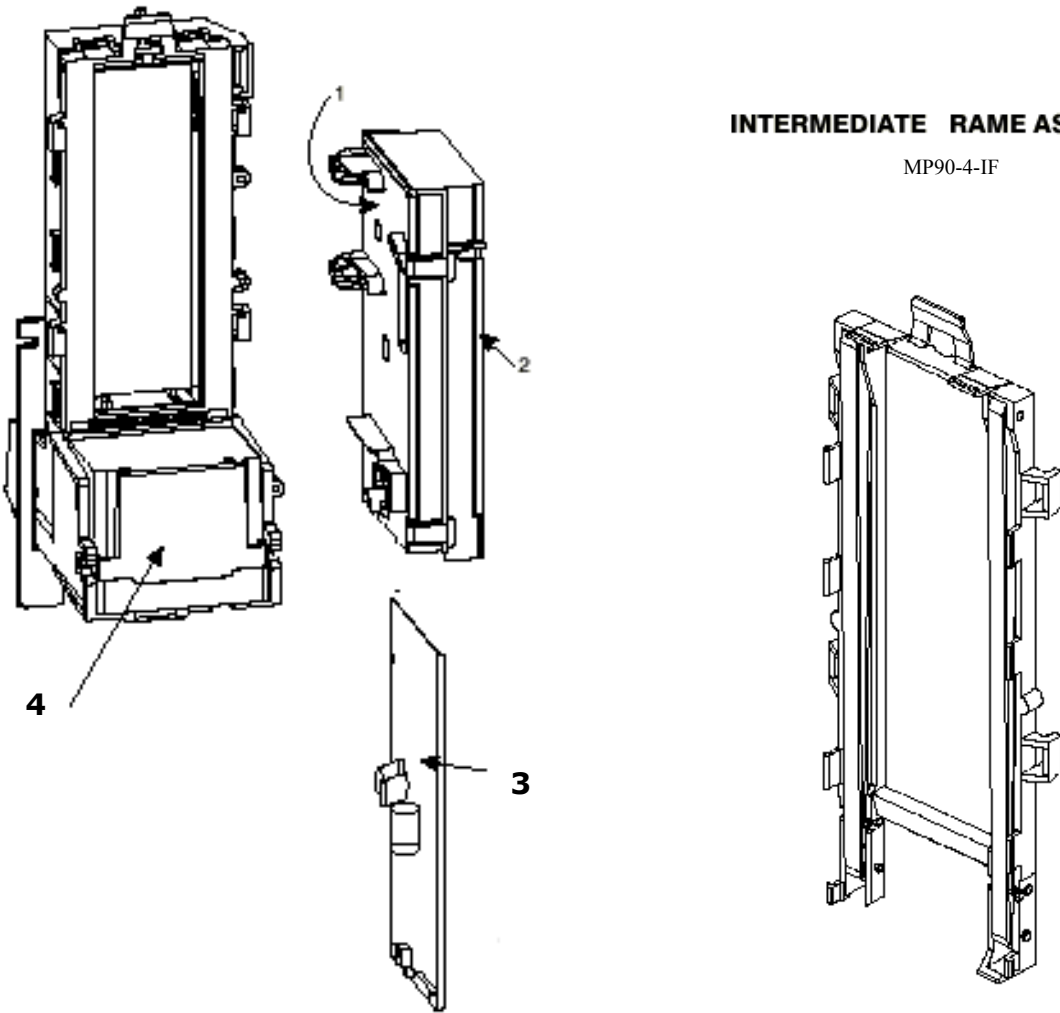


<u>PICTURE #</u>	<u>PART #</u>	<u>DESCRIPTION</u>
#1	MP90-3-1	Dust Cover
#2	MP90-3-2	Upper Transport & Hub Assembly, Complete
#3	MP91-3-3	Motor, Transport & Gear Assembly Complete
#4	MP90-3-4	Wheel, Encoder
#5	MP90-3-5	Stacker, Push-Plate Assembly
#8	MP90-3-8	Spring, Belt Tension
#9	MP90-3-9	Motor, Stacker Assembly Complete
#10	MP90-3-10	Pulley, Idler
#11	MP90-3-11	Lower Transport Pulley & Hub Assembly
#13	MP90-3-13	Belt, Upper Housing
#14	MP90-3-14	Frame, Upper Housing
#15	MP91-3-15	Sensor Board, Upper Housing
#16	MP90-3-16	Upper Board Clip
#17	MP90-3-17	Wire Clip
#18	MP90-3-18	Shaft, Pulley
#19	MP90-3-19	Shaft, Wheel
#21	MP90-3-21	Board, Stacker

COINCO PARTS BREAKDOWN

INTERMEDIATE RAME ASSEMBLY

MP90-4-IF



PICTURE #

- #1
- #2
- #3
- #4
- #5

PART #

- MP90-4-1
- MP91-4-2
- MP90-4-3
- MP90-4-4
- MP90-4-IF

DESCRIPTION

- Lid, Logic board Box
- Body, Logic board Box
- Main Logic Board
- Sticker, Serial Number / Warranty
- Intermediate Frame with Bearings