

SC CONVERSION KITS

Allows you to convert Older System 500/System 600 Bill Acceptors to Mars or Coinco

for System 500, 500-E & 600-FST Bill Acceptors



Standard Change-Makers introduces the **SC-Conversion Kit** - that allows for a total conversion of older model System 500, System 500-E, System 600-FST and System 600-EF bill acceptors to an OEM bill acceptor, such as Coinco Vantage or Mars (CPi Talos) downstacker models. This kit is designed for easy installation and the **SC Conversion Controller** unit provides the same programming, diagnostic and audit feedback as your current System 500 or 600 acceptor.

NEW SC-Conversion Kit features Remote Notification!
An Ethernet connection is included - when plugged into your network router, allowing access to the internet - you can program it to send texts or emails. Including Out of Service Alerts, Low-Level Alarms & Audit Reports!!!

The new SC-Conversion Kit is intended for machines that have been in service for a long period of time and the older bill acceptor requires more frequent maintenance or repairs to remain operational, but the cabinet, hoppers and other equipment are still operating efficiently.

The SC-Conversion Kit includes everything you need to add a new MEI or Coinco bill acceptor in the place of an older System 500/600 bill acceptor and stacker unit. The finished conversion will look like the SC60 model shown (right), providing a nice, clean finish with a stainless steel cover plate and "Out of Service" Indicator light.



The kit is available with your choice of either a Mars (CPi) Talos or a Coinco Vantage Bill Acceptor.

The SC Conversion Kit includes:

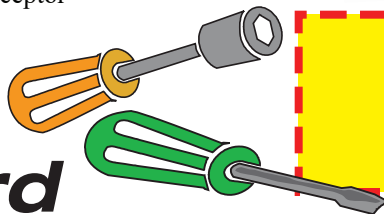
- External Stainless Steel Cover Plate/Bezel
- Internal Bill Acceptor Mounting Bracket
- SC-Conversion Controller - with LCD display & push buttons
- 24V DC New Power Supply (for SC-Conversion Controller)
- MDB Universal Bill Acceptor cable
- 28V "Out of Service" Indicator Lamp harness
- Installation Hardware - assorted nuts, washers, and tie-wraps
- Flat cable for connection to MEI Cashflow 330 Coin Acceptor (if needed)
- Installation Instruction Sheet & Programming Flowchart



The SC-Conversion Controller (left) features a LCD display that provides visual instructions and feedback via a menu-driven system similar to our Expanded Function Module. The Controller acts like the System 500 Keypad or the System 600 Data Terminal in providing most of the programming, diagnostic and audit feedback you're familiar

And your choice of one of the following:

- CPi (Mars) Talos Series MDB Bill Acceptor - or -
- Coinco Vantage MDB Bill Acceptor



SC-Conversion Kits:
Kit #4K01328-FI (w/ Mars)
Kit #4K01327-FI (w/ Coinco)



3130 N. Mitthoeffer Road Indianapolis, IN 46235-2400
 Phone: 317.899.6966 Fax: 317.899.6977

1-800-968-6955

www.standardchange.com

Thank you for purchasing the SC-CONVERSION System 500/600 Conversion Kit. This Kit is available in two different versions:

Part # 4K01328-FI – SC-CONVERSION Conversion Kit with CPi (Mars) T-7 Talos Downstack Bill Acceptor

Part # 4K01327-FI – SC-CONVERSION Conversion Kit with Coinco Vantage Downstack Bill Acceptor

The basic parts of the kits are the same. The Bill Acceptor included is dependent on which part number you ordered. Please check to be sure that you received the proper bill acceptor before proceeding.

INTRODUCTION

The SC-CONVERSION KIT allows you to modify your existing Standard Change-Makers SC Series change machine that currently has one of the following bill acceptors installed:



- ▶ System 500 (Black cover plate) *circa 1987-1993*
- ▶ System 500-E (Blue cover plate) *circa 1993-1998*
- ▶ System 600-FST (Red cover plate) *circa 1998-2006*
- ▶ System 600-EF (White/US flag cover plate) *circa 2006 - 2012*

The SC-CONVERSION Conversion Kit works well with two bill acceptors compatible with the MDB interface: CPi (Mars) Talos series or Coinco Vantage series. The bill acceptor must be configured for the down-stacking option when used in the conversion kit. The SC-Conversion Kit comes supplied with your choice of these two bill acceptors.

The **SC-CONVERSION Controller** controls the entire machine and interfaces between the coin hopper(s) and the bill acceptor. You can dispense any type of coins, including tokens - providing that you have the proper hopper mechanism configuration for the diameter and thickness of the coin/token.

The installation process does not require a strong technical background and only a few basic tools are required. You should allow approximately 30-60 minutes to perform the conversion kit installation. Your subsequent installations will take less time.

The SC-CONVERSION KIT offers all the same functions that were available in the original Standard bill acceptor, including, a full detailed audit available on the SC-Conversion Controller display or printed via the Portable Audit Printer Kit (optional).

TOOLS REQUIRED:

- 11/32" Nut Driver or Socket
- 3/8" Nut Driver or Socket
- 7/16" Nut Driver or Socket
- Phillips #2 Screwdriver
- Needle Nose Pliers

If you have any questions prior to or during the installation of this kit, please contact our SERVICE DEPARTMENT at Standard Change-Makers, Inc. – by calling 1-800-968-6955 – Monday through Friday: 8:30 AM – 4:30 PM (Eastern Time)

To begin the conversion, we should check to be sure you have everything needed in your Conversion Kit...



The **SC-CONVERSION KIT** consists of the following components (Please check to be sure you have all these components prior to starting the conversion of your change machine):

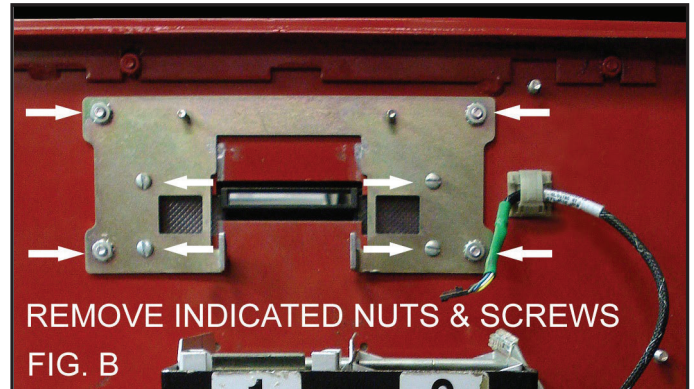
- (#1) External Stainless Steel Cover Plate/Bezel (MEI = Part #2F04830) (Coinco = Part #2F04918)
- (#2) Internal Bill Acceptor Mounting Bracket (MEI = Part #2F06138) (Coinco = Part #2F06137)
- (#3) SC-CONVERSION Controller - with green LCD display & touch buttons (Part #5A00221)
- (#4) MEI #T632-D7MUS MDB Bill Acceptor (Part #5V00230)
- or -
- (#4) Coinco #VX63D45US00 Bill Acceptor (Part #5V00359)
- (#5) 24V DC (New) Power Supply (Part #5P00117)
- (#6) MDB Bill Acceptor cable (Part #4C00263)
- (#7) 28V “Out of Service” Indicator Lamp harness (Part #4C00300)
- (#8) Installation Hardware - plastic bag with assorted nuts, washers, and tie-wraps
- (#9) Flat cable for connection to MEI Cashflow 330 Coin Acceptor (if necessary) (Part #4C00196)
- (Not Shown) Bill Insertion Decals for Cover Plate
- (Not Shown) Installation Instruction Sheet (Part #8M00619)

STEP 1 - REMOVING COMPONENTS:

NOTE: Take the audit reading before removing the bill acceptor. You will not be able to get an accurate audit after removing the System 500/600 bill acceptor. You may refer to the System 600 Owner’s Manual (Part #8M00341 – Section 4.4), found under the SUPPORT tab on the Standard Change-Makers web site (www.standardchange.com)

1. Shut main power OFF by unplugging machine from the wall outlet, or turning power off at the electrical panel (hard wired).

2. Disconnect all wires and cables from the System 500/500-E/600-FST/600-EF bill acceptor. Be sure to keep the Power Cable (GREEN wrap on ends – connects to 40-watt Power Supply), as you will re-use this cable with the Conversion Kit.
3. Pull the stacker down by pressing the lever under the stacker box. Disconnect the cables from the stacker and remove the stacker from its mounting brackets.
4. Remove the bill acceptor. To remove, simply pull the black plastic clamps out and pull the unit up and back from the mounting bracket.
5. Remove the front black bezel held in place with (4) big slot screws. **(See Fig. B)**
6. Remove the internal bracket held in place with four 7/16" nuts. **(See Fig. B)**
7. Remove the keypad and its bracket. (Recommended: Keep the communication wire as a spare for future use.)
8. You may also choose to remove the Stacker Mounting Brackets. To do so, simply remove the 7/16" nuts.

**NOTE: REPLACING THE LEXAN™ DECAL:**

If you decide to change the Lexan™ decal of the machine, you will have to remove the coin bezel and the lock cylinders as well. Remove the old decal or vinyl while making sure there is no residue of glue remaining. Apply a new decal carefully. Make the necessary cuts. Re-install the lock cylinders and the coin bezel.

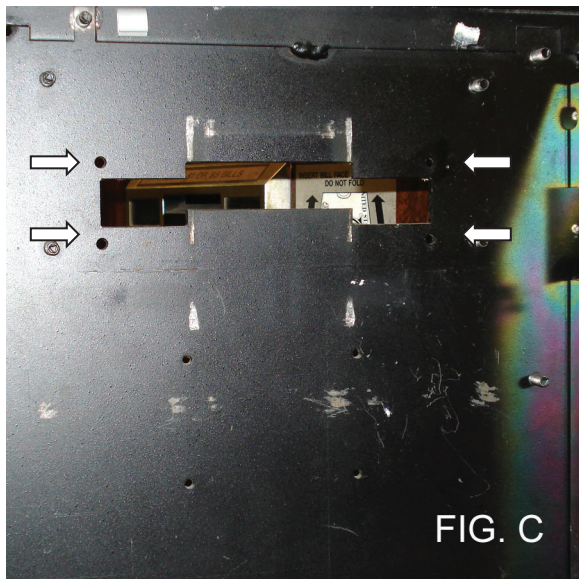
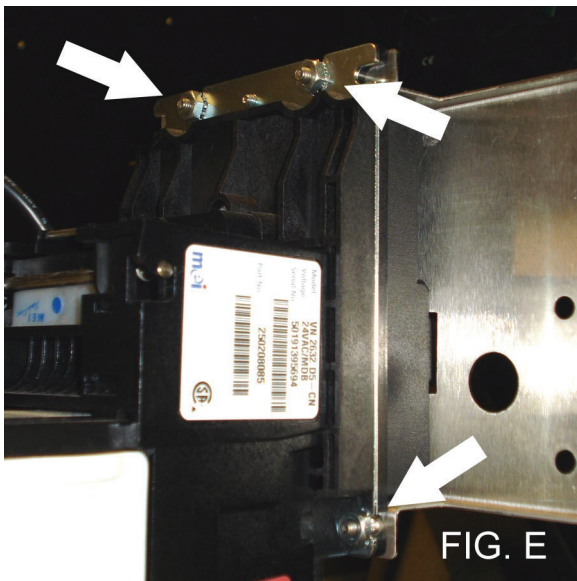
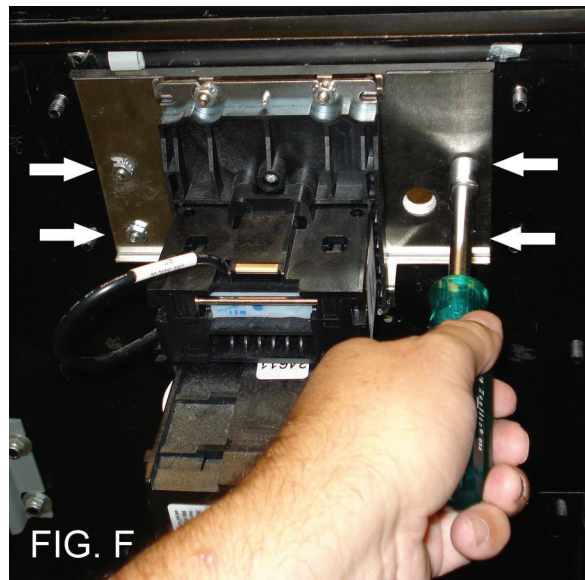
STEP 2 – INSTALLING CONVERSION COMPONENTS:

FIG C – Shows the old SC Series Bill Acceptor Assembly and Mounting Bracket removed from the cabinet, and the 4 holes where the External Cover Plate studs will fit through

FIG D – Shows the Stainless Steel External Mounting Plate installed & OOS Indicator Lamp wires inserted in opening

1. Take out all the SC-CONVERSION KIT components from the box.

2. Locate the External Cover Plate (#1). Install this plate on the outside the machine door (front loads) or on the stainless steel faceplate (rear loads), by placing the studs through the four existing holes from removal of the SC Series acceptor removal (See FIG. C).
3. Locate the small 28-volt “Out of Service” Indicator Lamp and harness (#7). Pass it by the round hole of the Stainless Steel Exterior Cover Plate (See FIG. D)
4. Install the MEI or Coinco Bill Acceptor (#4), using the 11/32” nuts to the steel Internal Mounting Bracket (#2) (See FIG E).

**FIG. E****FIG. F****FIG. E – Attach the Bill Acceptor to the Internal Mounting Plate using (4) 11/32” nuts (arrows show 3 of 4 locations)****FIG F – Attach completed Bill Acceptor & Mounting Bracket assembly to the studs from the External Cover Plate**

5. Affix the Internal Mounting Bracket & Bill Acceptor Assembly in place, matching up the threaded studs with the holes in the Internal Mounting Bracket (See FIG F).
6. Tight both plates together with the 3/8” nuts (included).
7. Place the **SC-CONVERSION CONTROLLER** (#3) where the keypad and its support were, using the nuts and washers (See FIG G).
8. Pass the cables making sure you do not damage them with the continuous opening of the door or the hopper tilting or any other moving parts. The cables are: (1) MDB Bill Acceptor Communication cable, (2) “Out of Service” Indicator Lamp and (3) Flat Coin Acceptor Ribbon cable (only if you have a Coin Acceptor installed in your machine – See Instructions below).
9. Connect all the cables to the **SC-CONVERSION CONTROLLER** (#3) into the indicated locations on the **SC-CONVERSION CONTROLLER** labels, including the original Power Supply cable (green ends) with flat black connector that is also plugged into the 40-watt power supply.

(See FIG H on Page 5).

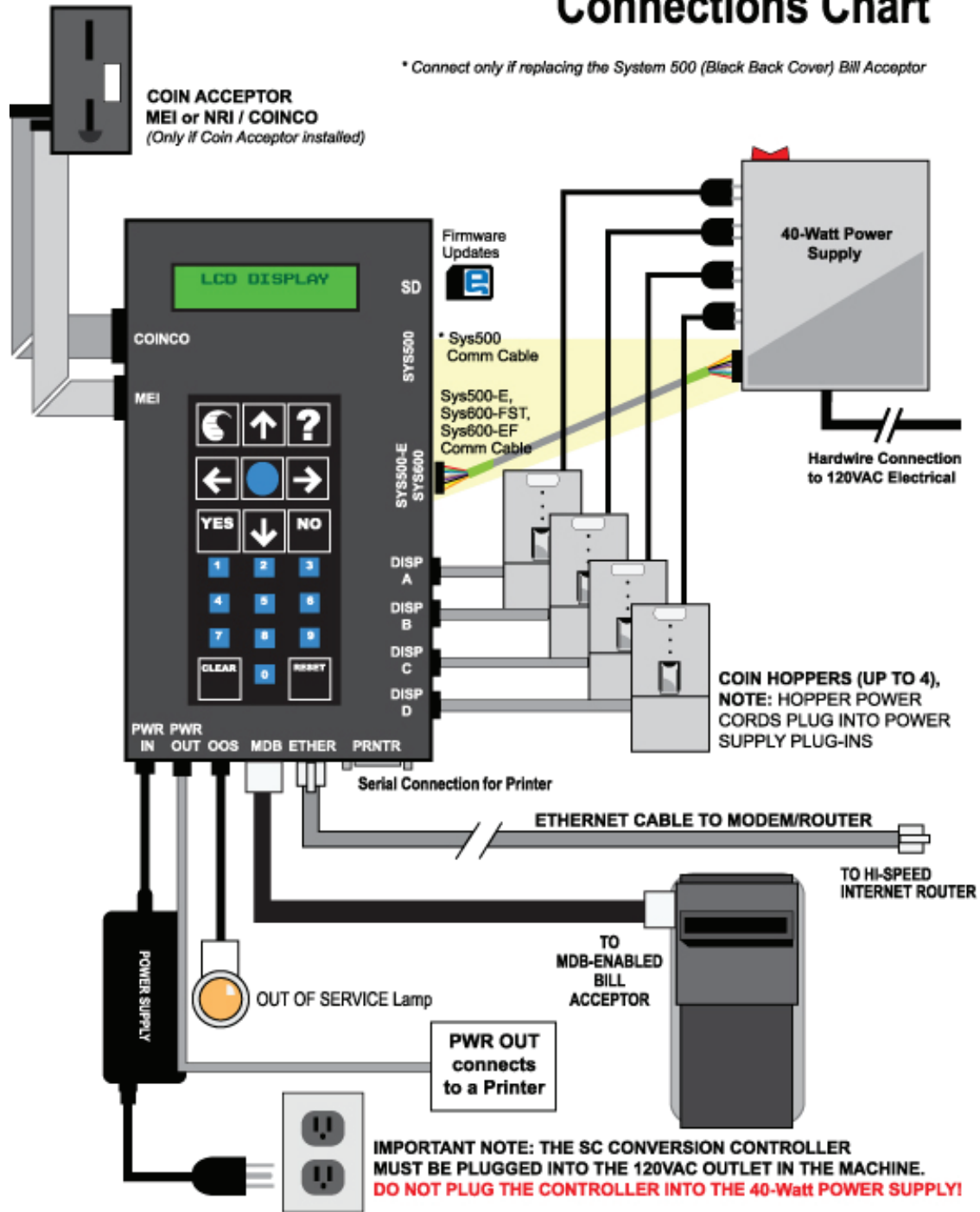
10. The new 24VDC Power Supply (#5) connects directly into the 120-volt outlet in the machine. **IMPORTANT NOTE:** If you do not have a separate AC outlet in your machine, you will have to install one.

**FIG. G**

- 11. Connect all the Hopper Communication Cables (up to 4), in the appropriate location on the underside of the SC-CONVERSION CONTROLLER. Be certain that you follow the Hopper Location Label (A, B, C, D) as shown on the hopper labels. Hopper A plugs into the DISP A location on the Controller, etc.

FIG. H

SC Conversion Kit Connections Chart



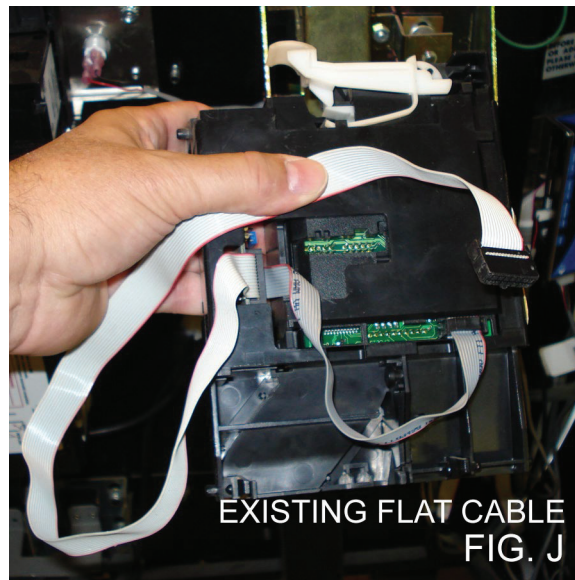
*** If your Change Machine does not have a Coin Acceptor – Proceed to Step 3. ***

FOR MACHINES EQUIPPED WITH COIN ACCEPTOR:

NOTE: The System 500-E through System 600-EF have used the Mars (MEI) Cashflow 330 Electronic Coin Acceptor for many years. If you have a different model, please contact our Service Dept (1-800-968-6955) about any other model of coin acceptor.



1. Remove the Coin Panel from its mounting bracket.
2. On the backside of the Coin Panel you will see two Flat Ribbon Cables (See FIG J). One is connected to the 10-PIN connector at the bottom, and the other was connected to the SC Series Bill Acceptor. The other end of this cable is connected to a board in the Coin Panel. Unplug the 10-PIN connection from the back. You will not use this cable with the SC-CONVERSION Conversion Kit.
3. Using the supplied Flat Ribbon Cable (#9), connect one end to the same 10-PIN connector and the other end will be connected to the 10-PIN Connection on the SC-CONVERSION Controller (#3)
4. Using a rubber band or one of the supplied wire ties, secure the Flat Ribbon Cable with other cables being sure not to crimp or twist, and leaving enough slack to allow the door to open completely.
5. Replace the Coin Panel back into its Mounting Bracket.



Once all components have been installed and cables connected, you are ready to proceed to Step 3.

STEP 3 – PROGRAMMING THE CHANGE MACHINE:**PROGRAMMING THE COINCO VANTAGE BILL ACCEPTOR:**

If you are using a Coinco bill acceptor, it should ship from the factory with default settings similar to the Mars unit describe above. If you would prefer to change any of these default settings - consult the Quick Reference Guide included with the bill acceptor.

After you have installed the SC-CONVERSION CONTROLLER connections, and programmed your bill acceptor, you are ready to power up your change machine.

PROGRAMMING THE CPi (MARS) TALOS BILL ACCEPTOR:

All bill acceptors are tested prior to being boxed to be sure they accept all four denomination bills. Programming which bills to accept is done via a programming coupon provided with the bill acceptor. See Appendix A for a copy of this programming coupon and the proper manner to fill it out.

IMPORTANT NOTE: Before attempting to program the CPi Talos acceptor with the coupon – make sure that the coupon you use is the exact same size as a dollar bill. Some copiers reduce the image when you make copies and a coupon that is too short or too long will not program properly.

BEFORE APPLYING POWER YOU YOUR MACHINE, PLEASE READ THIS: The original Power Supply, also referred to as the 40-Watt Power Board, now only serves to provide power for the coin hoppers only. It does not provide power to the SC-Conversion Kit. In order for your machine to operate properly, the main switch must be turned on AND the new power supply must be plugged into the other AC outlet. This means, when you power down the machine, you must unplug the new power supply and turn off the main switch as well.

STEP 4 – POWERING UP YOUR MACHINE:

Apply POWER to your change machine by flipping the breaker or turning on the main power switch, and plugging in the new Power Supply into the 120 VAC outlet.

After you apply power to the machine, you will experience a 3-5 second delay before you hear the bill acceptor motor activate and the indicator lights activate. The LCD display on the SC-CONVERSION CONTROLLER will turn on, then the display will show the words “**OUT OF SERVICE**” to indicate it is ready.

At this point, you should put some coins in the hopper(s) and insert individual bills and coins and check the amount dispensed for proper change.

EXCEPTIONS ON THE CABINET DESIGNS:

SC90 AND SC100 SERIES MACHINES REQUIRE CABINET MODIFICATION

The SC90 (SC93, SC94, SC93-TOK, SC94-TOK, etc.) and SC100 (SC101 & SC102) Series changer require a small cabinet modification when installing the SC-CONVERSION KIT.

In order to install the down-stacking MEI or Coinco bill acceptor in these machine models, you must cut the lip of the cabinet – where the door meets the frame of the opening – because the bill acceptor is mounted higher on the door, and there is insufficient clearance for the new bill acceptor models.

The modification requires you to install the External Cover Plate and Internal Mounting Bracket with the Bill Acceptor attached. Closing the door carefully – mark the area where the top of the bill acceptor meets the door frame. Using a metal saw or a high-speed rotary tool (such as a *Dremel*), make two vertical cuts in the lip of the cabinet. Once the cuts are finished, use a good pair of pliers pry the lip back into the cabinet to provide the needed clearance (See **FIG M**).

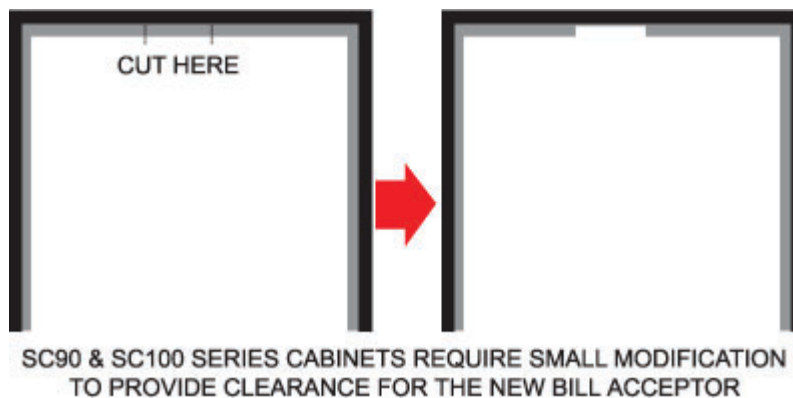
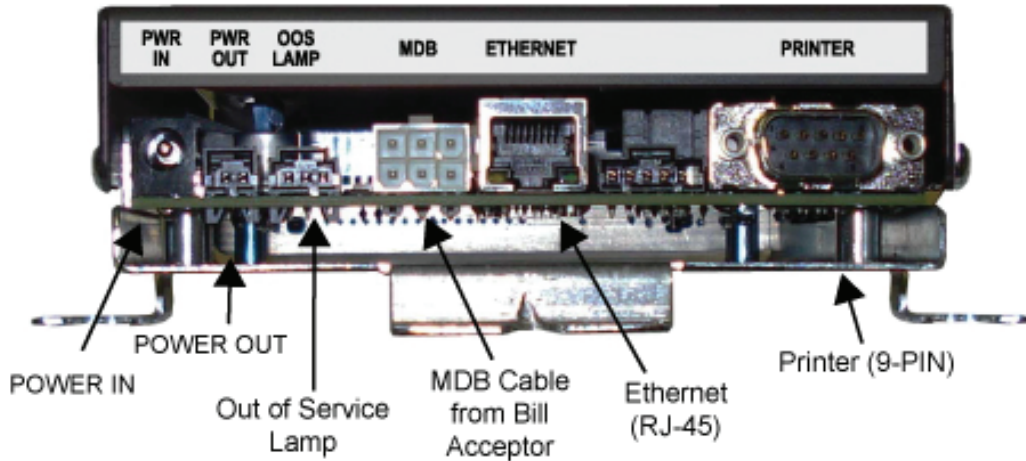


FIG. M

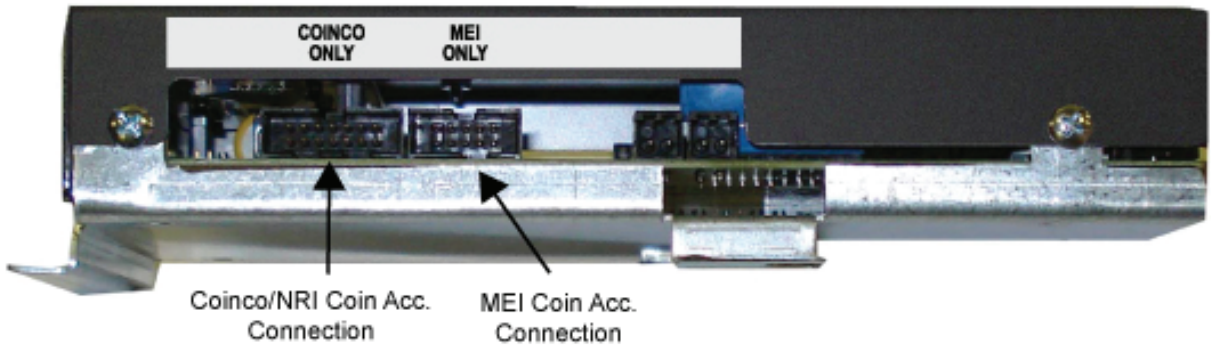
Congratulations! You have completed the installation of your SC-CONVERSION Conversion Kit. If you have any problems with the operation of the machine during the testing phase, please re-read the instructions to be sure that all installation operations have been completed properly. Check to be sure that your cables are installed in the proper places and connected properly. If all of this checks out, please contact the Standard Change-Makers, Inc. Service Dept. at 1-800-968-6955.

SC CONVERSION CONTROLLER CONNECTIONS

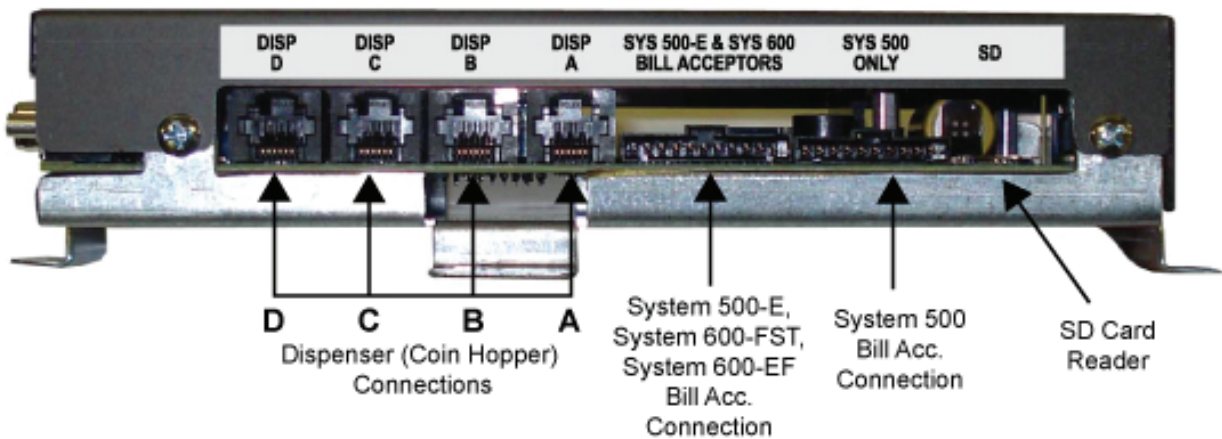
SC Conversion Controller - BOTTOM SIDE



SC Conversion Controller - LEFT SIDE



SC Conversion Controller - RIGHT SIDE



APPENDIX A – CPi T6 TALOS SERIES PROGRAMMING COUPON (original included with your kit)
 DO NOT USE THE COPY BELOW! USE ONLY THE ORIGINAL SUPPLIED IN THE BILL ACCEPTOR BOX, BUT FILLED
 IN AS SHOWN BELOW

COUPON SECTIONS

SECTION 1 - BILL WAYS

- 1 - Face up in one direction (green seal first)
- 2 - Face up in either direction
- 4 - Face up or down in either direction

SECTION 2 - BILL ENABLES

Fill in on or off to enable or disable a bill.
\$50 and \$100 - T8 Models Only
 Fill in on or off to enable or disable a bill.

SECTION 3 - PULSE WIDTH

Sets the width of the pulse, check with your machine manufacturer for details.

SECTION 4 - PULSES PER DOLLAR

Credit pulses per dollar accepted, check with your machine manufacturer for details.

SECTION 5 - INTERFACE MODE

Harness Enable - requires an input from the controller to enable and accept bills.
Always Enable - allows for acceptance at all times, a host or controller cannot disable the unit.

SECTION 6 - ACCEPTANCE MODE

Mode 0 is default. Increasing Acceptance Mode increases security, but may also impact performance. Please contact CPi Technical Support for details.


FREE VEND COUPONS AND BILL PROGRAMMING

Follow the same process to program the Talos with bills or free vend coupons, but note that the LED codes are slightly different:

Flashes	Meaning
10	The bill or vend coupon has been enabled successfully
7	The bill validator was unable to read the bill or vend coupon. Try again.
3	The bill or vend coupon has been disabled

OTHER DOCUMENTATION

All support documentation, including a downloadable copy of this coupon, can be found at Cranepi.com/support.



Scan

Log in

Tap Support

And select My Library

Add a Product

Then Use the filters or scroll to find Talos

Tap

View Downloads

Then Choose your Document

THE COUPON ABOVE IS THE PROPER WAY TO FILL IN THE COUPON FOR THE CPi T6 DOWNSTACKER BILL ACCEPTOR PROVIDED IN THE SC CONVERSION KITS

EXAMPLE ONLY

Print actual size
66mm

T6/T8 Coupon

Sections 1-5 must be filled in, section 6 is optional

Bill ways accepted

1 Bill enables on off

2 \$1 \$2 \$5 \$10 \$20 \$50 \$100

\$50 & \$100 for T800 models only

Pulse width

3 Gaming Short Vending Long

Pulses per dollar

4 1 2 3 4

Interface mode

5 Harness Enable Always Enable

Acceptance mode

6 Mode 0 Mode 1 Mode 2 Mode 3

CPi

Cut carefully on the dotted line. The coupon should be the same size as an American bill when complete.