Atronic
Great games Great people

Ticket In - Ticket Out (TITO)

An Atronic machine that is configured for TITO can vend tickets (coupons), from a Thermal Ticket printer, instead of **or** in addition to coins (Tokens), from a Hopper, when the CASH OUT Button is pressed. These tickets can be redeemed either by inserting them into another machine configured for TITO or by "Cashing In" the ticket with Casino personnel. When a ticket is inserted into an Atronic machine configured for TITO, the appropriate amount of credits will be booked to the machines Credit Meter upon ticket validation. If there are credits left over, which are less than the denomination of the machine, a **CHANGE TICKET** will be vended in the amount of left over credits immediately after ticket validation.

Example: CHANGE TICKET
A ticket for the amount of $4.53 is inserted to an Atronic machine with a denomination of $.05. The machine will book $4.50 to the credit meter and will immediately print a ticket for $.03.

Machine Requirements for TITO

- Thermal Ticket Printer;
  Atronic currently uses Thermal Ticket Printers from Seiko Instruments, and TransAct - Ithaca.

- Accounting System Brackets and extensions for Thermal Ticket Printers;
  Specialized accounting system brackets and a "Sandwich" spacer bracket for the Top Box are required for Thermal Ticket Printer installations.

- P-Level or higher Atronic Main software

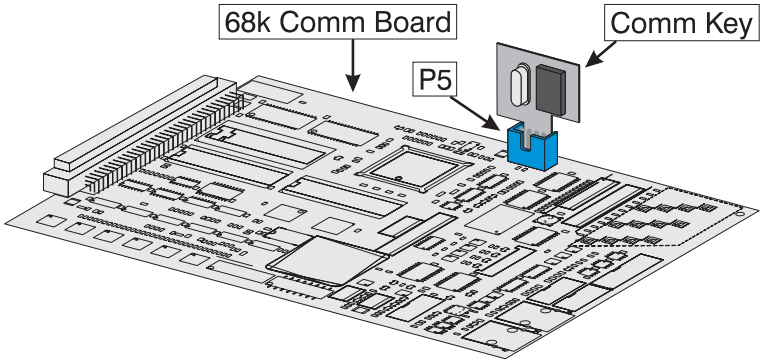
- 68k Comm board;
  The 68k Comm board is easily identified by having 2 Comm software EPROM slots U34 and U35.

- P-Level or higher Atronic Comm board software;
  Standard P-Level Comm board has Ticket In and Ticket Out Functionality. A Comm Key is required to enable Ticket In functionality.

additional information ***See the "TITO Parts" section on Pg. 13***

Machine Requirements for TITO (continued)

- Comm Key to enable Ticket In functionality;
  If a Comm Key is not installed the machine will be able to print tickets, but not redeem them.



Note:
Comm Key Part # 65015558

Fiber Optic Board

The 68k Comm board is capable of Dual Channel communication. Dual Channel communication may be required in TITO installations that have a TITO system in addition to an accounting system that does not have TITO support built in. If Dual Channel communication is required, an Atronic Fiber Optic Board Kit will be required.

Note:
Fiber Optic Board Kit part # 65019494

The Atronic Fiber Optic Kit includes:

- 1 Fiber Optic board
- 1 Fiber Optic board stand
- 1 power supply
- 1 RS232 ribbon cable
- 1 fiber optic cable

The Fiber Optic board can be configured for either Current Loop or RS232 communication with the 68k Comm board with a jumper setting on the Fiber Optic board. The 68k Comm board will need software capable of Dual Channel communication and the board itself configured for Dual Channel communication.

Note:
RS232 communication is the typical Fiber Optic board confuguration.

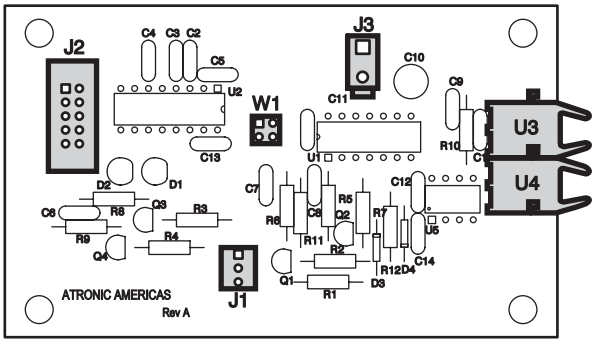
Fiber Optic Board (continued)

To configure the Fiber Optic board first determine the type of communication to be used by the accounting, if applicable, and TITO systems.

Typically accounting systems using SAS for communication will be connected to the 68k Comm board through **P2** (Current Loop port) or **P12** (SAS RS232 port). For this configuration the Fiber Optic board must be connected to the 68k Comm board at **P4** (RS232 port).

Fiber Optic Board Configuration For RS232:

Fiber Optic board



- Jumper **W1** set to RS232 mode (Pins 1 & 2)
- RS232 Cable from **J2** to the **P4** on the 68k Comm board
- Connect the Fiber Optic Board Kit power supply to **J3**
- The transmitting fiber optic cable (the one that is lit) to **U3**(Fiber Optical receiver terminal)
- Connect the fiber optic cable from the Fiber Optic Board kit to **U4** (Fiber Optical transmitter terminal) and run it to the next machine or to the TITO system.

The Fiber Optic board configuration is the same as above if a TITO system is installed without an additional accounting system, The only difference is the RS232 Cable from the Fiber Optic board is connected to **P12** instead of **P4** on the 68k Comm board.

Note:
The fiber optic cable that is transmitting is coming either from the TITO system or another machine.

Note:
The fiber optic cable ends and transmit and receive terminals are color-coded.
Grey to Grey
Blue to Blue

Note:
All fiber optic connections from the fiber optic boards and the TITO system must complete a loop in order for the TITO system to communicate.

Fiber Optic Board (continued)

If the accounting system or other systems besides the TITO system are connected to **P4** (RS232 port) on the 68k Comm board, it is possible to connect the Fiber Optic board to the Current Loop port **P2** on the 68k Comm board.

Fiber Optic Board Configuration For Current Loop:

- Jumper **W1** set to Current Loop mode (Pins 3 & 4)
- Current Loop Cable from **J1** to the **P2** on the 68k Comm board
- Connect the Fiber Optic Board Kit power supply to **J3**
- Connect the fiber optic cable that is transmitting from (the one that is lit) to **U3** (Fiber Optical receiver terminal)
- Connect the fiber optic cable from the Fiber Optic Board kit to **U4** (Fiber Optical transmitter terminal) and run it to the next machine or to the TITO system

Note:
The fiber optic cable that is transmitting is coming either from the TITO system or another machine.

Note:
The fiber optic cable ends and transmit and receive terminals are color-coded.
Grey to Grey
Blue to Blue

Note:
All fiber optic connections from the fiber optic boards and the TITO system must complete a loop in order for the TITO system to communicate.

Fiber Optic Board Trouble Shooting:

There are transmit (green) and receive (red) LEDs that "talk" to indicate TITO system and Fiber Optic board communication.

If the receive (red) is not lit:
- Check the fiber optic cable at **U4**,
  Is it correctly plugged in?
  Is the cable in good condition?
- Check the Fiber Optic board or TITO system that is transmitting to it.

If the transmit (Green) is not lit:
- Check the RS232 **J2** or Current Loop **J1** cables,
  Are they correctly plugged in?
  Is the cable in good condition?
- Check the Fiber Optic board Jumper **W1** setting.
- Is the Comm board configured correctly?

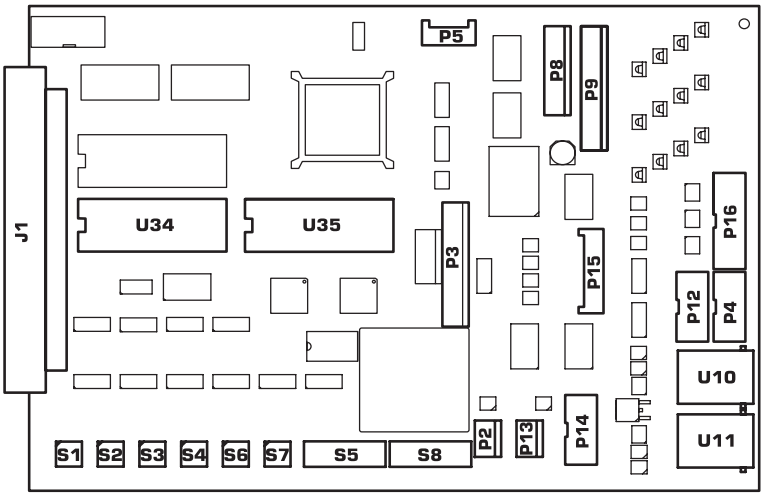
Machine TITO Setup

Dual Channel Comm Board Configuration

The 68k Comm board is capable of Dual Channel communication. Dual Channel communication may be required in TITO installations that have a TITO system in addition to an accounting system that does not have TITO support built in. Later versions of Comm board software support individual addresses for Channel 1 and Channel 2 between 1-99.

Note:
Individual addressing for Channel 1 and Channel 2 is supported in Comm board software version ***P-_09-MI-STD_-_07A*** *or later.*

68k Comm board



To enable Dual Channel communication on the 68k Comm board DIP-Switch **#1** on DIP-Switch bank **S8** must be turned on.

In order to have TITO system communication on Channel 2 (**P4**) DIP-Switch **#6** on DIP-Switch bank **S8** must be turned on. This enables an accounting and TITO system to be connected and communicate with a 68k Comm board simultaneously.

Note:
These DIP-Switch settings are for Comm board software version ***P-_09-MI-STD_-_07A*** *or later.*

68k Rotary & DIP-Switch Settings

DIP-Switch Bank S8								Function	Channel Addressing	
1	2	3	4	5	6	7	8		Single or Dual Ch 1	Dual only Ch 2
OFF								Single channel on **P2** or **P12 ONLY** All other DIP-Switches on **S8** are ignored	Rotary Switches **S3, S4**, **S6**, & **S7** set address for **P2** and **P12**	
ON								Enables Dual Channel Communication Channel 1 on **P2** or **P12** Channel 2 on **P4**	Rotary Switches **S3 & S4** set address for **P4**	Rotary Switches **S6 & S7** set address for **P2** and **P12**
					OFF			TITO on Channel 1		
					ON			TITO on Channel 2		

Dual Channel Comm Board Configuration (continued)

Dual Channel Comm Board Addressing

68k Comm boards, configured for Dual Channel Communication, connected to TITO and accounting systems simultaneously require individual addresses for each channel. Setting individual addresses for channel 1 and Channel 2 is done with Rotary switches **S3**, **S4**, **S6**, & **S7**. With the proper DIP-Switch settings on **S8** (#1 & #6 ON) Rotary switches **S3** & **S4** are used for Channel 1 and Rotary switches **S6** & **S7** are used for Channel 2.

If Channel 1 is connected to an accounting system, it's address will typically be the same as if the Comm board were not configured for Dual Channel.

- Rotary switch **S6** = x10
- Rotary switch **S7** = x1

If Channel 2 is connected to a TITO system, it will require an individual address from all of the other machines connected to the TITO system. Most TITO systems connect multiple TITO controllers into one TITO system thus allowing more that 99 machines be connected to the same TITO system.

- Rotary switch **S3** = x10
- Rotary switch **S4** = x1

Single Channel Comm Board Configuration

If the 68k Comm board is configured for Single Channel Communication (**S8** #1 off), Rotary switches **S3**, **S4**, **S6**, & **S7** will set the address for Channel 1.

- Rotary switch **S3** = x1000
- Rotary switch **S4** = x100
- Rotary switch **S6** = x10
- Rotary switch **S7** = x1

Note:
Channel 1 can have an address from 1-99.

Example:
Channel 1 address = 1
S6 = 0
S7 = 1

Note:
Channel 2 can have an address from 1-99.

Example:
Channel 2 address = 20
S3 = 2
S4 = 0

Machine TITO Setup (continued)

After all hardware and software has been properly installed, and the initial setup has been completed, PC-Setup is required for TITO Setup.

PC-Setup for TITO

PC-Setup versions vary between different levels and versions of Comm board software. To verify which version of PC-Setup software is used by the machine follow these steps.

- Open machine Main Door
- Press the Green Service Switch on the Main Board to enter the Main Menu on the machine.
- Select PC-SETUP in the machines service menu.
- The information in the lower left hand corner of the screen indicates which version is used.
- Leave the machine in the PC-Setup Menu.

Start PC-Setup

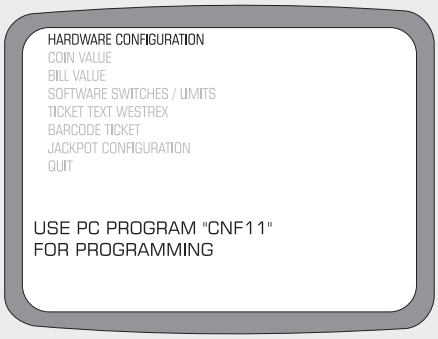
- Connect the PC-Setup Dongle G/E 0300 to the Printer port of the laptop
- Power up laptop and start the laptop in DOS mode.
- Select the directory in which the program is installed and start the program.
- Connect the PC Setup cable to the RS232 connector on the Main Board and then connect the other end to the laptop's serial port.

The following Main Menu will appear on your laptop:

Note:
The Ticket In - Ticket Out Module include information relevant primarily to TITO functionality and setup. Refer to the Software and Operation Modules for more detailed information.

Note:
A Master Reset is not required to enable TITO functionality within Atronic Machines, however later versions of P-Level software require a Master Reset in order to configure PC-Setup.

Example:



USE PC PROGRAM "CNF11" FOR PROGRAMMING
Identifies the PC-Setup program to use for this machine.

PC-Setup TITO Settings

Hardware Configuration

This routine allows to configuration of the machine according to the actual installed hardware like coin and bill acceptor, hopper and ticket printer.

A Thermal Ticket Printer must be chosen for TITO. Currently Atronic machines are able to use Ithaca & Seiko Thermal Printers.

There are no other settings within PC-Setup that are specific to the type of Thermal Printer being used.

Note:
A Thermal Printer can be used together with a hopper.

See the "TITO Parts" section on Pg. 13 to help identify which printer is installed in the machine.

Coin Values
Not used for TITO Setup

Bill Value
Not used for TITO Setup

Coin Value and Bill Value is not available in all jurisdictions!
See the "Software" module for more information on Coin and Bill Value.

Software Switches / Limits

Only "**Validation Type for Handpays and Barcode Coupons**" is used for TITO Setup.

Software Switches / Limits (continued)

Validation Type:

NONE: No validation required. If a Thermal Ticket Printer is installed, the Main board will create the validation number. The Thermal Ticket Printers uses this validation number for the Barcode. The bill acceptor will **not** redeem these tickets.

When is NONE used?
When an accounting system without TITO functionality or no accounting system is used.

Validation Security:

NO Ticket information must be read by an accounting system. If the Memory fills the machine will tilt and force a Handpay.

YES Old ticket information will be over written by new ticket information, if not read by an accounting system.

STANDARD Similar to NONE except the Comm board creates the validation number and sends it to the Main board.

When is STANDARD used?
When an accounting system has TITO functionality. Used with some SAS TITO accounting systems.

Validation Security: Has no effect

ENHANCED This option effects tickets, and Handpays if the security mode is selected. The Comm board creates the validation number and sends it to the Main board.)

When is ENHANCED used?
When an accounting system has TITO functionality or a TITO system is used. Used with most SAS TITO accounting systems.

Validation Security:

NO Only coupons and tickets require validation.

YES The accounting system must configure the validation ID at least once after the machine is turned on. The machine will remain locked until the validation ID is set.

SYSTEM Printed tickets require a validation number from the accounting system. In this mode the Comm board may refuse validation, e.g. when the link to the accounting system is disabled. If validation is not possible for a cash out the machine will tilt and force a Handpay.

When is SYSTEM used?
When the accounting system supplies the validation number for a ticket. Used mainly for Bally EPI accounting systems.

Validation Security: Has no effect

Ticket Text Westrex
Not used for TITO Setup

Barcode Ticket

This routine allows configuration of the ticket format and coupon handling.

Jackpot Receipt:

NONE Handpays and jackpots will be hand paid. No ticket will be printed.

OFFSET Barcode on the jackpot receipt will be offset.

Ticket Base Value:

The TICKET BASE VALUE is the smallest unit amount (in credits), which will be printed on the ticket after a cashout, if the machine is configured with a ticket printer and a hopper.

TICKET BASE VALUE = 0:
All credits will be printed on a ticket.

TICKET BASE VALUE = 1:
All Credits up to the HOPPER LIMIT will be paid via the hopper, the rest will be printed on a ticket.

TICKET BASE VALUE **greater than** 1:
All credits up to the next TICKET BASE VALUE amount will be paid via the hopper, the rest will be printed on a ticket. This allows ticket values to be rounded to certain values (e.g. $1, $5, $10...)

Note:
The TICKET BASE VALUE should always be smaller than the HOPPER LIMIT.

Examples:
TICKET BASE VALUE = 1
HOPPER LIMIT = 200
Cashout 115 credits 115 paid via hopper
0 paid via ticket

Cashout 215 credits 200 paid via hopper
15 paid via ticket

TICKET BASE VALUE = 100
HOPPER LIMIT = 200
Cashout 115 credits: 15 paid via hopper
100 paid via ticket

Cashout 215 credits: 15 paid via hopper
200 paid via ticket

Cashout 399 credits: 99 paid via hopper
300 paid via ticket

Cashout 500 credits 0 paid via hopper
500 paid via ticket

Barcode Ticket Continued (continued)

Ticket Length:

SHORT

LONG Standard note length tickets.

Note:
*If the machine is configured with a **Seiko** Thermal Ticket Printer, the ticket length must be set to **LONG**.*

Residual Credits:

It is possible to define, in case of cashout, the handling of the residual credit payout. This will only apply if the TICKET BASE VALUE is greater than 1 and the machine is Tokenized.

HOPPER Residual credits will be paid via second hopper (if installed) or will start special residual credits feature.

TICKET Residual credits will always be paid via ticket.

Note:
*If the machine is Tokenized, Residual Credits **MUST be set to TICKET**.*

Casino Information:

The casino name and address can be entered and will be printed on the ticket. Some accounting systems that use ENHANCED Validation will automatically configure these fields.

At this point PC-Setup TITO configuration is complete.

TICKET TYPES

CASHOUT TICKET:
After the Cashout button has been pressed, the machine prints a CASHOUT TICKET for the amount of cashable credits. The bar code is centered.

CHANGE TICKET:
If $1 machine accepts a ticket for $2.25 the machine gets 2 credits to the credit meter and prints a ticket for $.25. The bar code is centered.

Menu Setup for TITO

After PC-Setup is completed, Menu Setup is Required to turn Coupon Redemption (Ticket In) on and the set the Hopper Payout Limit, if applicable. Menu Setup can be found in the Main Menu.

Coupon Redemption:

By enabling Coupon Redemption, the Ticket In feature is activated.

This Only applies if:
- The Comm board software is Ticket In capable.

and
- A TITO capable accounting system or a separate TITO system is attached to the machine.

and
- A bill acceptor is installed in the machine.

Also verify that the Validation Code Length is set to 18.

Hopper Payout Limit:

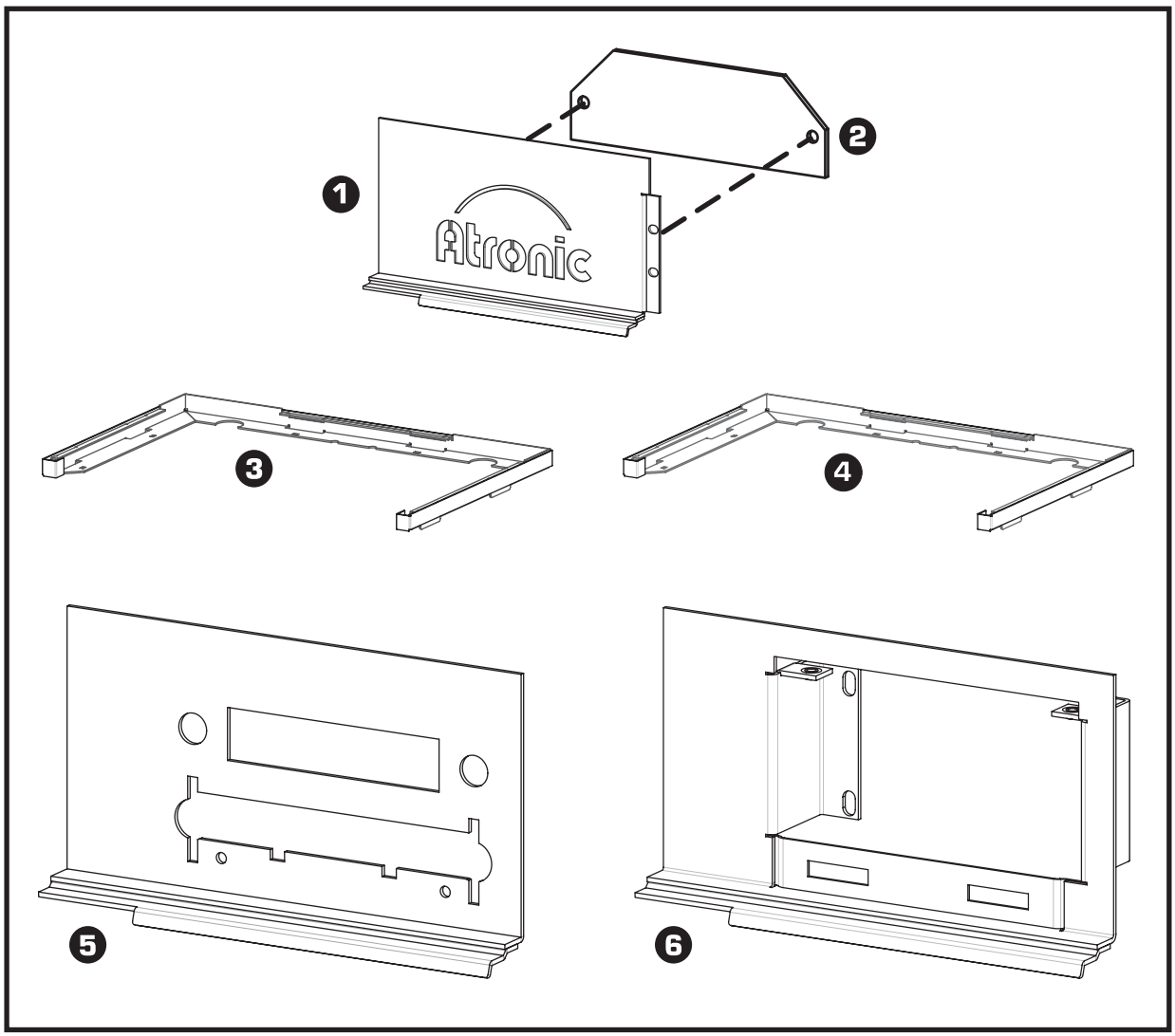
This option only effects TITO setup if a Ticket Base Value of 1 was chosen.

If the Ticket Base Value is set to 1:
- If the number of coins to be paid is under the Hopper Payout Limit, when the Cashout button is pressed, coins (**not credits**), up to the Hopper Payout Limit, will be paid via the hopper. All remaining credits will be printed on a ticket.

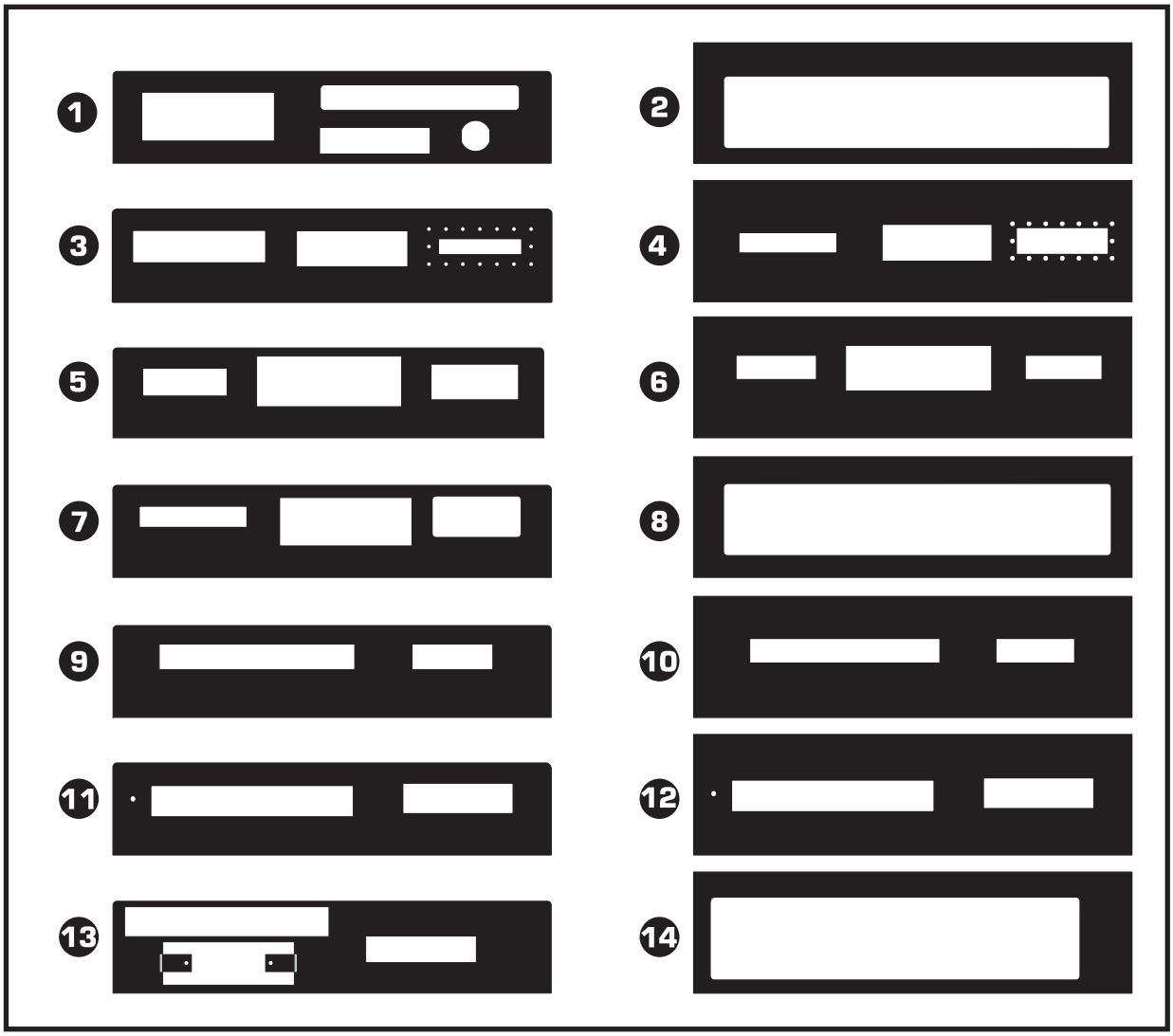
- If the number of coins to be paid is under the Hopper Payout Limit when the Cashout button is pressed, all coins (**not credits**), will be paid via the hopper. If the machine is Tokenized, the residual credits will be printed on a ticket.

Note:
The lowest Hopper Payout Limit avialable in Older versions of P-Level software is 100 coins.

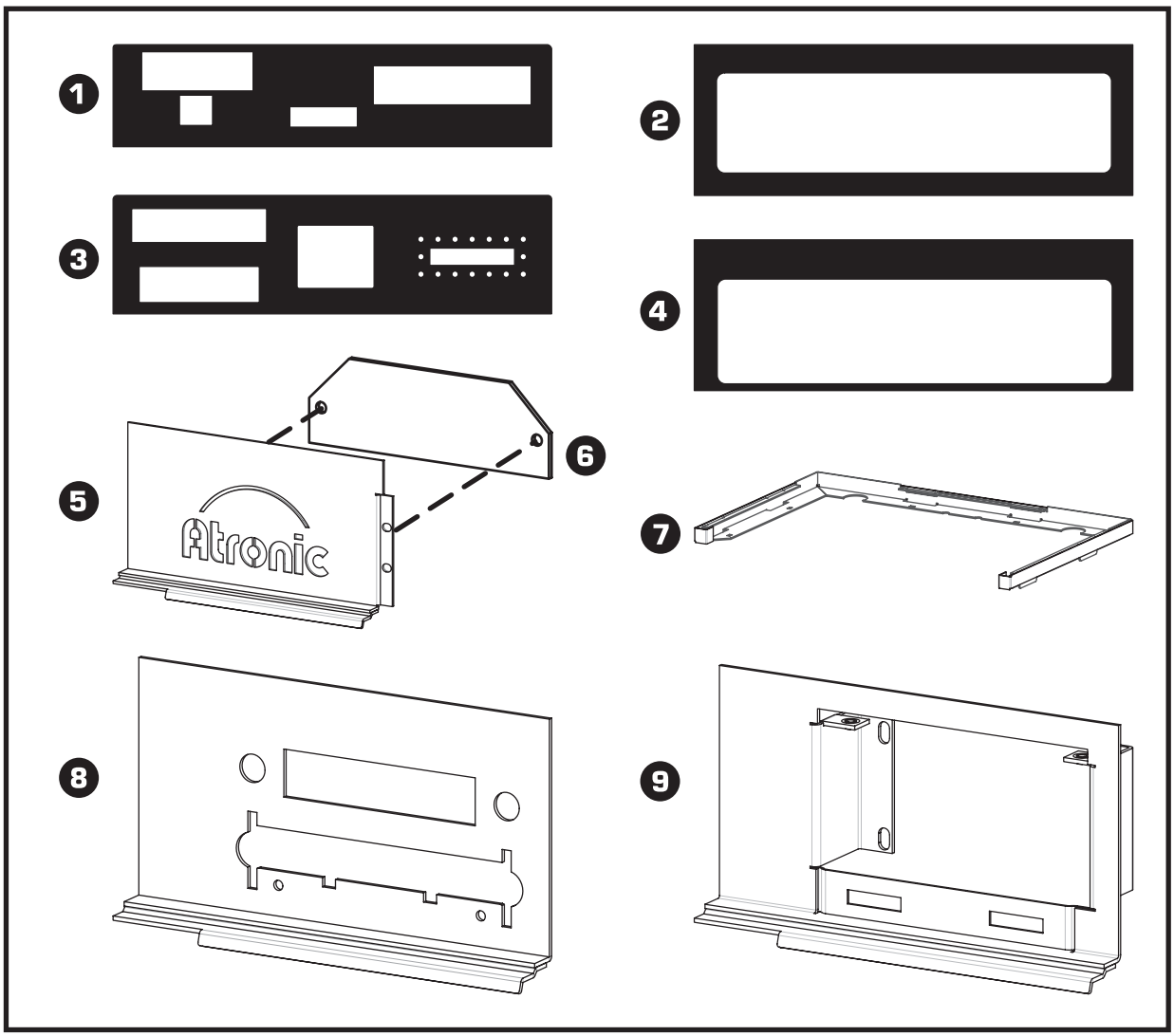
Note:
*If the machine is Tokenized, Residual Credits **MUST be set to TICKET**.*



POS	SAP-Number	Nomenclature
1	65013484	Thermal Printer Block Off Plate WBC
2	65010313	Thermal Printer Block Off Plexi WBC
3	65017960	Spacer Bracket Short 3/4" WBC
4	65014878	Spacer Bracket Tall 1 3/4" WBC
5	65012432	Ithaca Faceplate WBC
6	65012795	Seiko Faceplate WBC



POS	SAP-Number	Nomenclature
1	65013799	Acres Quick Pay Inner Bracket WBC
2	65013800	Acres Quick Pay Outer Bracket WBC
3	65013248	Bally EPI Quick Pay Inner Bracket WBC
4	65013249	Bally EPI Quick Pay Outer Bracket WBC
5	65013478	CDS Quick Pay Inner Bracket WBC
6	65013479	CDS Quick Pay Outer Bracket WBC
7	65015950	Data Valet Quick Pay Inner Bracket WBC
8	65015954	Data Valet Quick Pay Outer Bracket WBC
9	65013485	GSI Quick Pay Inner Bracket WBC
10	65013486	GSI Quick Pay Outer Bracket WBC
11	65013477	IGT Quick Pay Inner Bracket WBC
12	65015497	IGT Quick Pay Outer Bracket WBC
13	65014875	Mikohn Quick Pay Inner Bracket WBC
14	65014876	Mikohn Quick Pay Outer Bracket WBC



POS	SAP-Number	Nomenclature
1	65013801	ACSC Quick Pay Inner Bracket Tall WBC
2	65013800	ACSC Quick Pay Outer Bracket Tall WBC
3	65015498	Bally EPI+ Quick Pay Inner Bracket Tall WBC
4	65015952	Bally EPI+ Quick Pay Outer Bracket Tall WBC
5	65014868	Thermal Printer Block Off Plate Tall WBC
6	65010313	Thermal Printer Block Off Plexi WBC
7	65014878	Spacer Bracket Tall 1 3/4" WBC
8	65014870	Ithaca Faceplate Tall WBC
9	65014866	Seiko Faceplate Tall WBC