

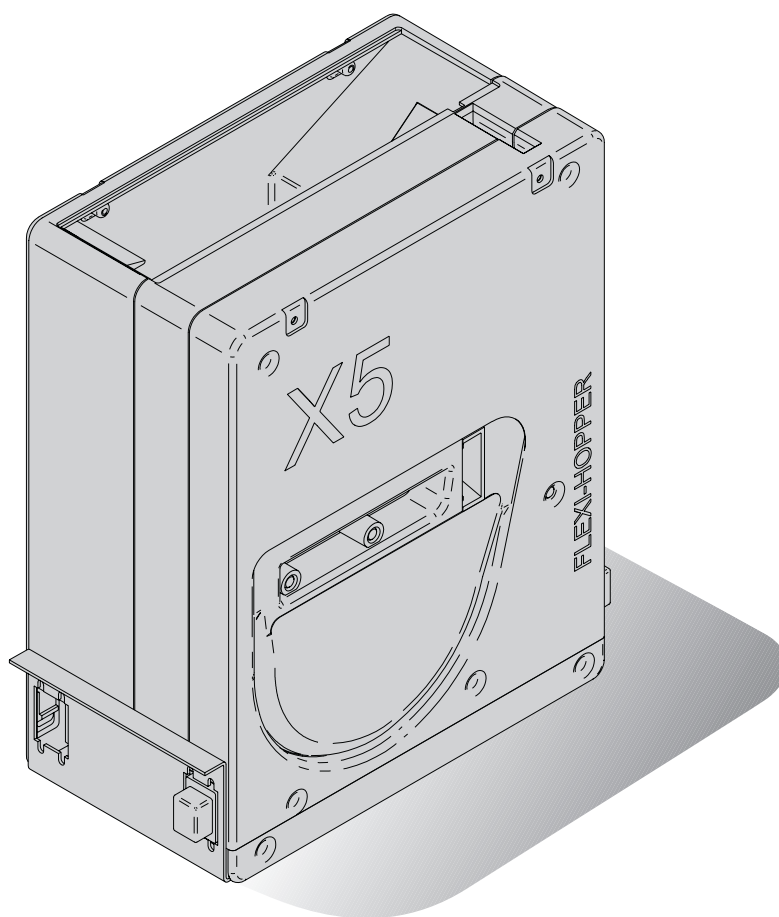


MICROHARD
VENDING PROJECTS

COIN AND/OR TOKEN PAY-OUT

X5 Family

ccTalk protocol/AES



TECHNICAL MANUAL

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1 GENERAL INFORMATION

1.1 DESCRIPTION

X5 is a new coin and token distributor and can be used in various applications such as payment kiosks, automatic cash registers, slot machines and money changing and coin recycler machines

1.2 MAIN FEATURES

5 product configurations and operating modes

1.2.1 COIN OUTPUT

By using various accessories provided with **X5** you can choose from 5 different coin or token output modes by diverting the flow from the pre-set position.

1.2.2 ERROR CODE

When the yellow LED on the **X5** turns on it means the following: that the device has power; the error code is indicated by means of a series of different flashes, enabling rapid identification of the causes of the malfunction or counting the coins paid according to ordinary operation.

1.2.3 PCB POSITION

The PCB enables all the **X5** functions -**Pay-out** can be updated from the outside without have to dismantle the distributor's parts.

1.2.4 ccTALK STANDARD

For the **X5 Pay-out** versions the unit functions by using the ccTalk standard. You can choose the device with the Cinch 12 connector or with the ccTalk standard 10 pins cup connector. The parallel version is available with the cinch connector only.

1.2.5 CONNECTOR POSITIONS

The connector for ccTalk operation or the 12 pin (Cinch) connector can be set in two different positions:

- side opposite coin output window
- side of coin output window (reverse)

1.2.6 ANTI-JAM SYSTEM

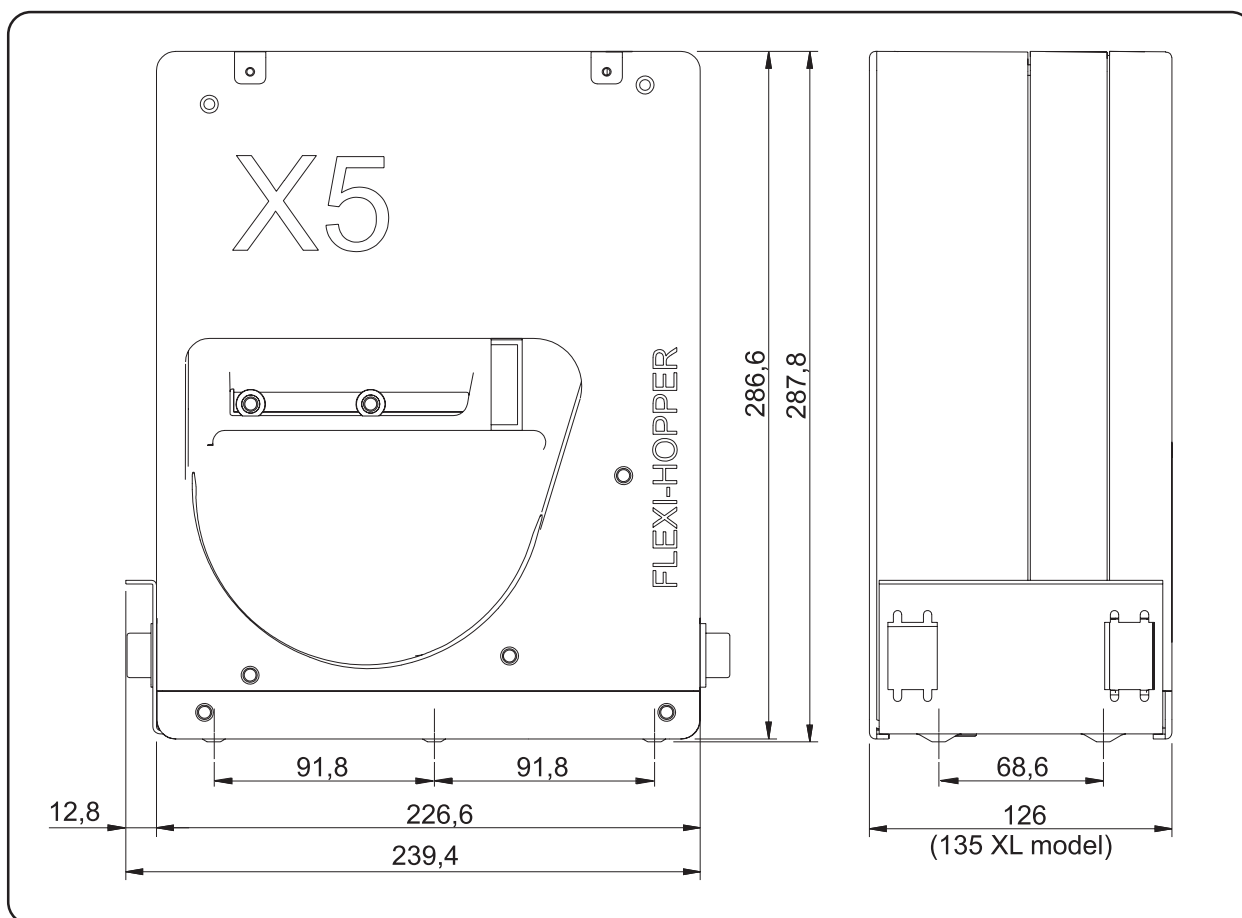
If the motor or belt jams the motor stops and subsequently restarts in reverse; it then stops again and restarts in the correct direction. If this does not occur the operation will be repeated with 3 tries.

1.3 SAFETY



X5 should not be connected/disconnected from the slide base with the power supply on.
Do not insert hands into the **X5** while operating as there are moving mechanical parts.

1.4 DIMENSIONS



1.5 TECHNICAL DATA

Distribution speed	4 coins/sec
Coin capacity	1500 pieces of 1.00 •
Weight (empty)	2 kg
Diameter coins dispensed	from 16 to 39 mm (from 20 to 31.5 mm with standard chain)
Thickness coins dispensed	from 1.25 to 4.5 mm

1.6 POWER SUPPLY

	<i>standby</i>	<i>mpty</i>	<i>max load</i>	<i>forced stop</i>
MOTOR 24Vdc \pm 10%	mA	80 mA	500 mA	(transient) 500 mA
LOGIC 12Vdc \pm 10%	0 mA	80 mA	80 mA	-

standby: X5 stopped but with power on

empty: normal operation

max load: operation with coin hopper full

forced stop: refers to value of current absorbed by motor over which it is jammed, and the anti-jam procedure begins.

2I INSTALLATION



DO NOT SUPPLY X5 WITH POWER UNTIL ASSEMBLY AND DUE INSPECTION ARE COMPLETED

- A ffix the **X5**'s slide to the machine.
- Check that it is properly plugged in if using 12 pin standard connector.
- Hook up the flat or 12 pin connector, following the instructions for each single pin as shown in paragraph 4.1, using a suitable cable to support currents and maximum voltages.
- I nsert **X5** onto the slide until it is totally inserted.
- T urn on electric power.

3E ELECTRICAL INFORMATION

3.1 GENERAL DESCRIPTION

The operating modes of **X5** are guided by a microprocessor:

ccTalk/AES protocol
parallel protocol
multi coin protocol
coin counter and divider

3.2 POWER SUPPLY

X5 is equipped with a 24 v continuous feed motor.

3.3 OPERATING MODES

X5-cc-Talk/AES MOD.

Functions with ccTALK/AES protocol.

3.4 OPTICAL SENSORS

There is a pair of optical sensors to determine the coins paid (including coins with a central hole) and a pair of inductive sensors for the multi-coin models.

X5-ccTalk/AES MOD.

By means of the data line, ccTalk/AES protocol monitors all the sensors' functions.

3.5 LED INDICATORS

X5-ccTalk MOD.

This has just one flashing green LED:

rapid flashing indicates that the **X5** is distributing one coin per flash

flashes with longer intervals indicates that the **X5** is in on

led constantly on means **X5** is in error: this can include photocell error or corrupt data in EEPROM or insufficient power supply.

3.6 COIN LEVEL PLATES

Inside **X5** there are brass plates to determine the level of coins.

X5-cc-Talk/AES MOD.

Plate signals are internally operated by the ccTalk/AES protocol.

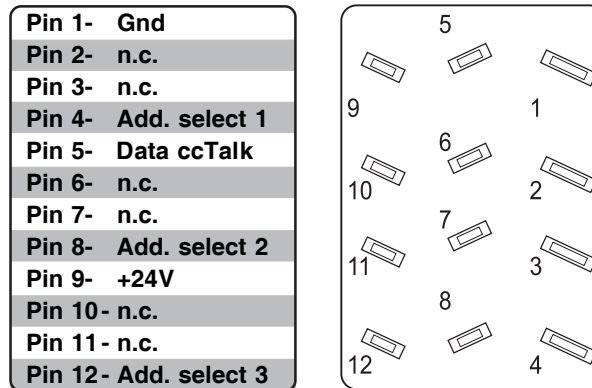
4- ELECTRICAL SPECIFICATIONS



N.B. TO CONNECT THE X5 USE A 22AWG CABLE.

4.1 X5-cc-Talk/AES MOD. CONNECTOR

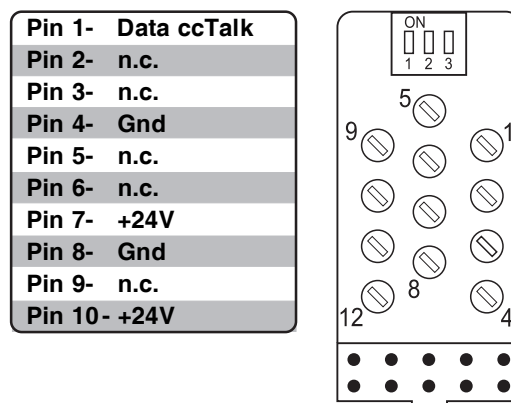
12 Pin connector (12V ccTalk, 24V ccTalk versions)



Pin 1 and Pin 9 power supply
 Pin 4, Pin 8 and Pin 12 X5 address (as described in paragraph 4.2)
 Pin 5 data line

The remaining Pins are not connected.

Optional 10-Pin connector mounted on optional MH455a board (versions 12V ccTalk, 24V ccTalk)

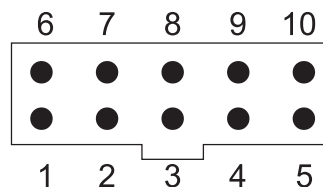


Pin 1 data line
 Pin 4 and Pin 8 GND
 Pin 7 and Pin 10 +24

The remaining Pins are not connected.

Flat 10 Pin Connector (12V ccTalk, 24V ccTalk versions)

Pin 1-	Data ccTalk
Pin 2-	n.c.
Pin 3-	n.c.
Pin 4-	Gnd
Pin 5-	n.c.
Pin 6-	n.c.
Pin 7-	+24V
Pin 8-	Gnd
Pin 9-	n.c.
Pin 10-	+24V

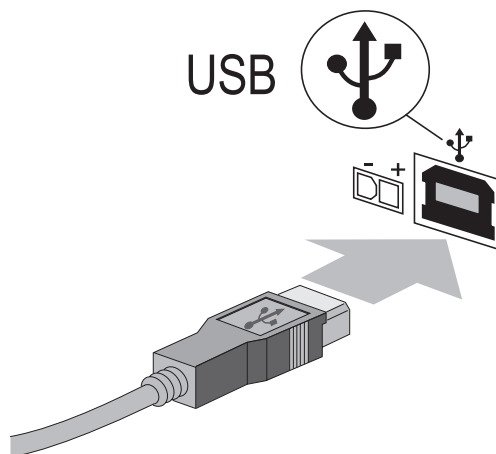


Pin 1 data line
Pin 4 and Pin 8 GND
Pin 7 and Pin 10 +24

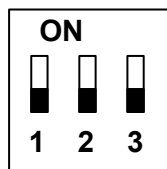
The remaining Pins are not connected.

USB Connector 24V ccTalk version)

Separate power supply 24VDC - 12VDC (optional)
 on connector "mini-fit" 2 poles.



The serial address of the hopper can be set using the Dip-Switch group.
 The address changes depending on the combination of Dip-Switch, following the table:



Dip-Switch 1	Dip-Switch 2	Dip-Switch 3	N° hopper	serial address
			1	3
		X	2	4
	X		3	5
	X	X	4	6
X			5	7
X		X	6	8
X	X		7	9
X	X	X	8	10

Header 254 "Simple poll"

Sent byte: none

Received byte: none

The hopper replies ACK if the command is identified or the address is correct

Header 253 "Address poll"

Sent byte: none

Received byte: only 1 byte (non-standard format) alike the using address and sent with a delay of $4 \times \text{address ms}$.

Header 246 "Request manufacturer ID"

Sent byte: none

Received byte: String that indicates the builder. In this case "MicroHard.Srl."

Header 245 "Request equipment category ID"

Sent byte: none

Received byte: String that indicates the kind of peripheral device. In this case "Coin Inject System"

Header 244 "Request product code"

Sent byte: none

Received byte: string that indicates the kind of product code. In this case "X5 DPO"

Header 242 "Request serial number"

Sent byte: none

Received byte: 3 byte [byte1],[byte2],[byte3] that indicates the serial number of the peripheral device. The first byte is always LSB so the serial number is $[\text{byte1}] + 256 \times [\text{byte2}] + 65536 \times [\text{byte3}]$

Header 241 "Request software revision"

Sent byte: none

Received byte: string with soft and hardware versions. Ex. "1.0 1.0" indicates software rev 1.0 and hardware rev 1.0

Header 217 "Request Payout Hi-Lo status"

Sent byte: none

Received byte: 1 byte that indicate the status and the presence of sensors of minimum and maximum

Bit0=1 Coins do NOT overtake the minimum sensor (if=0 they overtake)

Bit1=1 Coins do NOT overtake the maximum sensor (if=0 they overtake)

Bit2=1 Minimum sensor present (if=0 absent)

Bit3=1 Maximum sensor present (if= absent)

Header 236 "Read Opto States"

Sent byte: none

Received byte: 1 status Byte of optical sensors

Where 1 bit=0 indicates free way

Bit 0: M1

Bit 1: M2

Bit 2: M3 return into hopper

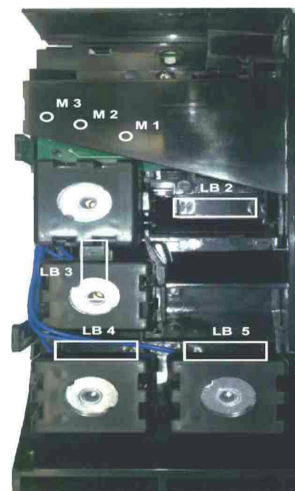
Bit 3: LB5 right storage position

Bit 4: LB4 left storage position

Bit 5: LB2 supply exit coin

Bit 6: LB3 coin recover

Bit 7: NU


Header 231 "Modify inhibit mask"

Sent byte: 2 byte. Each bit of 2 byte qualifies or disables the correspondent channel. Bit 0 of the first byte controls the channel 1, bit7 of the second byte controls the channel 16

Received byte: None

The hopper replies with ACK

At the turn on and at the reset moment all the channels are active.

Pay very attention: if some supplied coins get disabled some amount could result impossible (it will happen a timeout in the payment)

Header 230 "Request inhibit mask"

Sent byte: None

Received byte: 2. The meaning is the same for the 2 2 byte sent with command 231.

Header 197 "Calculate ROM checksum"

Sent byte: none

Received byte: 3 byte [byte1],[byte2],[byte3] that indicate the checksum of the peripheral device. The first byte is always LSB so the checksum is $[\text{byte1}] + 256 \times [\text{byte2}] + 65536 \times [\text{byte3}]$

Header 169 "Request address mode"

Sent byte: none

Received byte: 1 with value =32

Value 32 indicates that the address of the peripheral device is set through deep-sw.

Header 164 "Enable Hopper"

Sent byte: 1 byte. If byte=165 the hopper is qualified for payments.

Received byte: None (the hopper replies with ACK)

Header 163 "Test Hopper"

Sent byte: none

Received byte: 2 byte that indicate the hopper status

Byte 1 (WARNING: the hopper is anyway on duty)

Bit0=1 Stopped hopper for current and restarted after release.

Bit1=1 Timeout during supply (lack of coins or blocked engine)

Bit2=1 Engine has made a release operation during the last supply

Bit3=1 Set bit=1 at PowerOn and reset at first valid command

Bit4=1 Hopper disabled (disable with command 165)

Bit5=1 Hopper stopped from command 132 ("Emergency stop value")

Bit6= 1 Hopper in duty / bit=0 hopper in IDLE (waiting for commands)

Bit7= 1 Problem during coin recovery. Coin not correctly recovered. Bits reset (except bit 3 and 6) at each new qualification (command 164) or at reset (command 1)

Byte 2 (ERROR: if only one bit=1 hopper is blocked in "OUT OF ORDER")

Bit0=1 Inductive sensors faulty coins

Bit1=1 Data Checksum wrong coins

Bit2=1 Faulty Hall sensor

Bit3=1 Blocked Hopper for blocked photocells LB2, LB3, M1, M2, M3.

Bit4=1 Blocked Hopper for current limit overtaken after three attempts.

Bit5=1 Blocked Hopper for polling-timeout during "purge hopper"

Bit6,7= NU

The error bit get reset (and the hopper become active again) if the condition of the error do not exist anymore. Only the bit 5,6 get reset at "power on" (serious error that require an operator).

Header 134 "Dispense hopper value"

After the qualification of the hopper send only the parameter for the count.

If we send as parameter 0, the counters will be reset and they restart from 0, if we send 1 the counters will be progressive.

Received byte: none. The hopper replies with ACK if correct command and previously qualified with command 164.

At each payment the hopper get qualified. To a request of payment without qualification the hopper replies with NAK.

During payment only the commands 132 and 132 and 1 are allowed (the others get back to a NAK) If we send the reset (header=1) instead of an "Emergency stop value" (header 132) the operation stops anyway but clearly the count of the supplied coins will be reset.

Header 133 "Request hopper polling value"

Sent byte: none

Received byte: 6 byte.

The first byte [data1] is an "Event Counter" that is a counter increased for each paid coin (any coin but it has to be paid not rejected).

When 0 is set at reset it starts again from 1 at overflow (0 at reset than cyclic from 1 and 255)

Byte 2 e 3 indicate the value in cent of the value amount that has to be supplied = $=[data2]+256*[data3]$ **that is always=0 given that it does not have meaning on CCS**

Byte 4 e 5 indicate the value in cent of the supplied amount value = $=[data4]+256*[data5]$

Byte6 indicate the status of the hopper about the payment.

If=7-9 payment in progress (7-> stable engine 8-> forward engine 9->behind engine)

If=0 hopper in idle and last start of the engine has been for command 134

All the byte except "event counter" get reset at each new command 134.

At power off the counters get saved, the event counter instead start again from 0. At a command of reset instead they get all reset.

Header 132 “Emergency stop value”

Sent byte: none

Received byte: 2 byte (the first is LSB) that indicate the value in cent of the paid amount until the stop, so it counts $[data1] + 256 * [data2]$

The hopper after this command get disabled.

Repeating the command, the value get always repeated and saved until reset, at turn of or at a new command of payment (header 134).

ATTENTION: the reply depending on the status of the route of the coins can be very delayed and consider a timeout of at least 500ms

Header 131 “Request hopper coin value”

Sent byte: 1 byte that indicate the channel (1-16) corresponding to the coin whose code and value you would like to find out.

Received byte: 8 byte. The first 6 indicate the standard coin code ccTalk for Example “EU200” for 2€. The last 2 byte (the first is LSB) indicate the value in cent and counts $[data7] + 256 * [data8]$

Header 130 “Request indexed hopper dispense count”

Sent byte: 1 byte that indicates the channel (1-16) corresponding to the coin whose quantity of supplied pieces you would like to find out.

Received byte: 2 byte (the first is LSB) that indicate the number of the coin supplied from that channel from the reset. The value is $[data1] + 256 * [data2]$

The value of the first 8 counters (channels 1-8) is saved at the turn off while at the command reset they get reset.

Header 121 “Purge hopper”

The hopper get totally empty. Also non-recognize coins get supplied.

This is a service command that must be execute together with an operator because it can be potentially dangerous. For reason of security a precise method has to be used otherwise the command do not execute. Moreover, during the emptying the command 133 must be executed in a polling time not larger than 1 second. If this command is not properly sent the hopper get blocked at first exit coin after the timeout occurred. It has to be turned off and turned on again (reset hardware) in order to restart it.

Method:

- 1- Send a reset (command 1)
- 2- Request of serial number (command 242)
- 3- Qualify the hopper (command 164)
- 4- **NOW WITHIN A SECOND THE FOLLOWING COMMAND HAS TO BE EXECUTED OTHERWISE THE COMMAND WILL NOT BE EXECUTED**
- 5- Send command 121 with the correct serial numbers as for command 134 (first method). The hopper replies with ACK.
- 6- SEND IN POLLING UNTIL COINS TIMEOUT AND FINISH COMMAND 133.

From the valued of byte 6 you can figure out if the emptying is finish. If all the coins get (byte2_3 del command 133=0) the value can be counted from byte 3_4 of command 133

DURING THE EMPTYING ONLY THE COMMANDS 133 AND 132 AND 1 ARE ALLOWED (the others will be back to a NAK). If we send a reset (header=1) instead of an “Emergency stop value”(header 132) the operation stops but clearly the counters of the supplied coins will be reset.

Header 4 “Request Comms Revision”

Sent byte: none

Received byte: 3 byte [1],[4],[3]

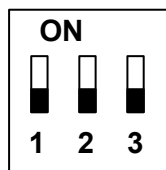
Header 1 “Reset device”

Sent byte: none

Received byte: none

The hopper replies with ACK after the execution of a soft reset.

The serial address of the hopper can be set using the Dip-Switch group.
 The address changes depending on the combination of Dip-Switch, following the table:



Dip-Switch 1	Dip-Switch 2	Dip-Switch 3	N° hopper	serial address
			1	3
		X	2	4
	X		3	5
	X	X	4	6
X			5	7
X		X	6	8
X	X		7	9
X	X	X	8	10

- Command 134 "Dispense hopper value" is used for counting coins. Send any value of payment and the count does not stop until you send a "132-Emergency stop value" or until a "timeout lack of coins" intervenes.
- In order to count the collected coins use a polling command "133-Request hopper polling value" during the count or after that it is finished.
- At the end of the count in order to know the denomination of the collected coins use the "130-Request indexed hopper dispense count". (Attention: the count of the denominations is progressive so it is resettable only at the moment of the starting or with a reset operation).
- CS does not have a "purge hopper" command. Command "134-Dispense hopper value" after a reset (when all the coins are addressed on the sorter variance 0) is able to "empty" the entire hopper.
- It can be programmed until 16 coins in the 16 tubes but only 2 (mod ccs2) or 3 (mod ccs3) plus a variance can be driven where the coins can be send. Programmed coins on the same separator channel will mix.

Recommended series for coins count:

1- hopper reset (command 1)

2- hopper qualification (command 164)

3-to set (command 210) sorter 1 for the channels that contains coins that have to go left 2 for channels with coins that have to go right and 3 (for ccs3) for coins on the left.

4-send command 134 with value 0 and if you would like to reset the counters of the coins or 1 if you would like to have a develop of the counters.

5-supervise in polling with command 133 the supplied amount until the timeout of lack-of-coins intervenes (data byte 6=0) or if you would like to stop send the command 132.

6-use the command 130 on the programmed channels in order to find out the denomination of the collected coins.

ATTENTION: in case of interruption of power source the counters of the first 8 coins will be saved together with the supplied total.

Header 254 "Simple poll"

Sent byte: none

Received byte: none

The hopper replies ACK if the command is identified or the address is correct

Header 246 "Request manufacturer ID"

Sent byte: none

Received byte: String that indicates the builder. In this case "MicroHard.Srl."

Header 245 "Request equipment category ID"

Sent byte: none

Received byte: String that indicates the kind of peripheral device. In this case "Coin Entry System"

Header 244 "Request product code"

Sent byte: none

Received byte: string that indicates the kind of product code. In this case "X5 CCS2"

Header 242 "Request serial number"

Sent byte: none

Received byte: 3 byte [byte1],[byte2],[byte3] that indicates the serial number of the peripheral device. The first byte is always LSB so the serial number is [byte1]+256*[byte2]+65536*[byte3]

Header 241 “Request software revision”

Sent byte: none

Received byte: string with soft and hardware versions. Ex. “1.0 1.0” indicates software rev 1.0 and hardware rev 1.0

Header 236 “Read Opto States”

Sent byte: none

Received byte: 1 status Byte of optical sensors

Where 1 bit=0 indicates free way

Bit 0: M1

Bit 1: M2

Bit 2: M3 return into hopper

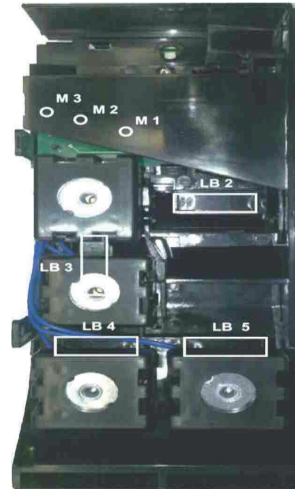
Bit 3: LB5 right storage position

Bit 4: LB4 left storage position

Bit 5: LB2 supply exit coin

Bit 6: LB3 coin recover

Bit 7: NU



Header 217 “Request Payout Hi-Lo status”

Sent byte: none

Received byte: 1 byte that indicate the status and the presence of sensors of minimum and maximum

Bit0=1 Coins do NOT overtake the minimum sensor (if=0 they overtake)

Bit1=1 Coins do NOT overtake the maximum sensor (if=0 they overtake)

Bit2=1 Minimum sensor present (if=0 absent)

Bit3=1 Maximum sensor present (if= absent)

Header 210 “Modify sorter path”

Sent byte: 2

Received byte: None (hopper replies with ACK)

Byte 1 indicates the channel 1-16 and byte 2 indicates the separation channel where the coin is sent. Channel 0 is the reject channel, channel 1 is the left one and channel 2 is the right one.

If for example the channel 1 is sent to left channel byte 1,1 must be sent.

At reset and at power on all the channels will be driven to the reject. It must be set as the coin changers.

If a channel is driven on the reject during the count (command 134) its value is not damaged. Therefore to programme a coin on the reject channel is like inhibit it.

Header 209 “Request sorter path”

Sent byte 1, that indicates the channel where you would like to find out the separation channel.

Received byte: 1 that indicates the requested value.

Header 197 “Calculate ROM checksum”

Sent byte: none

Received byte: 3 byte [byte1],[byte2],[byte3] that indicate the checksum of the peripheral device. The first byte is always LSB so the checksum is $[byte1]+256*[byte2]+65536*[byte3]$

Header 169 “Request address mode”

Sent byte: none

Received byte: 1 with value =32

Value 32 indicates that the address of the peripheral device is set through deep-sw.

Header 164 “Enable Hopper”

Sent byte: 1 byte. If byte=165 the hopper is qualified for payments.

Received byte: None (the hopper replies with ACK)

Header 163 “Test Hopper”

Sent byte: none

Received byte: 2 byte that indicate the hopper status

Byte 1 (WARNING: the hopper is anyway on duty)

Bit0=1 Stopped hopper for current and restarted after release.

Bit1=1 Timeout during supply (lack of coins or blocked engine)

Bit2=1 Engine has made a release operation during the last supply

Bit3=1 Set bit=1 at PowerOn and reset at first valid command

Bit4=1 Hopper disabled (disable with command 165)

Bit5=1 Hopper stopped from command 132 (“Emergency stop value”)

Bit6= 1 Hopper in duty / bit=0 hopper in IDLE (waiting for commands)

Bit7= 1 Problem during coin recovery. Coin not correctly recovered. Bits reset (except bit 3 and 6) at each new qualification (command 164) or at reset (command 1)

Byte 2 (ERROR: if only one bit=1 hopper is blocked in "OUT OF ORDER")

Bit0=1 Inductive sensors faulty coins
 Bit1=1 Data Checksum wrong coins
 Bit2=1 Faulty Hall sensor
 Bit3=1 Blocked Hopper for blocked photocells LB2, LB3, M1, M2, M3.
 Bit4=1 Blocked Hopper for current limit overtaken after three attempts.
 Bit5=1 Blocked Hopper for polling-timeout during "purge hopper"
 Bit6,7= NU

The error bit get reset (and the hopper become active again) if the condition of the error do not exist anymore. Only the bit 5,6 get reset at "power on" (serious error that require an operator).

Header 134 "Dispense hopper value"

After the qualification of the hopper send only the parameter for the count.

If we send as parameter 0, the counters will be reset and they restart from 0, if we send 1 the counters will be progressive.

Received byte: none. The hopper replies with ACK if correct command and previously qualified with command 164.

At each payment the hopper get qualified. To a request of payment without qualification the hopper replies with NAK.

During payment only the commands 132 and 132 and 1 are allowed (the others get back to a NAK) If we send the reset (header=1) instead of an "Emergency stop value" (header 132) the operation stops anyway but clearly the count of the supplied coins will be reset.

Header 133 "Request hopper polling value"

Sent byte: none

Received byte: 6 byte.

The first byte [data1] is an "Event Counter" that is a counter increased for each paid coin (any coin but it has to be paid not rejected).

When 0 is set at reset it starts again from 1 at overflow (0 at reset than cyclic from 1 and 255)

Byte 2 e 3 indicate the value in cent of the value amount that has to be supplied = $=[data2]+256*[data3]$ **that is always=0 given that it does not have meaning on CCS**

Byte 4 e 5 indicate the value in cent of the supplied amount $value=[data4]+256*[data5]$

Byte6 indicate the status of the hopper about the payment.

If=7-9 payment in progress (7-> stable engine 8-> forward engine 9->behind engine)

If=0 hopper in idle and last start of the engine has been for command 134

All the byte except "event counter" get reset at each new command 134.

At power off the counters get saved, the event counter instead start again from 0. At a command of reset instead they get all reset.

Header 132 "Emergency stop value"

Sent byte: none

Received byte: 2 byte (the first is LSB) that indicate the value in cent of the paid amount until the stop, so it counts $[data1]+256*[data2]$

The hopper after this command get disabled.

Repeating the command, the value get always repeated and saved until reset, at turn of or at a new command of payment (header 134).

ATTENTION: the reply depending on the status of the route of the coins can be very delayed and consider a timeout of at least 500ms

Header 131 "Request hopper coin value"

Sent byte: 1 byte that indicate the channel (1-16) corresponding to the coin whose code and value you would like to find out.

Received byte: 8 byte. The first 6 indicate the standard coin code ccTalk for Example "EU200" for 2€. The last 2 byte (the first is LSB) indicate the value in cent and counts $[data7]+256*[data8]$

Header 130 "Request indexed hopper dispense count"

Sent byte: 1 byte that indicates the channel (1-16) corresponding to the coin whose quantity of supplied pieces you would like to find out.

Received byte: 2 byte (the first is LSB) that indicate the number of the coin supplied from that channel from the reset. The value is $[data1]+256*[data2]$

The value of the first 8 counters (channels 1-8) is saved at the turn off while at the command reset they get reset.

Header 4 "Request Comms Revision"

Sent byte: none

Received byte: 3 byte [1],[4],[3]

Header 1 "Reset device"


Sent byte: none

Received byte: none

The hopper replies with ACK after the execution of a soft reset.

5 SPARE PARTS


 Use exclusively original spare parts to replace any components.

 Use of non-original and/or non conform parts (if not authorized exclusively by the assistance center in writing) release the manufacturer from all liability.

To request spare parts, photocopy the page of the pertinent spare parts table and fill out the table completely, indicating the table containing the part, its reference number on the drawing and the quantity of parts requested, and your details.

Requests lacking the above data will not be taken into consideration.

Send the copy/ies by fax to the number +39 0547 81247


MICROHARD
 VENDING PROJECTS
SPARE PARTS REQUEST FORM
 Send copy by fax to the number +39 0547 81247

CUSTOMER DATA

Company name _____

Address _____ Date of request _____

City/Town _____

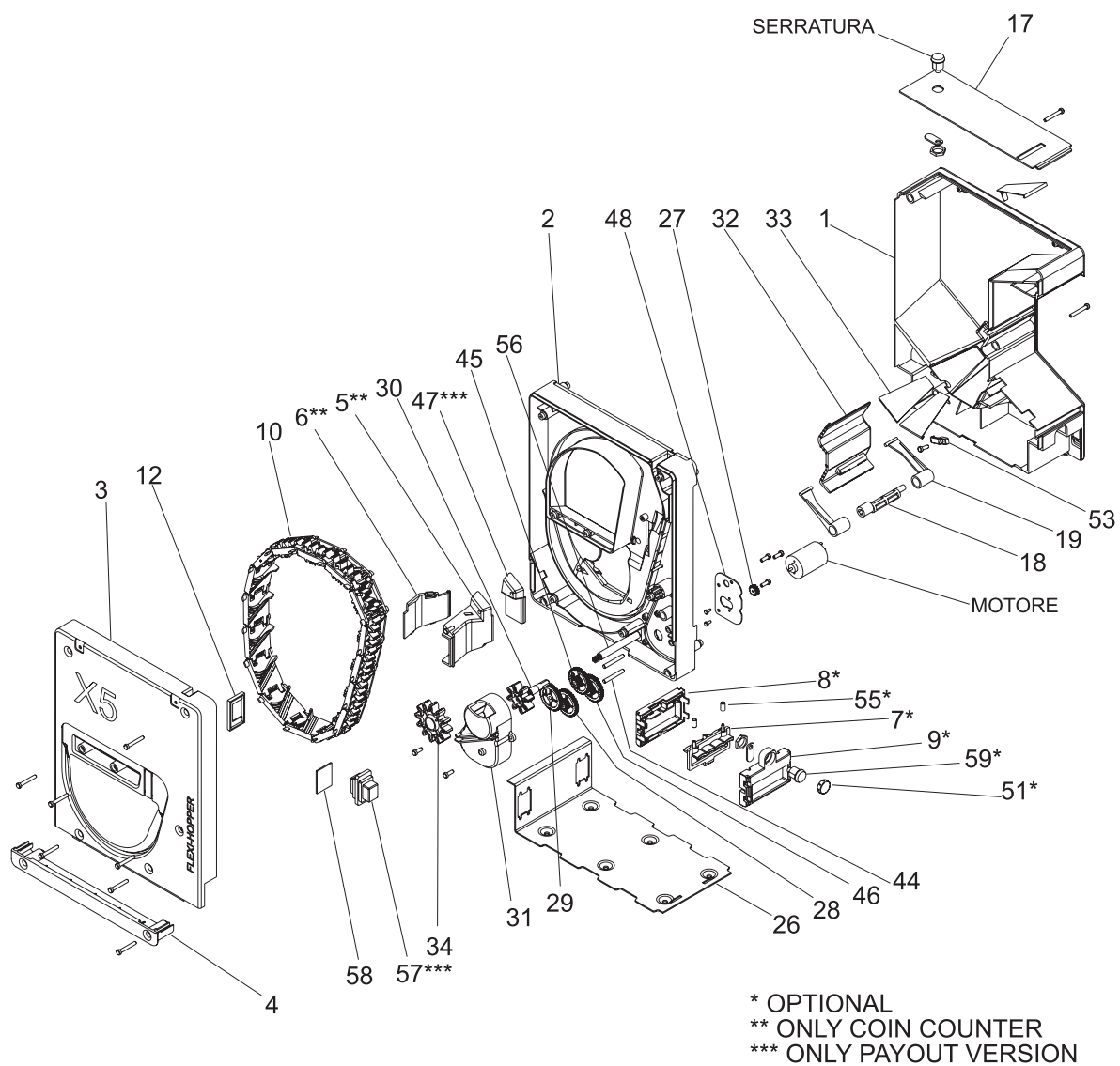
Tel. _____ Stamp/Signature _____

Fax _____

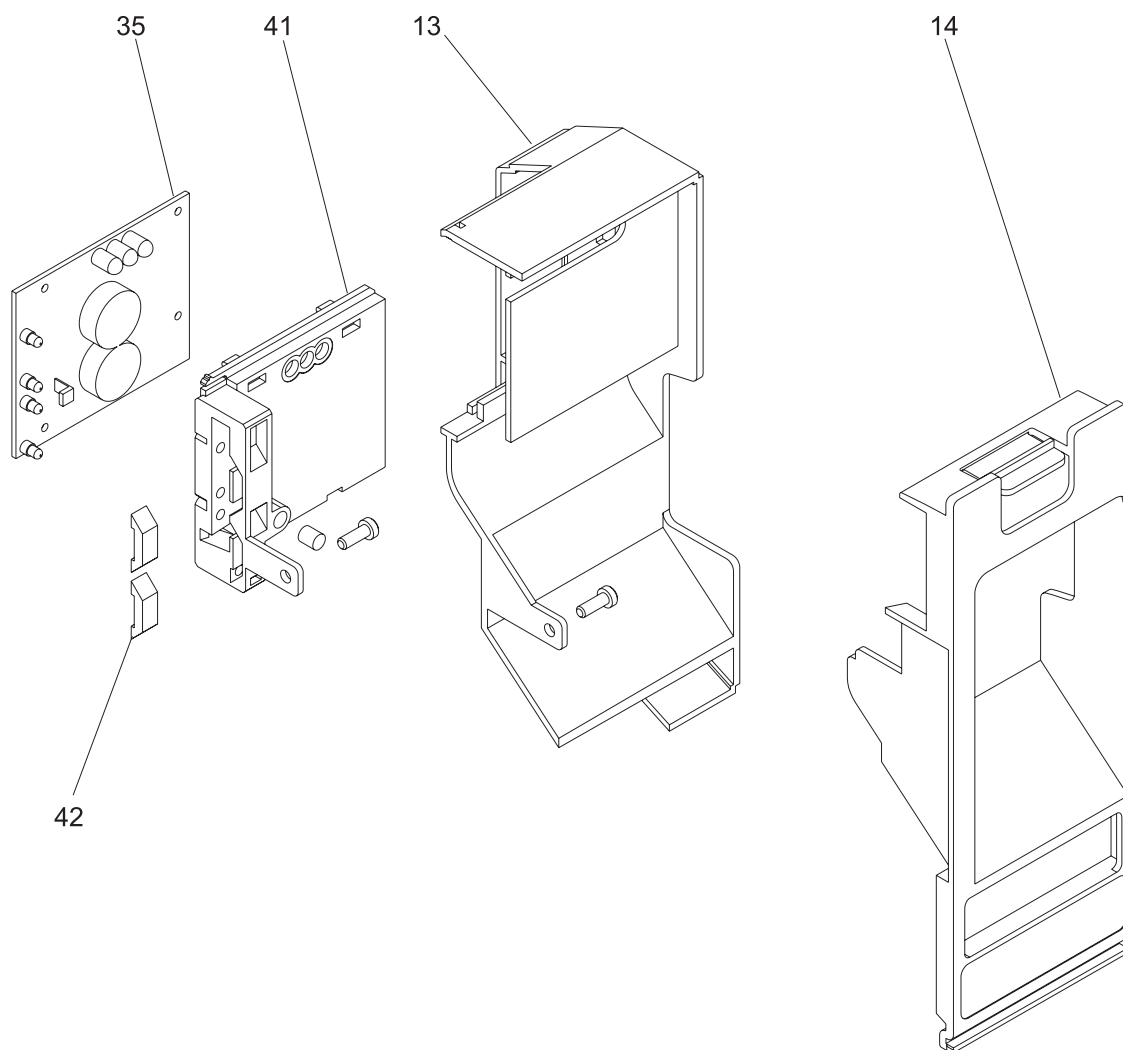
TABLE	NUMBER	QUANTITY

TABLE	NUMBER	QUANTITY

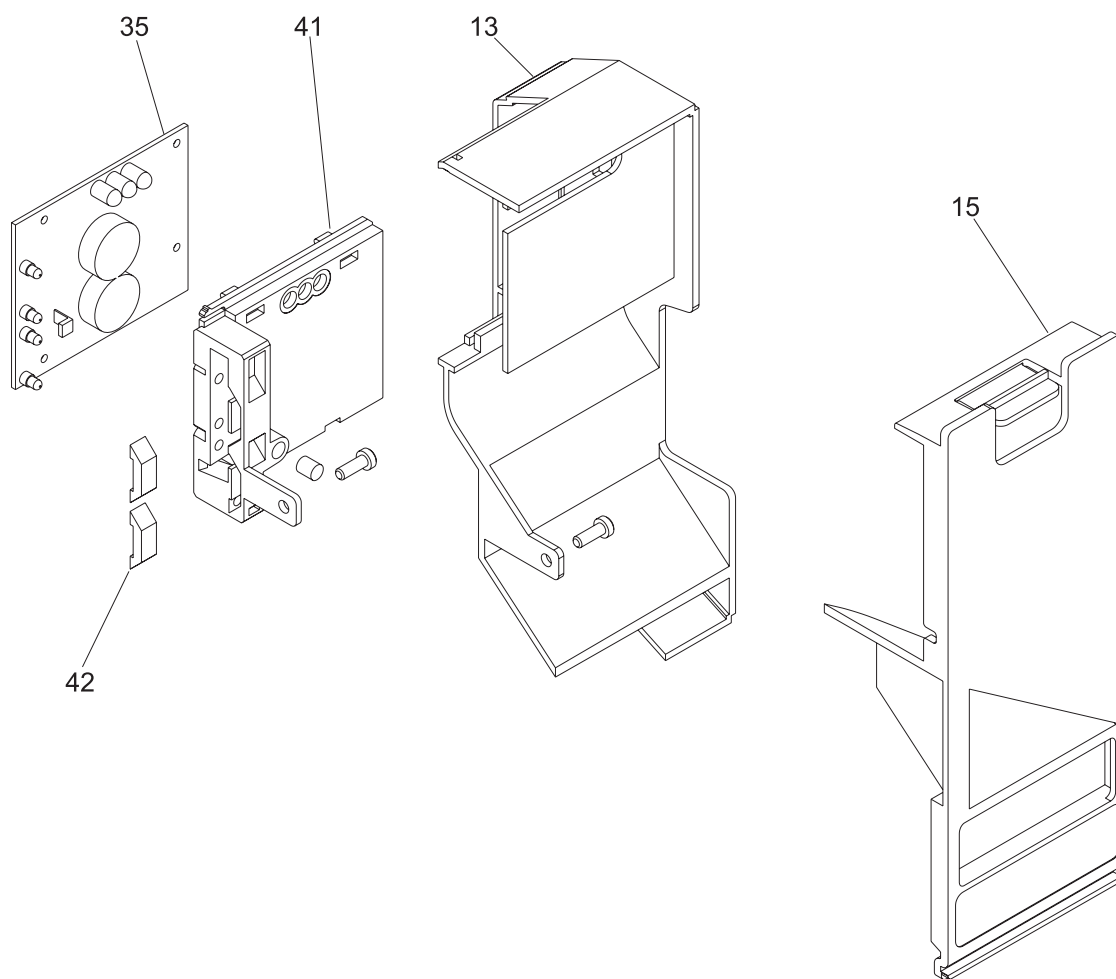
TABLE	NUMBER	QUANTITY



TAV. 1 - PAYOUT PART CINCH CONNECTOR



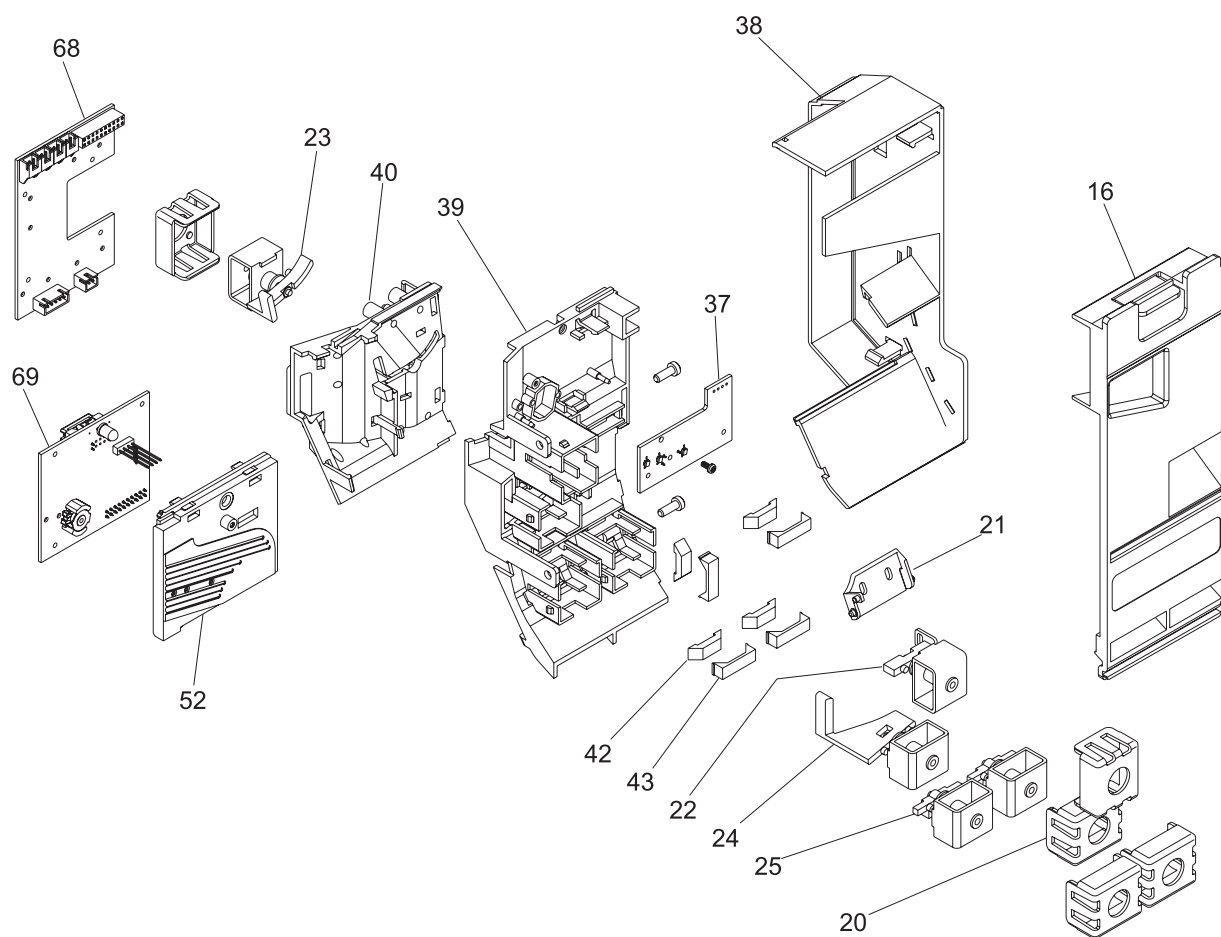
TAV. 3 - STANDART VERSION



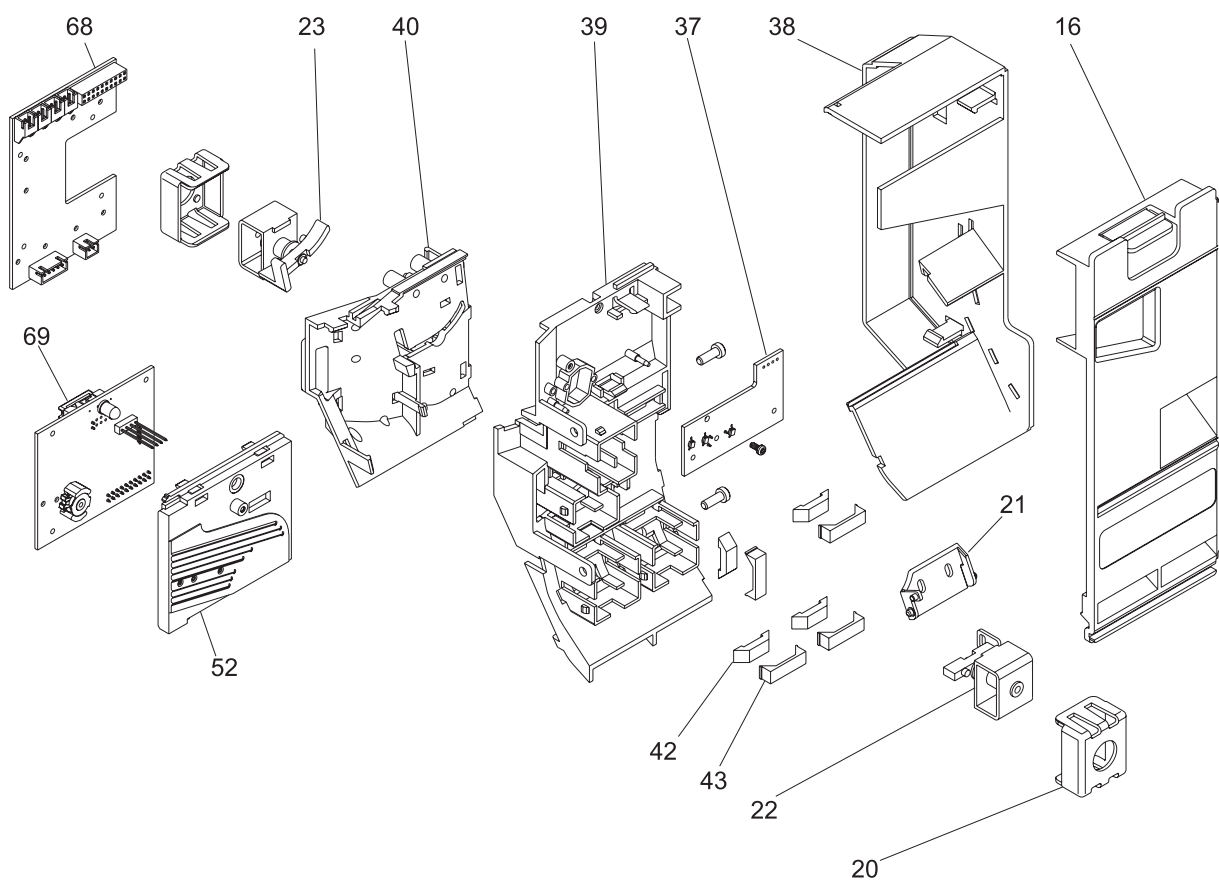
TAV. 4 - SIDE VERSION 1



TAV. 4a - SIDE VERSION 2



TAV. 5 - DYNAMIC PAY OUT



TAV.6 - COIN COUNTER AND SORTER

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