

## ClearLock 632



## Installation manual

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01	25-06-10	Update	
02	20-01-12	Update	



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## 1. INTRODUCTION

This Manual is written to assist with the installation of the CLEARLOCK 632 booth. See Figure 1 at page 43 for illustrations of the CLEARLOCK 632 and relevant main parts.

#### 1.1. Parts list

Main parts are shown below. Depending on the model, other parts can be added. (Ref. Figure 1)

**Table 1-1 Part list** 

Pos.	Ref.	Qty.	Item	
1	C02	1	Basement	
2	MC01	1	Low side jamb "R"	
3	MC02	1	Low side jamb "L"	
4	MC03	1	High side jamb "R"	
5	MC04	1	High side jamb "L"	
6		1	Top canopy	
			6a: top canopy with electronic	
			6b: top canopy cover #1	
			6c: top canopy cover #2	
7	C01	1	Ceiling with sensors	
8	V04	1	Side glass "R"	
			8e: side glass cover	
			8i: side glass cover	
9	V03	1	Side glass "L"	
			9e: side glass cover	
			9i: side glass cover	
10	V01	1	Low security side automatic sliding door	
11	V02	1	High security side automatic sliding door	
12	A03/4	1	Internal column	
13		1	Fastening set box (see fastening set part list)	



#### **Table 1-2 Tools**

Pos.	Qty.	Item	Draw	Assembly pos.
30	4	Hex Flat Head Screw M8x20 (Allen #5)		2,3,4,5
31	8	Flanged Button Head Screw M5x10 (Allen #3)		6a,6b,6c
32	4	Hex Flat Head Screw M8x20 (Allen #5)		6a,2,3,4,5
33	4	Journal box		6a,2,3,4,5
34		Plastic shims		6a,8,9
35	3	Grey silicone tube		8,9
36	12	Hex Head Bolt M8x35 (wrench #13)		6a,10,11
37	12	Spring Washer M8		6a,10,11
38	12	Nylon washer	ľ	6a,10,11
39	8	Flanged Button Head Screw M6x16 (Allen #4)		6a,7
40	10	Flanged Button Head Screw M4x10 (Allen #2.5)		12
41	4	Hex Socket Cap Screw M5x16 (Allen #4)		1,6a,12b
42	4	Flat Washer M5		1,6a,12b
43	4	Spring Washer M5	0	1,6a,12b



Most screws are already in final places: unscrew them and screw them again after assembling.

## 1.2. Tools and auxiliaries

- 1. Fork-ring-wrench size 13 (1 pcs.)
- 2. Allen key size 2.5, 3, 4, and 5
- 3. Caulking gun



## 2. Installation procedure

#### 2.1. Pre-installation Inspection

To put into practice a good installation creating as less as possible troubles and risks, it is better to check:

- If installation ambient temperature is -10° < °C < +70° for all the year.
- If the passage for power, console and intercom cables was planned before starting booth installation.

Proceed, when it is possible, the laying of cables in connection with booth installation, in any case before installing possible false ceilings or floating floors.

Be sure that the electric plant is appropriate for this installation.

Carefully protect all parts in glass and / or painted when working close to the booth

Make sure the floor is level plus or minus 6 mm within 4 m run. If the floor is not level, stop this installation and ask the general contractor to level the floor.

Make sure that the width of the wall opening is larger enough.

Make sure the minimum clearance above the booth. This space is necessary to positioning the booth and to allow for electrical connections and future servicing.

Do not use the booth as a scaffold or as a support for the execution of overhanging works!

Avoid that any acid (also if diluted) used to clean floors or glasses may enter in contact with the base of the booth.

#### Do not modify in any way the booth.

Check floor resistance to booth weight.

## 2.2. Unpacking and Inspecting

- · Move the booth packaging (ref. Figure 2) near to the place of installation, open and unpack all single booth component
- · Remove the protective plastic foil
- Remove packaging taking care not to cause damage to glasses or to surface. Clear all parts from the bottom box
- · Check that the parts are not damaged (glasses and surface). In case there are some damages please contact Automatic Systems
- Remove the accessories box (#13), lean it on the floor, open it and check that nothing is missing (ref. 1.1 Parts list)

If something is missing please contact Automatic Systems



#### **2.3.** Installation

#### 2.3.1. Basement

- · Position the basement of the booth (#1) in the place where the booth will be assembled with rubber part upside
- Fix the basement with self expanding anchors or other similar systems, depending on the type of floor, using the designed fixing holes (Ø8mm)(ref. Figure 3)



Position the basement according with the installation plans. Take care about lowside and highside.

#### 2.3.2. Basement and jambs

- · Unscrew the hex flat head screw M8x20 (#30) from the support frame
- Position the high side jamb "R" (#4) on the support frame
- · Screw the high side jamb "R" (#4) using the hex flat head screw (#30) (ref. Figure 4)



Repeat the previous operations for all 4 jambs (#2, #3, #4 and #5) (ref. Figure 5)

#### 2.3.3. Top and jambs

- · Unscrew the flanged button head screws M5x10 (#31) and remove the covers (#6b, #6c) from the top of the booth (#6a) (ref. Figure 6)
- Unscrew the hex flat head screw M8x20 (#32) from the top of the jambs (#2, #3, #4 and #5) and remove the journal boxes (#33) (ref. Figure 7)
- · If useful, screw 4 eye-bolts M16 on the top of the booth (#6a) to move it up with a crane or use an adequate lifting unit to move it up (approx. weight 100Kg.)
- · Position the top (#6a) above the jambs (#2, #3, #a, #5) (ref. Figure 8)



Take care about the lowside and highside.

 Screw the jambs (#2, #3, #4 and #5) with the hex flat head screw M8x20 (#32) and the journal box (#33) (ref. Figure 9)



#### 2.3.4. Positioning side glasses

- · Unscrew the two hex flat head screw M8x20 (#30) from the jamb (#3)
- Rotate the lowside jamb (#3): eventually partially unscrew the hex flat head screw M8x20 (#32) at the top of the jamb (#3) in order to make easier the introduction of the side glasses (ref. Figure 9)
- · Insert the side glass (#9) (approx. weight 100Kg.) into the jamb (#4) (ref. Figure 10)
- · Introduce the side glass (#9) into the jamb (#3) and at the same time rotate back to its original position the jamb (#3)
- Screw the two hex flat head screw M8x20 (#30) (ref. Figure 11) and the hex flat head screw M8x20 (#32) at the top of the jamb (#3) (ref. Figure 9)
- · Position the side glass (#9) in the middle between the two jambs (#3 and #4)
- Put the necessary plastic shims (#34) between the side glass (#9) and the top (#6a) in order to do not let the glass freely moves (ref. Figure 12)



Take care about the position of the glass, it must be vertical.



Repeat the previous operation for the side glass R (#8)

#### 2.3.5. Fixing side glasses

- · Clean the glasses with glass cleaner to remove dust, grease and fingerprints
- · Fill with silicone the gaps between side glasses (#8, #9) and the top (#6a)
- · Put the side glass covers (#8e, #9e) between glasses and jambs
- · Put the side glass covers (#8i, #9i) between glasses and jambs
- Fill with silicone the vertical gaps between side glasses (#8, #9) and the jambs (#2, #3, #4, #5) (ref. Figure 13)



The covers are fixed in place using silicone, then temporally fixed with paper masking tape until the silicone is dry.



Apply the silicone with a slice device and water with soap. Wait 24H before proceed with other operations. Remove silicone residual when the silicone is dry.



#### 2.3.6. Automatic sliding doors



Remove from the racks all the fixing devices (iron wire, tapes, ...) before proceeding.

- · Unscrew the hex head bolt M8x35 (#36), the spring washer (#37) and the nylon washer (#38) from the high security side sliding door (#11) (ref. Figure 14)
- Position the sliding door (#11) (approx. weight 100Kg.) between the top (#6a) and the basement (#1): first, introduce the sliding door bottom wheels inside the bottom slide-way, then the put it vertically (ref. Figure 15)
- · Allign the three top sliding door supports with the sliding door (#11)
- Screw the automatic sliding door (#11) and the three top supports by means of the hex head bolt M8x35 (#36), the spring washer (#37) and the nylon washer (#38) (ref. Figure 16)



Repeat the previous operation for the lowside sliding door (#10)

#### 2.3.7. Adjusting automatic sliding doors



Take care about the correct adjustments. (ref. Figure 15, Figure 16 and Figure 17)

- 1) The sliding door has to be vertical and aligned: take as reference the jambs
- 2) The door bottom wheels must not touch the bottom part of the slide-way
- 3) The sliding door must not touch the ceiling, when the ceiling will be assembled
- 4) Sliding door movement must be free for whole rotation
- 5) The top support must run straigth
- 6) The horizontal wheel of the top supports must touch on the side top canopy frame lightly
- 7) The rack and pinion must work freely for the whole rotation: between the teeth there must be a very little gap

#### 2.3.8. Ceiling

- Unscrew the flanged button head screws M6x16 (#39) from the top of the booth (#6a) (ref. Figure 18)
- Position the ceiling (#7) under the top canopy (#6a): first, introduce the ceiling sloped, then the put it horizontally and centered with the top brackets (ref. Figure 19)
- Screw the ceiling (#7) with the flanged button head screws (#39) (ref. Figure 20)



#### 2.3.9. Internal column

- Unscrew the flanged button head screws M4x10 (#40) from the column cover (#12a) (ref. Figure 21)
- · Unscrew the hex socket cap screws M5x16 (#41), the flat washer (#42) and the spring washer (#43) from the ceiling (#7) and form the basement (#1) (ref. Figure 21)
- · Place the rear of the column (#12b) in place between the ceiling (#7)\* and the basement (#1) with the plate (#12c) (ref. Figure 22)
- Screw the rear of the column (#12b) with hex socket cap screws M5x16 (#41), the flat washer (#42) and the spring washer (#43) (ref. Figure 22)
- · Screw the cover (#12a) on the rear of the column (#12b) with the flanged button head screws M4x10 (#40) (ref. Figure 21)



\* NOTE: move the connection cable through the hole into the ceiling with care.

#### 2.4. Final operations

#### 2.4.1. Electrical assembling

- · Follow the electrical assembling instructions described at page 12 "Electrical".
- · Perform functional test of the system

#### 2.4.2. Top covers mounting

- · If present, unscrew the eye-bolts from the top of the booth (#6a) (ref. Figure 6)
- · Cut covers (#6b, #6c) to make the power, intercom and console cables go out
- Screw the covers (#6b, #6c) on the top of the booth (#6a) with the flanged button head screws M5x10 (#31) (ref. Figure 6)



## 3. Electrical wiring

#### 3.1. Assembling instructions



Remove from the cables all the fixing devices (iron wire, tapes, ...) before to proceed.

#### 3.1.1. Safety beams wiring

• Connect the safety beams to the amplifier board on the four dedicated connectors (#50), located nearby the external top sliding doors supports, and fix the cables with a cable tie, in order not to disturb the door movements (ref. Figure 23)

#### 3.1.2. Emergency button wiring

· Connect the "Emergency button" of the internal column to the electronics on the dedicated three multipolar terminal strip "*MM01*" (#51), located upon the ceiling, following the colours (ref. Figure 24)

#### 3.1.3. Ceiling located devices wiring

• Connect the ceiling located devices to the electronics by means of the connector cable "MMO2" (#52), located upon the ceiling (ref. Figure 25)

#### 3.1.4. Traffic-light plates wiring

- · Guide the connection cable "W002" (with GND cable) into the jamb (#2)
- · Connect the traffic-light plate on the dedicated connector cable (#53) following the colours and the GND connector (#54) to the GND cable (ref. Figure 27)
- · Screw the traffic-light plate on the jamb (#2) with the hex flat head pin-in-TORX screw
- · Guide the connection cable "W003" (with GND cable) into the jamb (#4)
- · Connect the traffic-light plate on the dedicated connector cable (#53) following the colours and the GND connector (#54) to the GND cable (ref. Figure 27)
- · Screw the traffic-light plate on the jamb (#4) with the hex flat head pin-in-TORX screw



#### 3.1.5. Intercom plate wiring

- Guide the connection cable "W001" into the jamb (#2)
- Connect the intercom plate on the dedicated connector cable (#55) following the colours (ref. Figure 28)
- · Screw the intercom plate on the jamb (#2) with the hex flat head pin-in-TORX screw

#### 3.1.6. Console wiring

· Connect the console to VB3406 board

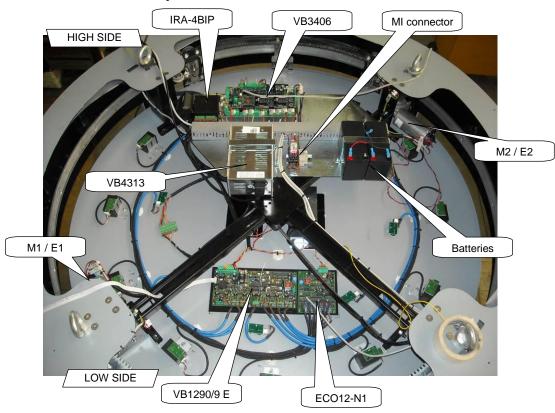
#### 3.1.7. Power wiring

- · Connect the power supply to the back-up batteries
- · Connect the power supply to the main power

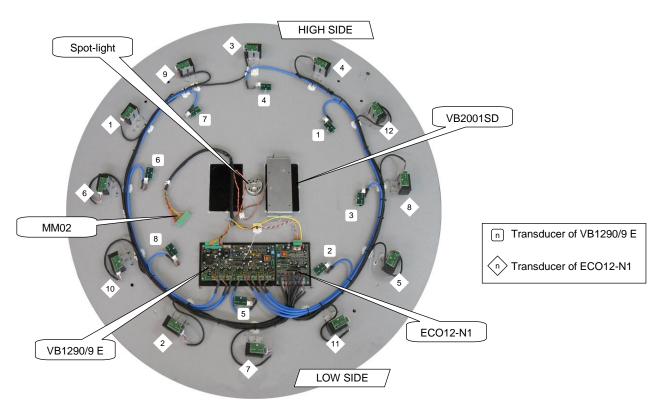


## 3.2. Wiring diagram

### 3.2.1. Electronics layout



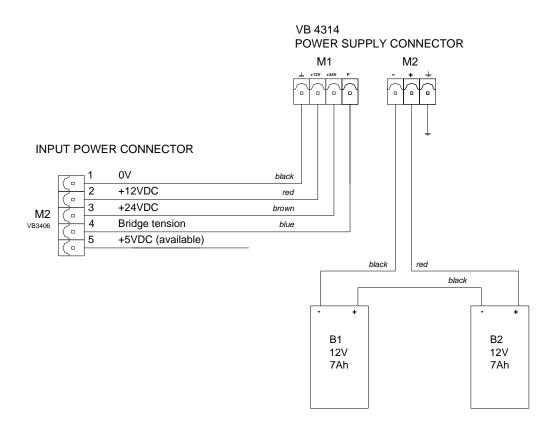
#### 3.2.2. Ceiling devices layout

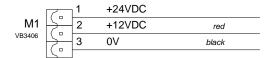


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#### 3.2.3. Power wiring



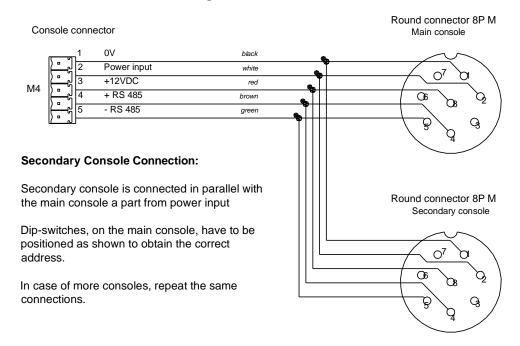


#### 3.2.4. Loudspeaker wiring



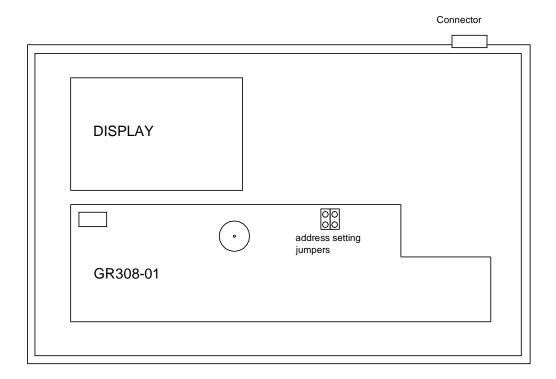


#### 3.2.5. NCD2 console wiring



## NCD2 address setting with GR308-01 board

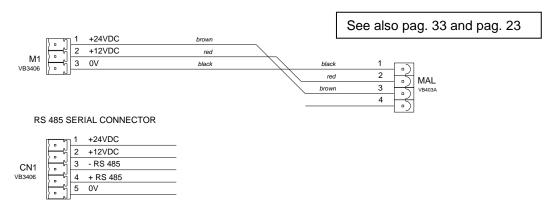


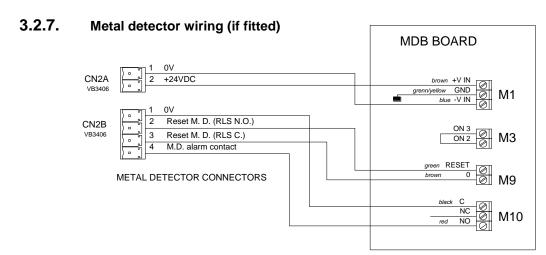


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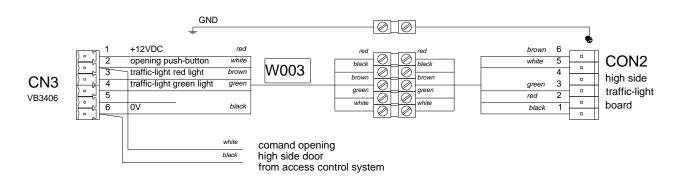


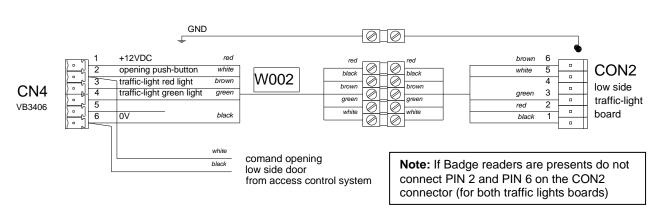
#### 3.2.6. VB 3406 power supply and serial connectors





#### 3.2.8. Traffic-light plate wiring

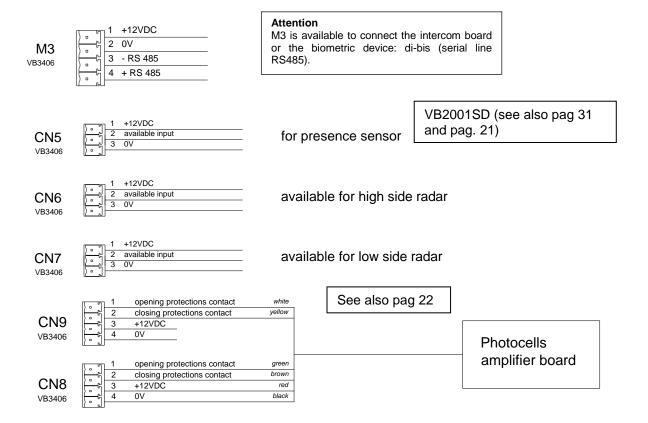




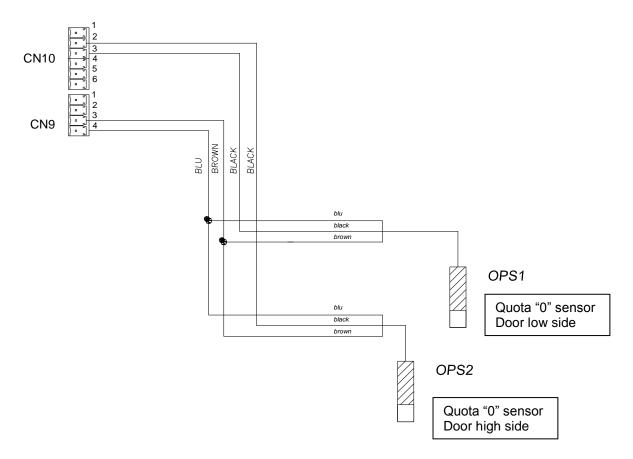
#### ClearLock 632-MT-EN-02



#### 3.2.9. Presence sensor, high and low side radars and safety photocells wiring

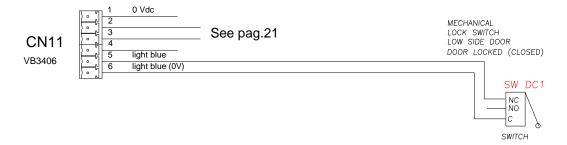


#### 3.2.10. High and low side reset quota "0" sensor



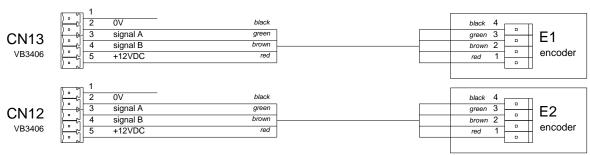


#### 3.2.11. Mechanical lock switch low side door (if fitted)



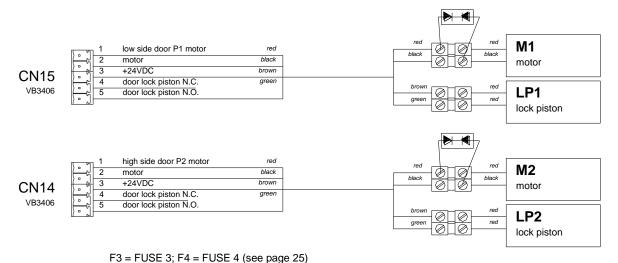
#### 3.2.12. High side and low side motor encoder wiring

#### Low side door E1 encoder connector



High side door E2 encoder connector

#### 3.2.13. High side and low side motor and lock piston wiring



#### NOTE:

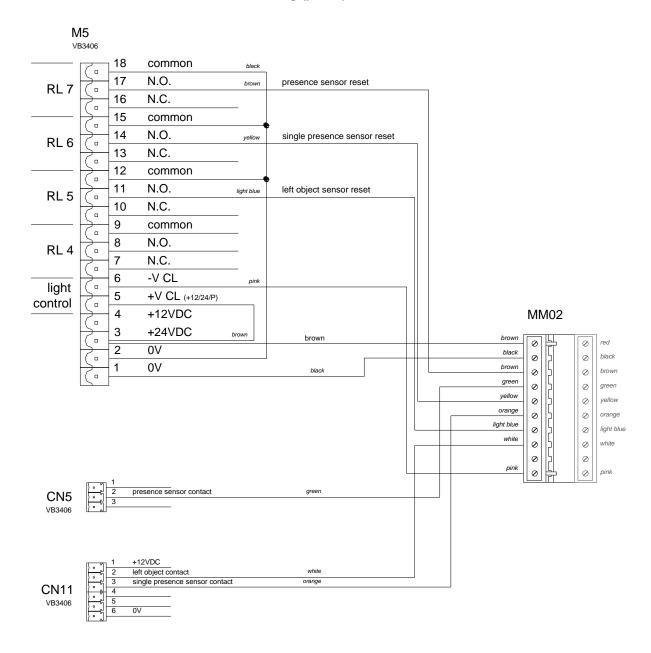
On request both doors (low and high side doors) can be managed in two differents way:

FAIL-LOCK: door is blocked during power cut

FAIL-SAFE: door is unblock for free passage during power cut

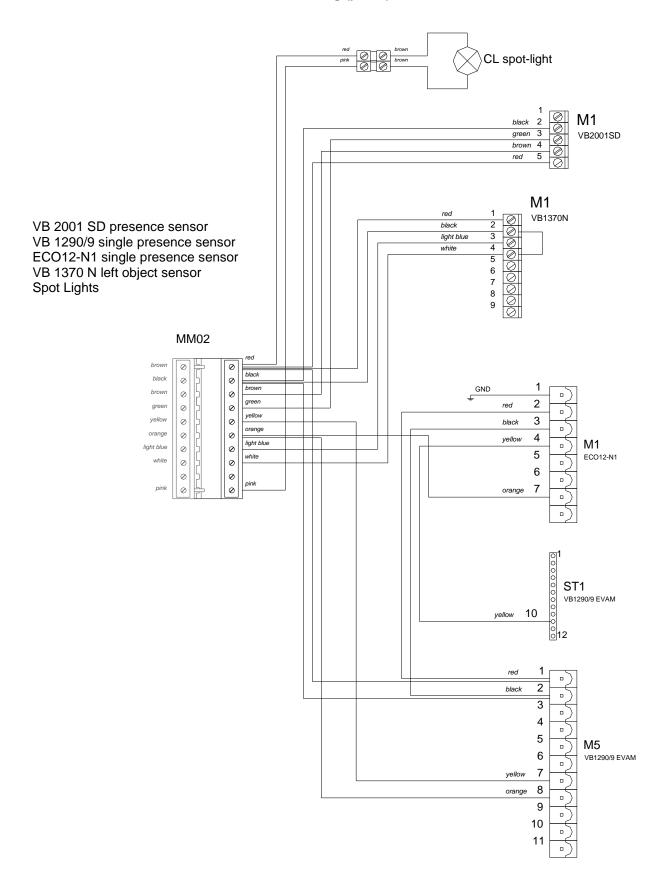


#### 3.2.14. Connector MM02 wiring (part 1)





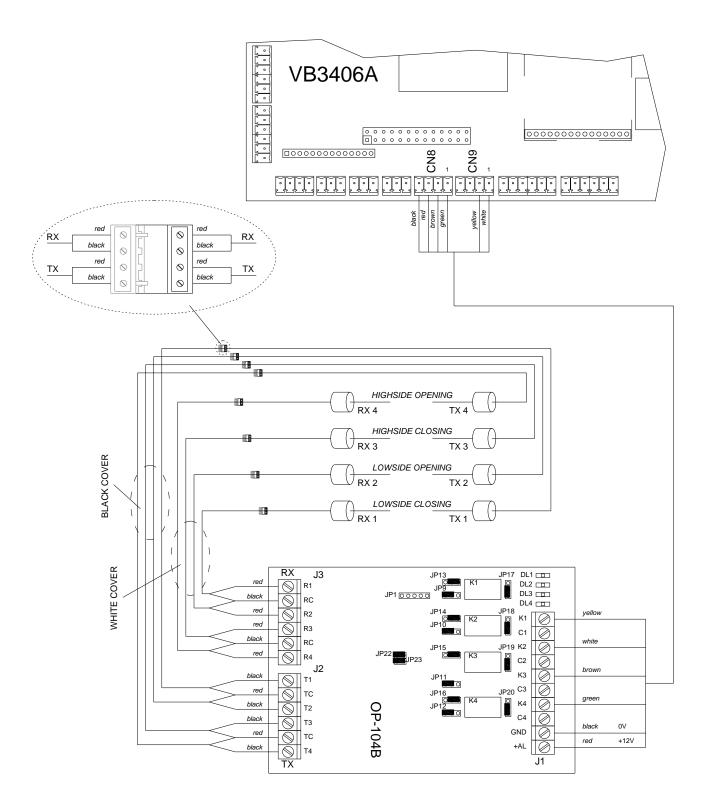
#### 3.2.15. Connector MM02 wiring (part 2)



#### ClearLock 632-MT-EN-02

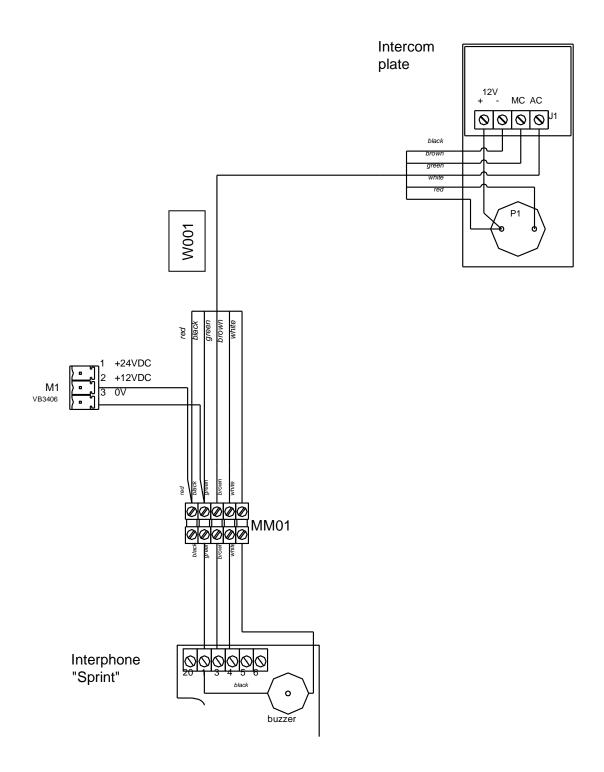


#### 3.2.16. IRA-4BIP safety beams amplifier board wiring



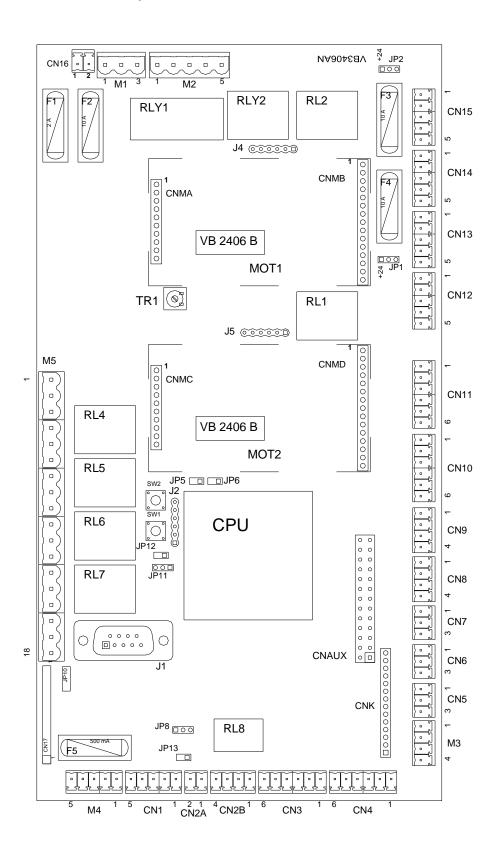


### 3.2.17. Intercom system wiring





#### 3.2.18. VB3406 layout



#### ClearLock 632-MT-EN-02



#### Table 3-1 VB3406 components legend

JP1	output selection +12/24VDC	3 - CN14
JP2	output selection +12/24VDC	3 - CN15

<ul><li>3</li><li>2</li><li>1</li></ul>	output selection +12VDC		output selection +24VD0
$\bigcirc$ 1		0 1	

JP3 RS 485	serial	line end	jumper
------------	--------	----------	--------

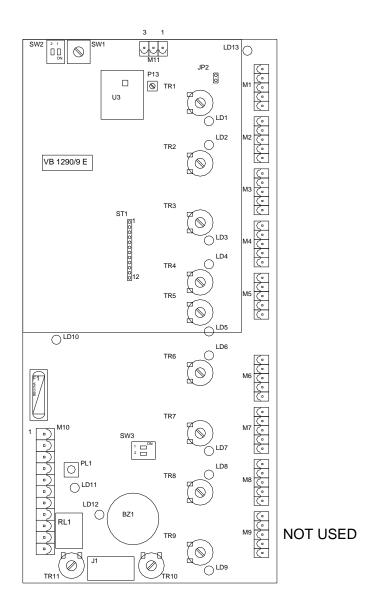
- JP5 Service jumper – DO NOT touch (closed)
- JP6 Service jumper - DO NOT touch (closed)
- JP7 Vocal messages Write protect jumper – close=write protect
- Service jumper DO NOT touch (pos. 1-2 closed) JP12
- LD5 Relay RL1 state led
- LD7 Low side door data movement recording led
- RS-232 communication led LD9
- LD10 RS-485 communication led
- LD15 Relay RL2 state led
- LD20 High side door data movement recording led
- LD21 Relay RL4 state led
- Relay RL5 state led LD22
- LD26 Relay RL6 state led
- LD27 Relay RL7 state led
- LD34 Power ON led
- LD40 Relay RL8 state led
- TR1 Messages volume setting
- SW1 Main microprocessor RESET button
- SW2 Available button
- F 1 Fuse 2A quick burning (+12VDC power in)
- Fuse 10A quick burning (+24VDC power in) F 2
- F 3 Fuse 10A quick burning (low side door motor - CN15)
- F 4 Fuse 10A quick burning (high side door motor - CN14)
- F 5 Fuse 500mA quick burning (M4 connector power out +12/24VDC)
- J1 RS-232 connector
- J2 IN-CIRCUIT main CPU programming connector
- J3 Connettore di servizio – factory test
- J4 IN-CIRCUIT low door motor CPU programming connector
- J5 IN-CIRCUIT high door motor CPU programming connector

**CNAUX** Connector for additional I/O VB 403 board

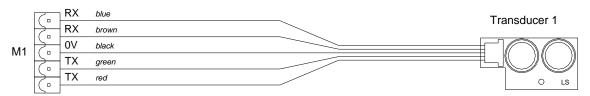
CNMA-CNMB Connectors for VB 3406 B motor board - CN15 connector CNMC-CNMD Connectors for VB 3406 B motor board - CN14 connector



#### 3.2.19. VB1290/9 EVAM layout (if fitted)



Transducers wiring (from connectors M1, M2, M3, M4,M5, M6, M7, and M8 to transducers through the supplied cable)





#### LD1,2,3,4,5,6,7,8,9

Transducers signal intensity led

Transducers signal setting (for each transducer use relevant potentiometer;

TR1 ex. TR1 = transducer 1)

- Rotate CLOCKWISE to increase the signal.
- Rotate ANTI-CLOCKWISE to decrease the signal.

SW3-2 Alarm phonic signal switch LD12 Alarmed sensor signalling led

#### TR10 collapsing effect setting potentiometer



- Rotate CLOCKWISE to increase the collapsing effect.
- Rotate ANTI-CLOCKWISE to decrease the collapsing effect.

#### TR11 sensitivity setting potentiometer



- Rotate CLOCKWISE to increase the sensitivity.
- Rotate ANTI-CLOCKWISE to decrease the sensitivity.
- PL1 Sensor RESET push button
- LD11 Signalling Led for sensor RESET
- LD13 Blinded sensor signalling led
- P13 Blinding sensitività potentiometer
- JP2 General alarm for blinded sensor jumper
- J1 Connector to remote bar-graph display
- F1 Fuse (800mA)

#### Blinded sensor alarm contact wiring

	C <sub></sub> 3	Common
M11	2	N.O. contact
	7 1	N.C. contact
	1	



# Some suggestions for a correct setting of the VB 1290/9 board (9 sensors single-passage-checking-system)

- 1) Connect the separately provided bar-graph display to the dedicated connector J1
- 2) Rotate clockwise trimmer TR10 till its end
- 3) Ask for the collaboration of a possibly corpulent person (target person [TP]) to help you during the settings, and let him cross the booth from low to security side
- 4) Let the TP enter inside the unit and check that on the bar-graph display 3 bars are ON (high intensity light): if YES, let the TP exit and go to point number 7
- 5) Let the TP exit and set trimmers TR1 up to TR9\* in order to reach on the bargraph display 3 bars ON (<u>high</u> intensity light): rotate\*\* clockwise if less than 3 bars are ON; rotate\*\* anti-clockwise if more than 3 bars are ON
- 6) Push the reset button PL1 and go to point number 4
- 7) Rotate\*\* anti-clockwise TR10 and push the reset button PL1
- 8) Let the TP enter inside the unit and check that on the bar-graph display 1 bar is ON (high intensity light): if YES, let the TP exit and go to point number 11
- 9) Let the TP exit and set trimmer TR10 in order to reach on the bar-graph display 1 bar ON (high intensity light): rotate\*\* clockwise if less than 1 bar is ON; rotate\*\* anti-clockwise if more than 1 bar is ON
- 10) Push the reset button PL1 and go to point number 8
- 11) With the booth now empty, set trimmer TR11 (Alarm threshold setting indication) so that on the bar-graph display device 3 bars are ON (<u>low</u> intensity light)
- 12) Disconnect the bar-graph display

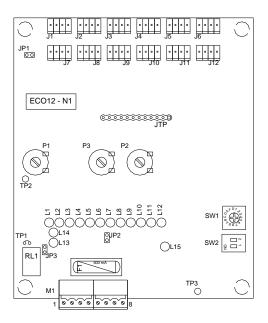
**ATTENTION**: all above mentioned checks and settings must be performed with doors (both sides) closed, either with the TP in or out.

\* Note: all the trimmers TR1 up to TR9 are set approximately at the same value (in the same same angular position).

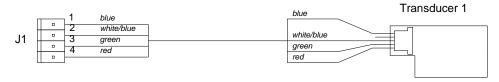
\*\* Note: the rotation has to be very short.



#### 3.2.20. ECO12-N1 layout (if fitted)



Transducers wiring (from connectors J1 .. J12 to transducers through the supplied cable)





#### Some suggestions for a correct setting of the ECO12-N1 board

In order to set the additional single presence control board ECO 12-N1 please follow the following procedure:

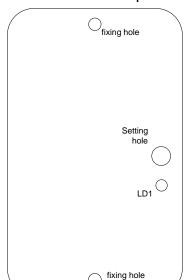
- 1) If the system has to work in parallel with VB1290/9 single presence board (like in this case) please check that jumper JP2 is open, connect PIN SIN on the M1 connector to VB1290/9 (as described in the wiring diagrams), Led L15 will start blinking.
- 2) Rotate trimmer P1 fully anticlockwise direction
- Connect the black connector into TP3 and the red connector into TP2 of a multimiter tester
- 4) Slowly rotate SW1 in both directions and stop rotating when you will see on the tester the maximum voltage rating reached
- 5) This setting will also correspond to the maximum intensity of the Led L1 up to Led L12
- 6) The system is now ready to work

NOTE: The board has 4 different programs according to the distance between the ceiling and the floor. Check that dip-switch SW2 has both 1 and 2 in ON (height 2300mm)

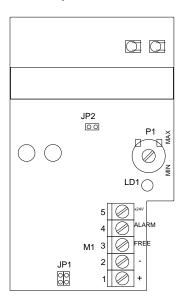


#### 3.2.21. VB2001SD layout

#### View from top



#### From components board



#### TR1 sensitivity setting potentiometer



View from top

- Rotate CLOCKWISE to improve sensitivity
- Rotate ANTI-CLOCKWISE to decrease sensitivity

#### TR1 sensitivity setting potentiometer with the NEW BOARD



#### View from top

- Rotate CLOCKWISE to decrease sensitivity
- Rotate ANTI-CLOCKWISE to <u>improve</u> sensitivity
- LD1 alarmed sensor signalling led

JP1,JP2 work frequency setting

00 1,579 KHz

1,610 KHz

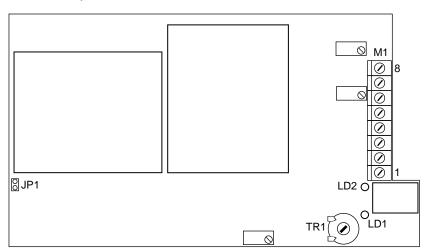
1,650 KHz

1,690 KHz



#### 3.2.22. VB 1370 N left object board (if fitted)

Lay-out board



#### TR1 Sensitivity setting potentiometer



- Rotate CLOCKWISE to increase sensitivity
- Rotate ANTI-CLOCKWISE to decrease sensitivity
- LD1 Alarmed sensor signalling led
- LD2 Sensor reset signalling led
- JP1 Clocking selection

$\bigcirc$	
$\bigcirc$	
$\cap$	MASTER

SI AVE

#### 3.2.23. GR308-01 board layout

Board inside the console

	•	address setting jumpers	
GR308-01			



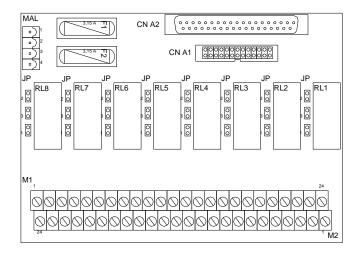
#### 3.2.24. VB403 I/O board (if fitted)

Connected to the main control board (VB3406) through a flat cable (using CNA1 connector).

For connection details (if fitted) see the addendum supplied with this manual

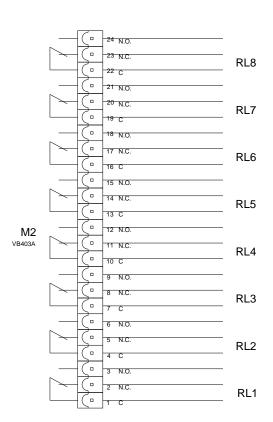
LAYOUT componenti scheda VB 403 A

JP 2 CLOSE = COMMON RELE' +12V JP 3 CLOSE = COMMON RELE' +24V JP 1 CLOSE = COMMON RELE' 0V ALL JUMPERS OPEN =FREE CONTACT



ALL INPUTS (16) ARE RELATED TO 0V

		24	0V
		23	0V
		22	0V
		21	+12V
		20	+12V
	-	19	+24V
		18	+24V
	-	17	+5V
		16	
		15	
M1 VB403A		14	
		13	
		12	
		11	
		10	
		9	
		8	
		7	
		6	
		5	
		4	
		3	
		2	
		1	
	ك		

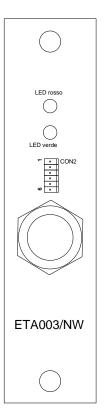




#### 3.2.25. Traffic-light and intercom plates layout

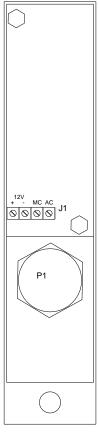
4.





Back view (board side)

Back view (board side)



IC1 - intercom plate





#### ClearLock 632-MT-EN-02



## **Preventive Maintenance and Adjustments**

#### **4.1.** Intent of this Section

This section covers the recommended procedures to reduce service calls and prolong the life and appearance of the ClearLock 632 496.

#### 4.2. Main Checks

After having installed the booth to be sure that everything is working correctly, some checks have to be done. These checks should be done at least twice a year:

- 1) Check that the two motors are correctly fixed and tighten (ref. Figure 29)
- 2) Check that sliding doors end pistons are correctly fixed (ref. Figure 30)

#### 4.3. Basic Maintenance

Clean once a week with a soft cloth all photocells because if they are dirty they may cause a wrong doors working (sliding doors may stop with no reason, because dust on the photocells seem to be an object between the sliding door and the booth). (ref. Figure 31)

In case a wrong doors working still remain, contact Automatic Systems because probably the photocells are in a wrong position.

Clean also, with a vacuum cleaner the two slide-ways one a week to avoid the presence of dust and obstacles. (ref. Figure 31)

Check if all users information stickers are present, if not please contact Automatic Systems. If the ClearLock 632 needs a different kind of maintenance, that is to say some parameters have to be changed, please see other paragraphs.

**Ceiling Lamp removal, replacement**: Using a glove or paper towel grab the bulb and pull it from its socket. Using a glove or paper towel push a new bulb into the fixture socket.

**Ceiling Lamp Fixture removal, replacement**: Remove the wiring of the faulty fixture from the main board VB3406A. Pull the fixture and its wiring down through the hole. Work the wiring up through the hole in the ceiling panel and push the light fixture into hole until it snaps into place. Wire the light fixture to the main board.

**Traffic-lights plate removal, replacement**: when a traffic lights has to be replaced unscrew the traffic-lights plate and replace it with the new one.



#### 4.4. Doors parameters setting

To change doors parameters follow these procedures:

From the console enter in Service Programming turning selector S1 clockwise to PROGRAM. On the display it appears:

COMMAND MODE 7=>AM 8=>PM 9=>NIGHT 4=>..... 5=>.....

Pushing in rapid sequence the buttons F3, F4 and 1 the service menu is entered. On the display it appears:

SERVICE MENU 1= READ PATH 2= MOTOR PARAMETERS

**READ PATH:** Push button **1** to access the "path" menu to change the opening/closing path points of the doors. On the display it appears:

DOOR SELECTION 1= INTERNAL DOOR 2= EXTERNAL DOOR

Pressing buttons 1 - 2 it is possible to introduce new parameters in closing and in opening for the high door and the low door.

Push button **1** to introduce new parameters in closing and in opening for the high door. On the display it appears:

READ INT PATH

xx

3= Reset 7= Save

4= Open 8= Close

Follow the next steps in order to introduce the new path:

- 1) push button 8 until the door is completely closed
- 2) push button 3 to reset the old path

(on the display it appears 00 instead of the old points number)

- 3) push button 4 until the door is completely opened
- 4) push button 7 to save the new data. On the display it appears:

SAVE DATA AND RECORD
THE PATH?
3= Cancel 7= Save

Pressing button 3 to cancel the new parameters.

Pressing button 7 to introduce the new parameters: the booth automatically makes a new door initialization to record the new path.



Push button **2** to introduce new parameters in closing and in opening for the low door. On the display it appears:

READ EXT PATH	
XX	,
3= Reset 4= Open	7= Save
4= Open	8= Close

Follow the next steps in order to introduce the new path:

- 1) push button 8 until the door is completely closed
- 2) push button 3 to reset the old path

(on the display it appears 00 instead of the old points number)

- 3) push button 4 until the door is completely opened
- 4) push button 7 to save the new data. On the display it appears:

Pressing button 3 to cancel the new parameters.

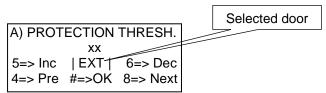
Pressing button 7 to introduce the new parameters: the booth automatically makes a new door initialization to record the new path.

Rotate S1 selector back to ON position to get out of this function.

**MOTOR PARAMETERS:** Push button **2** to access the "parameters" menu to change the doors movements setting. On the display it appears:

DOOR SELECTION 1= INTERNAL DOOR 2= EXTERNAL DOOR

Pressing buttons 1 - 2 it is possible to introduce new parameters for the high door and the low door. On the display it appears:



The two doors have the same menu voices: on the display appears which door is selected at the moment.

- push button 5 to increase the current value
- push button 6 to decrease the current value
- push button 4 to access the previous menu item
- push button 8 to access the next menu item
- push button # to save the new data. On the display it appears:



Pressing button 3 to cancel the new parameters.

Pressing button 7 to introduce the new parameters: the booth automatically makes a new door initialization to record the new path.

Rotate S1 selector back to ON position to get out of this function.

- **A) PROTECTION THRESH.:** value from 1 to 100. It represents the "power" that the door uses to win an obstacle during the run. A higher value makes the door "stronger".
- **B) INITIALIZ.SPEED:** value from 1 to 100. It is speed of the door during the initialization process or when the door performs a "reverse" during the run (example: when a safety beam is alarmed). A higher value makes the door "faster" during initialization.
- **C) OPEN: SPEED:** value from 1 to 100. It is speed of the door in opening. A higher value makes the door "faster".
- **D) OPEN:** % **PATH ACCELL:** value from 1 to 100. It is % of the whole space in which the door accelerate up to the normal speed in opening (item C)). A higher value makes the door "slower".
- **E) OPEN: START BRAKE:** value from 1 to 100. It is % of the whole space to be made by the door in opening before the door starts decelerating up to 0.
- **F) OPEN: TIME BRAKE:** value from 1 to 1000. It is time of the short circuit applied on the motor when the door starts to brake in opening. Value expressed in milliseconds.
- **G) OPEN: BRAKE SPEED:** value from 1 to 100. It is braking speed of the door in opening. A higher value makes the door "faster".
- **H) CLOSE: SPEED:** value from 1 to 100. It is speed of the door in closing. A higher value makes the door "faster".
- I) CLOSE: % PATH ACCELL: value from 1 to 100. It is % of the whole space in which the door accelerate up to the normal speed in closing (item H)). A higher value makes the door "slower".
- **L) CLOSE: START BRAKE:** value from 1 to 100. It is % of the whole space to be made by the door in closing before the door starts decelerating up to 0.
- **M)** CLOSE: TIME BRAKE: value from 1 to 1000. It is time of the short circuit applied on the motor when the door starts to brake in closing. Value expressed in milliseconds.
- **N) CLOSE: BRAKE SPEED:** value from 1 to 100. It is braking speed of the door in closing. A higher value makes the door "faster".



## 5. Troubleshooting Guide

\* If something on request has not been fitted, the relevant problem cannot exist

One or both doors do not operate correctly		
Possible Cause	Check Point	Action
in the slide – way of the door there is an object that avoid the correct movement	Check that no object is inside the slide-way	Remove the object and clean the slide-way with a vacuum cleaner
one of door parameters is not appropriate for that place	Please see "Doors parameters setting" at page 36 of this manual and follow the instructions	Adjust accordingly
one or more safety beams photocells are dirty	Check if there is some dust on one or more safety beams photocells	Clean with a soft towel. Don't use solvents
one or more safety beams     photocells have been broken     or they are misaligned	Check if one or more safety beams photocells are correctly fixed to the frame and aligned	Replace the safety beams photocells paying attention to connect the new one in the same way if it's broken, and aligned them carefully
5) the console is set to manual function or that booth is set for entrance/exit only	Check if you are in manual function on the display console and check if the door you approach is the correct one to enter/exit	Change the programmation to requested function See the operating guide.

The console is OFF		
Possible Cause	Check Point	Action
S1 selector at the console is in OFF position	Check that S1 selector is in ON position	If it is in OFF position turn clockwise the key of 90°
Connectors between the console and the booth are not properly connected	Check that the console connection is properly wired with the console cable and that the wiring of connection cable at the main board is ok (see page 16 of this manual)	Act accordingly
3) One or two fuses are burnt	Check that fuses F1 and F2 on VB3406A are not burnt	Replace the burnt fuses with new ones with same characteristic (see page 24 of this manual)



The consoles signals the lack of power		
Possible Cause	Check Point	Action
Booth power switch of the main power board of the building is in OFF position.	Check if the booth power switch of the main power board of the building is in ON position.	If not turn ON the main power
The power supply plug is not correctly connected or there is a fault in the plug	Check that the plug is not damaged and it is correctly connected	In case the plug is damaged replace it
3) There is a lack of the main power	Check main power presence at the power supply with proper test instrument	Call the Energy supplier

*2 people are allowed to enter even if the single presence sensor system is ON (on the console)		
Possible Cause	Check Point	Action
1) VB1290/ECO12 has to be adjusted	people do not alarm VB1290/ECO12	See page 26 and follow the setting instructions
2) Problem with the connection between VB1290 and VB3406A	there is an alarm on VB1290 but 2 people can enter the same	Check the connection between VB1290 and VB3406A
3) Problem with the connection between VB1290 and ECO12	there is an alarm on ECO12 but 2 people can enter the same	Check the connection between VB1290 and ECO12
4) VB1290 not working	2 people do not alarm VB1290	After having checked that it isn't point 1, VB1290 has to be replaced
5) ECO12 not working	2 people do not alarm ECO12	After having checked that it isn't point 1, ECO12 has to be replaced

Spot lights are OFF during booth working		
Possible Cause	Check Point	Action
1) spot lights are broken	spot lights is OFF	Replace the relevant spot light
2) wrong connection on VB3406A	spot lights is OFF	Check the connection on VB3406A



One or both traffic lights don't work		
Possible Cause	Check Point	Action
1) one or two leds are broken	Only the red or the green light doesn't work	Replace the traffic lights
2) wrong connection on VB3406A	Both lights are OFF	Check the connection on VB3406A

*The loudspeaker doesn't work		
Possible Cause	Check Point	Action
1) wrong connection on VB3406A		Check the connection on VB3406A
2) the loudspeaker is broken	Check if the loudspeaker is damaged	Replace the broken loudspeaker

*The intercom doesn't work		
Possible Cause	Check Point	Action
1) wrong connection	No intercom is visibly damaged	Adjust the connection on intercom plates and on the handset
2) one intercom is broken	One intercom is visibly damaged	Replace the broken intercom

During initialization one or both doors do not close as first action		
Possible Cause	Check Point	Action
The connection to motors is inverted	One or both doors start opening and not closing	Invert the wiring on the motor/s

During initialization one or both doors do not move		
Possible Cause	Check Point	Action
one or both motors are not correctly connected	Check the wiring to the motor/s	Adjust the wiring
2) on VB3406A there isn't the correct voltage	Check the voltage of 24V on VB3406A at point (connector M2 page 15 of this manual)	See the next point
3) one or more fuses are burnt	Check that fuses F2, F3 and F4 on VB3406A are not burnt	Replace the burnt fuses with new ones with same characteristics
4) VB2406B boards are not correctly connected with VB3406A	Locate the VB2406B on the main board (VB3406A)	Check that VB2406B boards are correctly connected

During initialization one or both doors do not move correctly		
Possible Cause	Check Point	Action
the encoder/s are not correctly connected or are broken	Check the wiring on the encoders or if they are damaged	Adjust the wiring or replace encoder/s if they are broken
the doors moving is limited by an obstacle or the mechanical lock has not been opened correctly	Check if there is an object in the slide – ways and if the mechanical lock is correctly open	Remove the object / open the lock



Low side door do not move		
Possible Cause	Check Point	Action
1) emergency button is pressed	Check the emergency button state	Put the emergency button in the operating state
2) wrong connection	The emergency button is not pressed	Adjust the connection



# 6. Figures

Figure 1 Parts list 6с 6b 6a 5 9i 8i 9e 8e 12 8 9 2

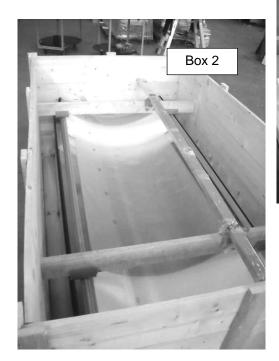
3

10

1



Figure 2 Packaging



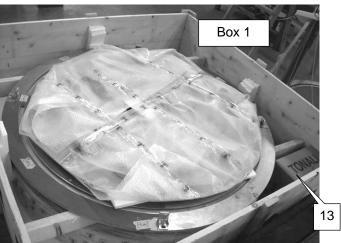


Figure 3 Basement

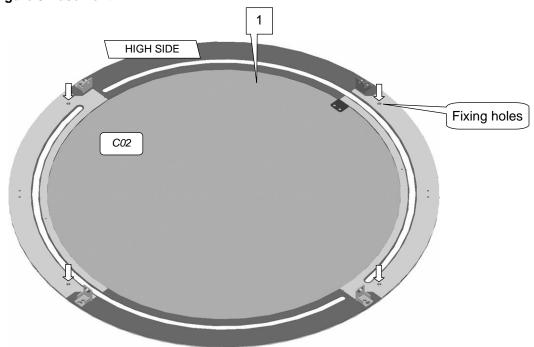




Figure 4 Assembly basement and high side jamb R

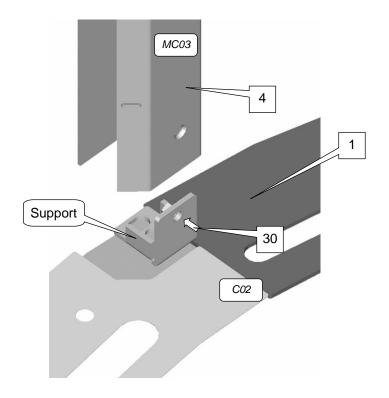
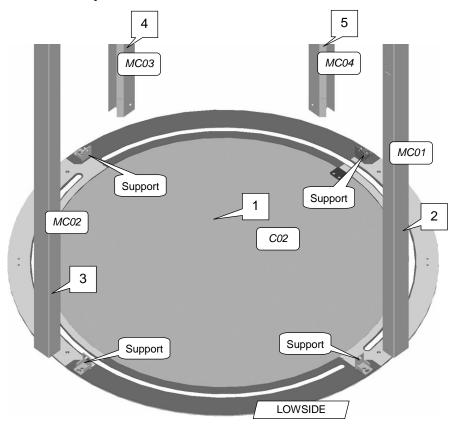


Figure 5 Assembly basement and jambs



#### ClearLock 632-MT-EN-02



Figure 6 Top canopy

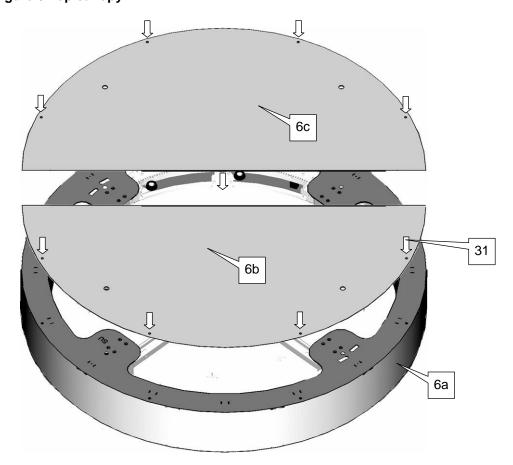


Figure 7 Assembly high side jamb R

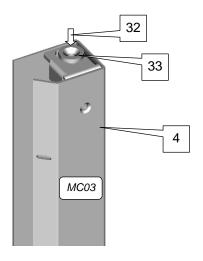




Figure 8 Positioning the top canopy above the jambs

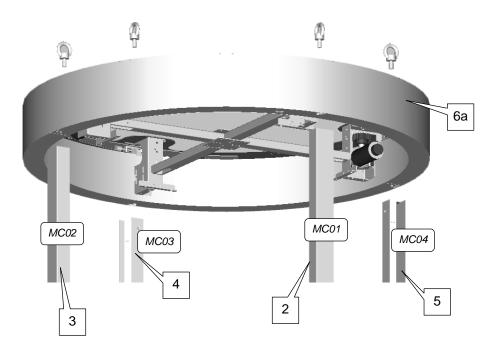


Figure 9 Assembly top and high side jamb R

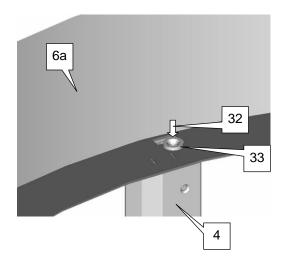
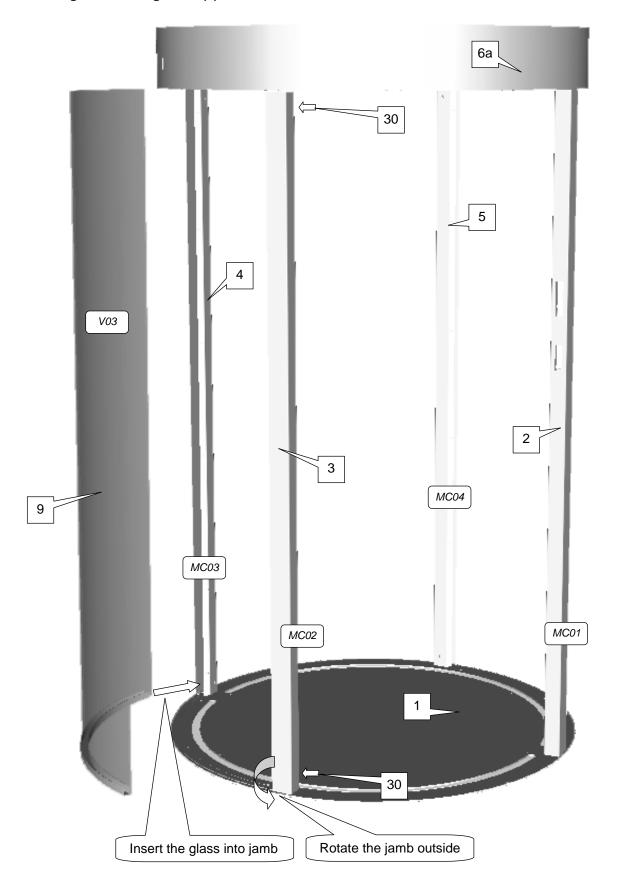




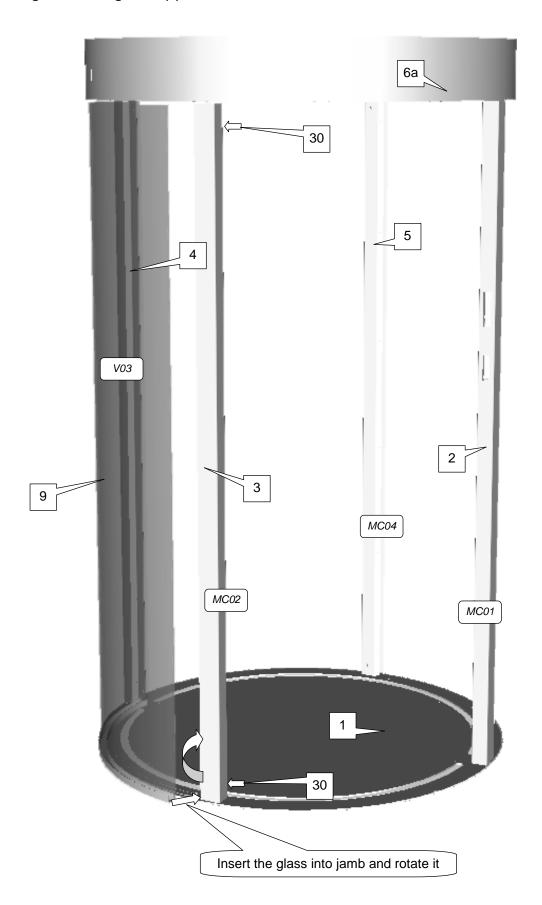
Figure 10 Side glass L (1)



### ClearLock 632-MT-EN-02



Figure 11 Side glass L (2)



#### ClearLock 632-MT-EN-02



Figure 12 Positioning the side glasses

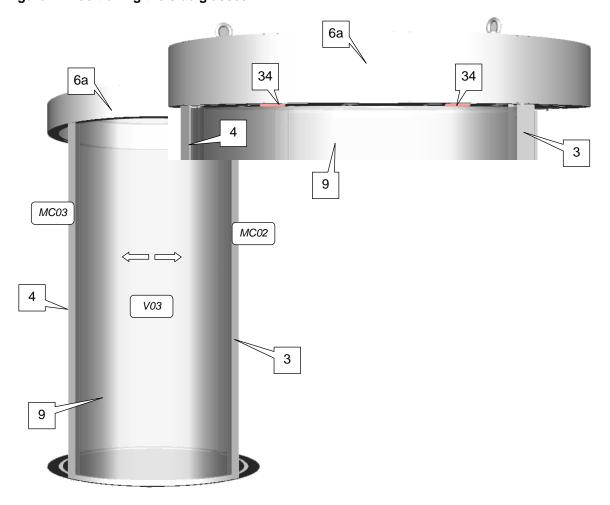
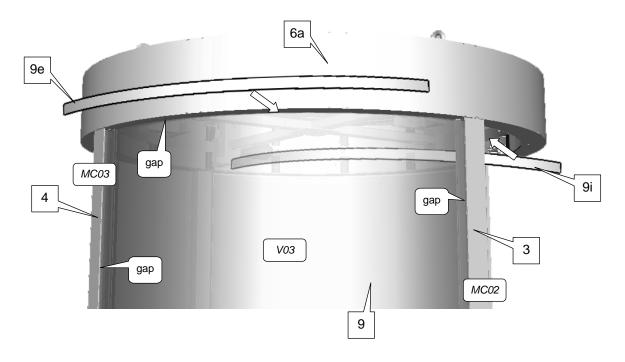


Figure 13 Fixing the side glasses





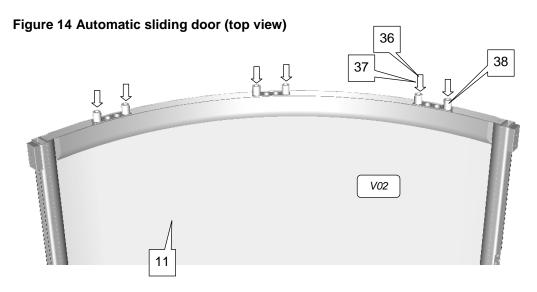


Figure 15 Automatic sliding door (bottom view)

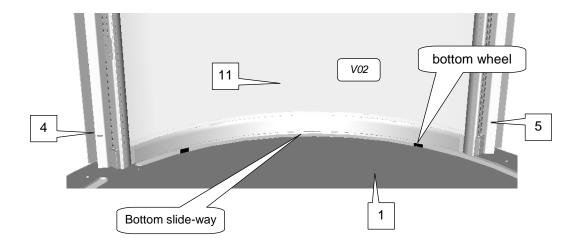




Figure 16 Assembly automatic sliding door

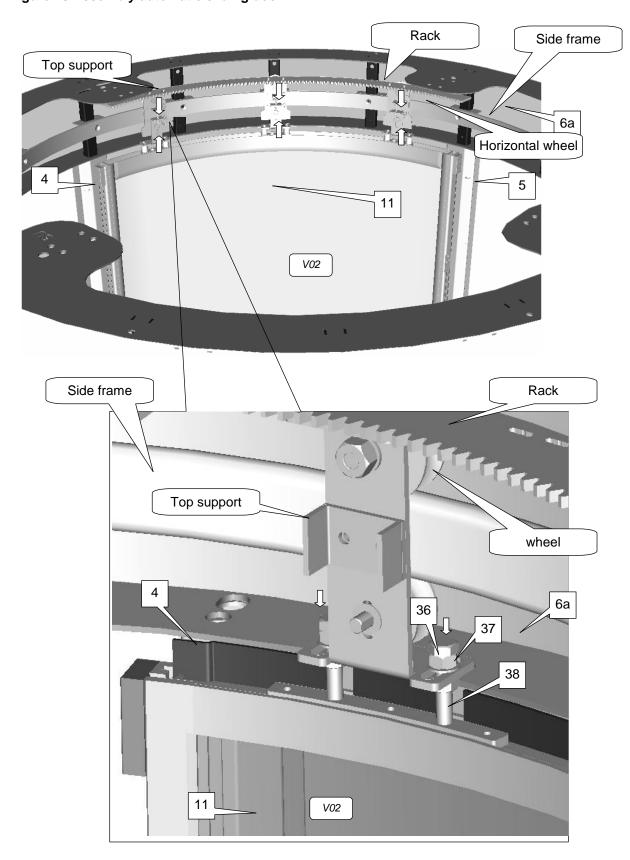




Figure 17 Automatic sliding door system

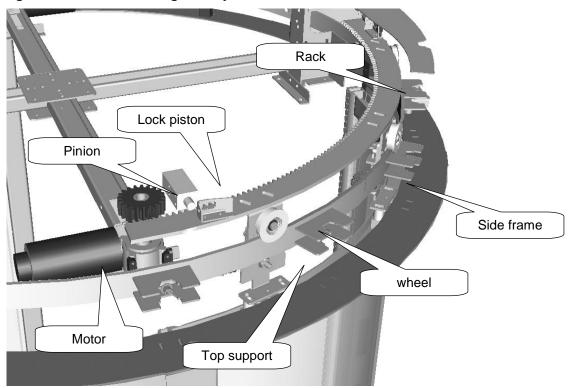




Figure 18 Assembly the ceiling (1)

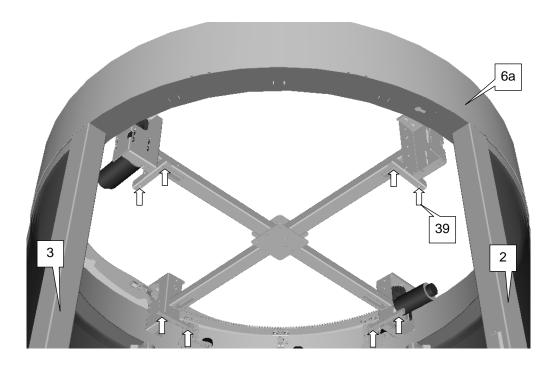


Figure 19 Assembly the ceiling (2)

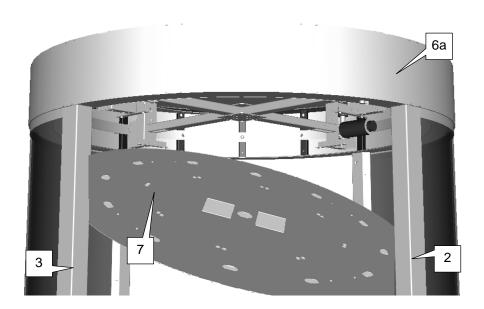




Figure 20 Assembly the ceiling (3)

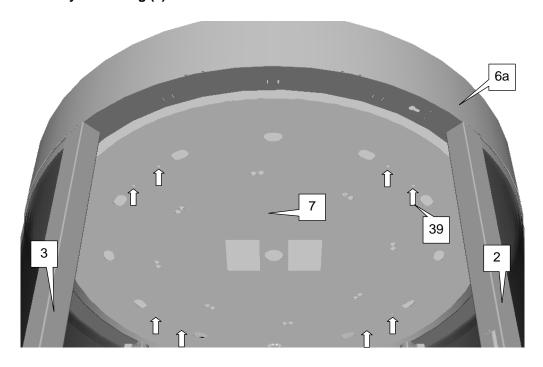


Figure 21 Assembly the internal column (1)

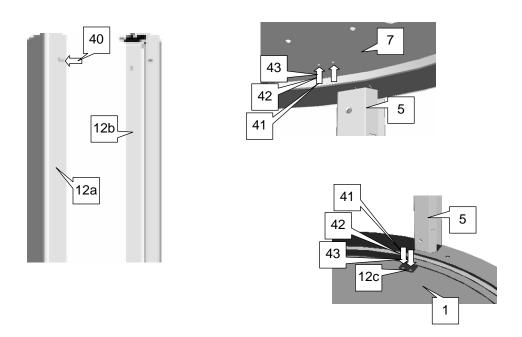




Figure 22 Assembly the service column (2)

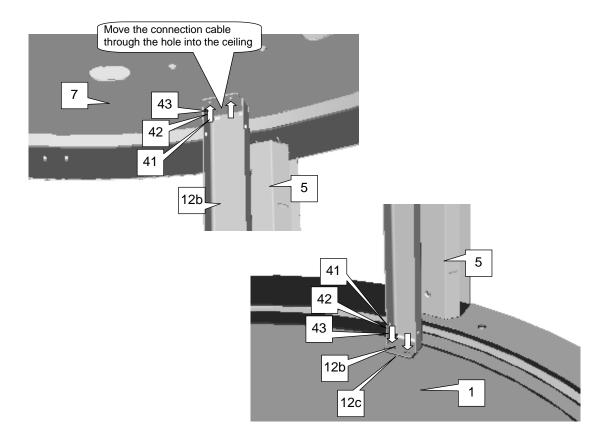




Figure 23 Connecting safety beams

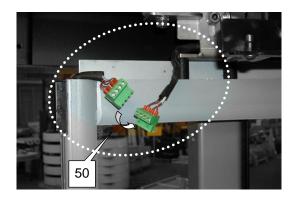


Figure 24 Connecting intercome device

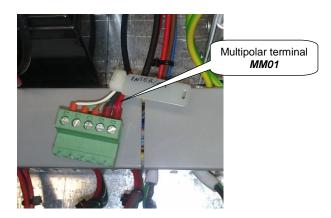


Figure 25 Connecting ceiling located devices

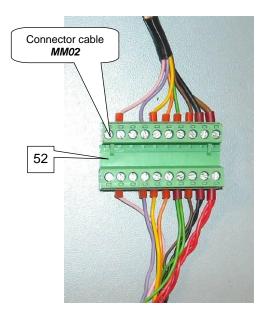




Figure 26 Installing plates on the jambs

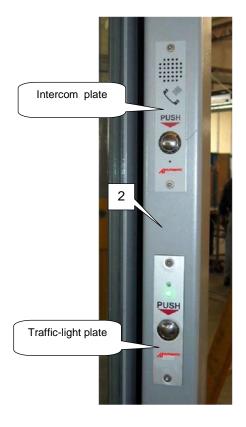




Figure 27 Connecting traffic-light plates

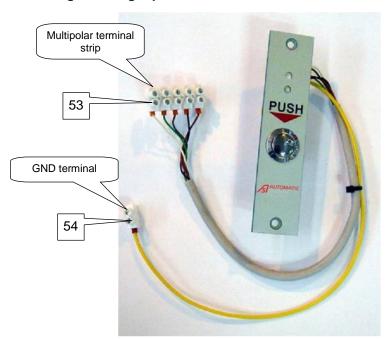




Figure 28 Connecting intercom plate

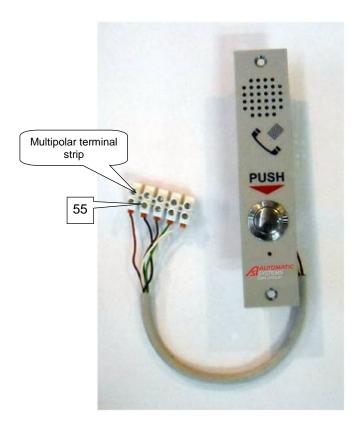


Figure 29 Motors check

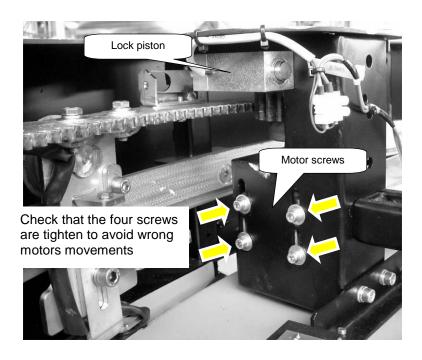




Figure 30 Sliding doors lock pistons check

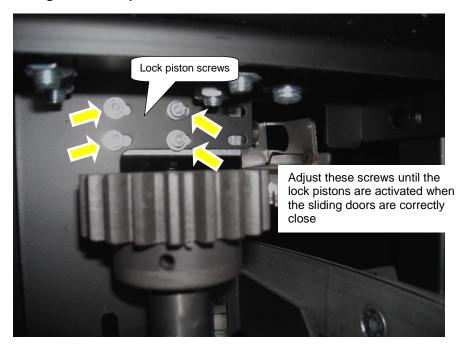


Figure 31 Booth cleaning

