LAFORTEZZA®
Industrial Store Systems

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Doc. ESAMT01
Rev. 02
Date: 12/12/2013
BC005155

CE

ENGLISH

"ORIGINAL INSTRUCTION "

MANUAL

FOR CHECKOUT INSTALLATION, OPERATION AND MAINTENANCE

ESA
FORTEZZA CONCEPT

ENGLISH

LIST OF REVISIONS OF THE MANUAL

REV	DESCRIPTION	DATE
00	Issue	15/10/12
01	Variation of wording, page 17	11/12/12
02	***Variations, pages 6-12-17-18-19-20-24-25-26***	**12/12/13**

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INTRODUCTION

0.1 GENERAL DATA

This manual provides the user with the necessary instructions to ensure safe and appropriate use and to facilitate the installation and maintenance of the checkout equipment.
In particular, this manual consists of seven chapters and this introduction:

- chapter 1 contains the general safety warnings;
- chapter 2 provides general information on the manufacturer, the description of the checkout, technical data, etc.;
- chapter 3 contains the instructions necessary for the installation of the equipment in the place of use;
- chapter 4 contains the operating instructions;
- chapter 5 contains the maintenance instructions;
- chapter 6 provides recommendations for the demolition and disposal of the equipment in compliance with protection of the environment;
- chapter 7 contains the list of spare parts, drawings and diagrams.

This manual must be considered an integral part of the equipment and must remain available and close at hand for installers, users and maintenance staff.
We recommend careful reading of this manual before any operations are carried out on the checkout; this will help to prevent installation, operating and maintenance errors.
In particular, you are advised to read the contents of CHAPTER 1 "GENERAL SAFETY WARNINGS" and to scrupulously observe the indications contained in this manual since they describe how to perform particular operations which, if not followed, can cause damage to persons or to the checkout.
If a fault occurs or any problem arises regarding the checkout, please consult our Technical Assistance Service.
Please note that the use of ORIGINAL SPARE PARTS guarantees the efficiency and long life of the checkout.

0.2 GUARANTEE

Every checkout is delivered fully tested and guaranteed for 1 (one) year from the date of delivery or of testing at the point of sale. The guarantee covers all mechanical and electrical parts.
This guarantee applies exclusively to the Purchaser up to date with contractual and administrative regulations, and if the installation and subsequent use are carried out by the User, these must be in accordance with the instructions contained in this manual which must be read and fully understood.
On the basis of this guarantee, the manufacturer undertakes to repair or replace free of charge any parts which deteriorate or prove to be defective at source, including labour costs and travel expenses.
The guarantee excludes any responsibility for direct or indirect damage to persons, objects or equipment caused by incorrect use, maintenance or installation of the product.
The guarantee also excludes costs for transport, inspection, dismantling and re-assembly by our technicians, should the faults detected not be attributable to the manufacturer.
In particular, the guarantee excludes operations for belt tensioning and alignment and cleaning of the photocells. If requested by the Purchaser or carried out by our technician, these operations will be charged at the tariffs in force at the time.
The guarantee starts from the date of testing carried out by our technician.

0.2.1 How to request assistance

For any type of information relative to the use, maintenance, installation, etc. LA FORTEZZA S.p.A. is always at the customer's disposal to satisfy requests.
For such requests, the customer should refer to this manual and always indicate the data on the identification plate (model, serial number and year of manufacture).
It should be remembered that only specialised technicians can carry out repair operations while the use and maintenance operations indicated in this manual should be performed by qualified operators.
The intervention of our Technical Assistance Service is recommended; this Service can provide specialised technicians and original spare parts. To request technical assistance, the customer should send an email (to assistenza.banchicassa@lafortezza.com) indicating the details of the problem, the model and serial number of the checkout, the address of the point of sale, the telephone number, the name of the contact person, the opening times and the closing day of the point of sale.
La Fortezza S.p.A guarantees a reply to the request for assistance within 48 (forty-eight) hours of receiving the request.

0.2.2 How to order spare parts

Although the checkout is constructionally simple and functional, it may be necessary to replace parts that are subject to wear. The Purchaser should consult this instruction manual and quote the data on the checkout rating plate (type/model, serial number, year of manufacture) when contacting our Technical Assistance Service to order spare parts.

0.3 EC DECLARATION OF CONFORMITY

The EC declaration of conformity to the applicable European directives is shown below.

CE

DICHIARAZIONE CE DI CONFORMITA'

Il Costruttore:

LAFORTEZZA® Industrial Store Systems

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Dichiara qui di seguito che il prodotto:

BANCO CASSA: Modello:
N° di matricola:
Anno di costruzione:

il cui FASCICOLO TECNICO è stato costituito dal Responsabile dell'Ufficio Tecnico dello stabilimento di Scarperia (FI) ed ubicato presso lo stabilimento stesso,

a) **risulta in conformità con quanto previsto dalle seguenti direttive comunitarie, comprese le ultime modifiche e con la relativa legislazione nazionale di recepimento:**

- Direttiva 2006/42/CE – concernente il ravvicinamento delle legislazioni degli Stati membri relative alle macchine
- Direttiva 2004/108/CE – concernente il ravvicinamento delle legislazioni degli Stati membri relative alle compatibilità elettromagnetica

b) **e che sono state applicate le seguenti norme armonizzate:**

- Sicurezza: EN ISO 12100-1-2 2010; EN 60204-1 2006; EN 61439-1 2010
- Compatibilità elettromagnetica: Emissione: CEI EN 61000-6-4 2007
  Immunità: CEI EN 61000-6-2 2006
- Ergonomia: EN 547-1/2/3: 2009
  EN ISO 14738: 2009
  EN 614-1: 2009
  EN 1005-1/2/3/4: 2009
  EN 1005-5: 2007

LAFORTEZZA S.p.A.
(A.Bagliani)

Scarperia, 16/05/2012

CHAPTER 1

GENERAL SAFETY WARNINGS

1.1. SYMBOLS

In this manual, the following symbols are used to draw attention to indications of danger.
These on one hand guarantee the personal safety of those operating the checkout and of third parties, and on the other they prevent damage to the checkout or the goods that must be moved.
With reference to this manual and to the warnings indicated on the checkout itself, the symbols have the following meaning:

This is a generic warning symbol. In this manual it means that non-observance of the relative warning during operation of the checkout can involve serious risks for persons.

This indicates the presence of live parts which if touched can cause death.
Covers marked with this symbol can only be removed by qualified personnel after disconnection from the mains power supply.

This means non-observance of the relative warning can damage the equipment.

This is important information concerning the equipment or a part of the manual that particular attention should be paid to.

1.2. USE ACCORDING TO INSTRUCTIONS

The checkout should be used only in perfect technical conditions and by qualified personnel, in strict compliance with current safety regulations and accident-prevention regulations.
This also includes observance of the operating and maintenance conditions indicated in this manual.

1.3. OPERATIONS NOT ALLOWED

The equipment must be used as a checkouts for food supermarkets; they should not be used for heavy goods (cash and carry and non-food points of sale) for which special checkouts are necessary and available Any other use shall be considered improper and are not allowed.

1.4. QUALIFIED PERSONNEL

According to the safety warnings described in this manual or marked on the checkout, qualified personnel means:

- persons assigned to use and operate the checkout and aware of the contents of this manual regarding the use of the checkout
- or persons assigned to setting up and maintenance of the checkout, having the necessary basic preparation, and aware of the contents of this manual regarding installation and maintenance of the checkout, or authorised to set up equipment and relative electrical circuits in accordance with safety standards.

Inappropriate intervention on the equipment or non-observance of the danger warnings indicated in this manual or on the checkout can cause serious injury to persons or damage to objects.
Only qualified personnel are authorised to carry out maintenance and repair interventions on the equipment.

1.5 GENERAL WARNINGS

This manual contains the necessary information for use of the checkout in accordance with regulations.
Knowledge and respect, from a technical point of view, of the safety warnings and danger indications contained in this manual and indicated on the checkout constitute the requirements for risk-free installation and set-up, as well as for safety during operation and maintenance of the equipment.
Only qualified personnel have the specific necessary knowledge to correctly interpret and implement the general safety warnings and danger indications described in this manual and only qualified personnel are therefore authorised to carry out maintenance and repair interventions on the equipment.
The qualified personnel must be familiar with all the causes of danger and all the directions regarding efficiency maintenance according to the data contained in this manual. It is therefore indispensable to carefully read all of this manual, to learn the use of the various controls and of all the devices and safety devices present on the equipment.
In addition to what is reported in the instructions, the general legal standards and regulations in force regarding accident-

prevention and protection of the environment must also be observed.
Warnings and danger indications, in the form of signs, stickers and markings must not be removed or made unrecognisable and must also be maintained so that they are legible.
The equipment may not be modified, supplemented or transformed in any way that could compromise safety.
It is extremely important that this manual be kept in perfect condition for future reference.
If the equipment is sold or if the operators are replaced, make sure that this manual is delivered with the equipment or that it is made available to future operators.

1.6. SAFETY REGULATIONS FOR OPERATION

- Every time the equipment is started, the operator must ensure that the proper conditions for its use are present and that it is perfectly safe to use.
- The equipment must only be used if all the protective and safety devices are fitted and operational.
- Before starting the equipment, the operator must ensure that there are no persons in a position of risk.
- During use of the equipment, the operator must supervise the operations and, if necessary, press the emergency pushbutton.
- Do not climb onto the checkout while it is functioning (pay particular attention to children!).
- Do not remove or tamper with the protective guards of moving parts or live parts; in particular, do not operate the checkout without these protective guards.
- In the event of functioning irregularities, the equipment must be stopped and blocked immediately. Eliminate any irregularities immediately.
- Do not in any way continue to operate the equipment until it has been repaired by qualified personnel and the irregu larities have been resolved. If the problems persist, consult our Technical Assistance Service.
- Anyone who becomes aware of an immediate danger to persons must press the emergency pushbutton without delay. This also applies if damage occurs to any parts of the equipment that requires an immediate halt.
- After an emergency stop, the operator can reset and restart the equipment only after making sure that the cause of the irregularity has been removed and that the equipment can continue to function without causing any more danger.

1.7. SAFETY REGULATIONS FOR MAINTENANCE

Before carrying out any maintenance operation that does require the equipment to be functioning, it is advisable to disconnect the electrical power supply and place a sign on the main switch indicating "MAINTENANCE IN PROGRESS" to ensure that the equipment is not involuntarily reconnected by unauthorised persons.
Mechanical and electrical repairs, as well as repositioning of the equipment, must only be carried out by qualified personnel.
Unauthorised persons are not allowed to carry out any work on the equipment.
Before carrying out any repairs or maintenance work, make sure that:

- the main power line is disconnected;
- the moving parts are stationary;
- the moving parts cannot start to move during the maintenance operations;
- it is not possible to accidentally reconnect the power supply while maintenance and repairs are being carried out.

In addition, during repairs or maintenance work:

- do not exclude the functioning of any safety devices or modify them or apply them in a different way to the foreseen function.
- do not modify or transform the equipment in any way. This prohibition does not refer to minor modifications that do not involve consequences for the operating safety and general safety of the equipment, or to measures designed to increase safety.
- the user must assume responsibility for these modifications and their consequences.

1.7.1. Regulations for work on electrical components

Work on electrical components or parts must only be carried out by qualified electricians or by specifically trained persons under the guidance and supervision of an expert electrician, in accordance with electrotechnical regulations.
Before starting work on the electrical system and relative devices, make sure that the mains power supply is disconnected.
If work on live parts is indispensable, a second person should be present so that, in the event of an emergency, the emergency pushbutton can be activated or the main switch turned off.
Use only insulated tools.
Use only original fuses with the correct ampere value. In the event of irregularities in the electrical power supply, the equipment must be stopped and blocked immediately.
Faulty fuses should not be repaired or excluded, but replaced with fuses of the same type.
The electrical system must be inspected/checked at regular intervals.

Defects, such as loose connections or worn cables, must be eliminated immediately.

1.8. INFORMATION ON AMBIENT NOISE

The checkouts are designed and constructed in such a way as to reduce the ambient noise to the minimum level possible. Measurements carried out in a non-reverberating room showed an extremely reduced equivalent level for a single checkout with operator position [LAeqTe lower than 70 dB(A)].
In assessing the noise it is however necessary to consider the overall situation and therefore take into account numerous parameters, including:

- the position and number of checkouts installed
- the ambient conditions
- the working conditions
- the position in which the parameters are measured.

It is therefore the user's responsibility to carry out, in the work place, the measurements of exposure to noise of the operators and of the public and to implement the necessary provisions according to the regulations in force in the country in which the equipment is used.

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CHAPTER 2

GENERAL INFORMATION

2.1. GENERAL DESCRIPTION OF THE EQUIPMENT

The equipment generally consists of several checkouts arranged to form a barrier at the supermarket exit.
The modular construction of the checkouts makes it possible to obtain various combinations during the assembly stage; this allows different installation and positioning requirements to be satisfied (traditional installation, island installation, tandem installation, mixed tandem installation) according to the various parameters to be taken into consideration (expected customer traffic, architectural characteristics of the point of sale, etc.).

2.2. DESCRIPTION OF THE CHECKOUT

As an example, fig. 2.1 shows two models of checkouts. Regardless of the type of installation and the model considered, a checkout can be schematically represented as in figure 2.1 and consists of the following functional parts:

1. a front conveyor belt (supplied in various lengths)
2. a photocell positioned at the end of the front belt close to the operator
3. a central section designed for the insertion of:
   - a scanner to automatically detect the price of the goods
   - a cash drawer
   - a keyboard to enter the price of the goods
   - a device for electronic payment for the goods
   - a cashier display
   - a Plexiglas protective barrier
4. a worktop or cabinet
5. an operator position, where the cashier sits
6. a deck to collect the exiting goods and in which a second belt or set of rollers can be fitted
7. a riser at the end of the rear belt
8. a front base
9. a rear base
10. a control panel for belt movement, photocells and lights
11. an emergency pushbutton

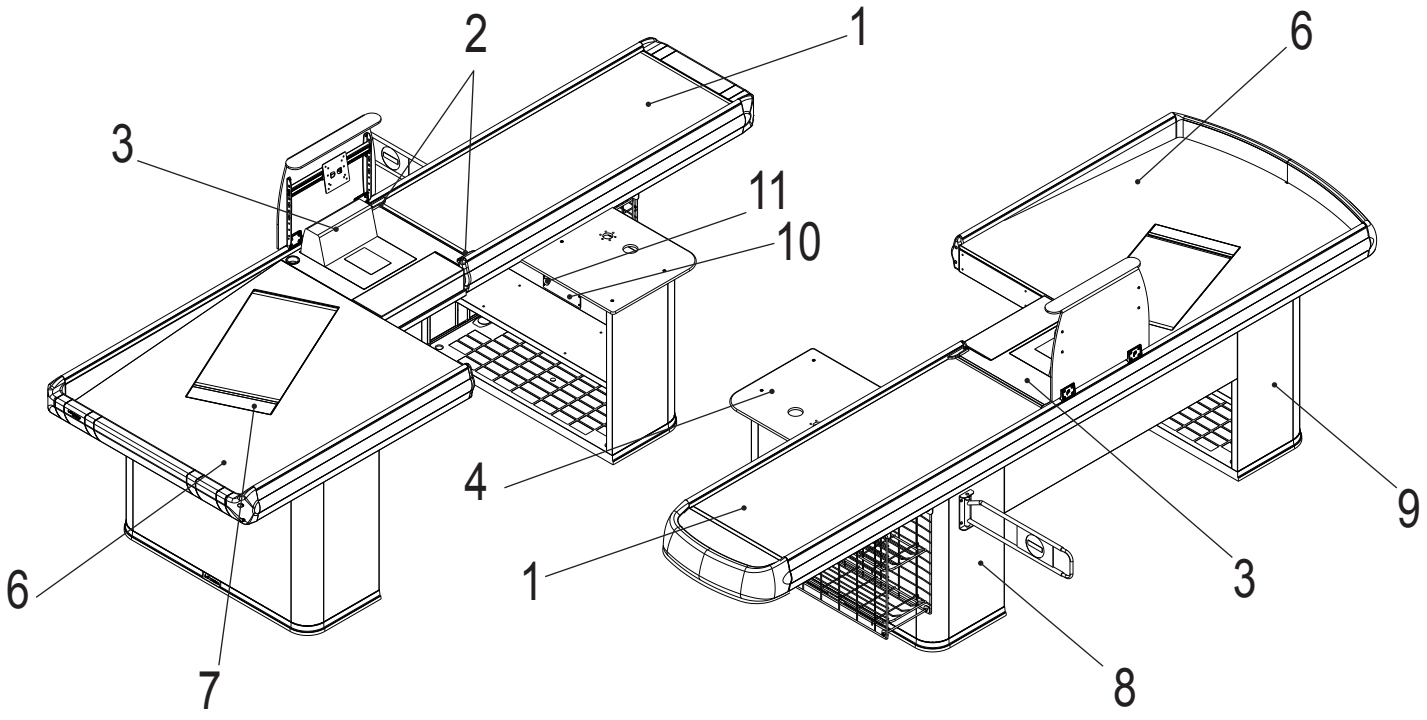

Fig. 2.1

2.2.1. Structure and belt movement system

The checkout structure consists of a checkout body placed on and fixed to a pair of support bases. The checkout body is made from sheet steel. The borders consist of aluminium profiles housing PVC and semirigid polyurethane strips which act as buffers and shock absorbers for shopping trolleys.
Up to two conveyor belts can be fitted in the body, one in the front part (looking at the checkout from the exiting customer side) and one in the rear deck.
Each belt consists of a motor roller fitted in the structure of the two sides of the checkout and the relative idle roller. The belt fabric consists of a double nylon weft and black antistatic PVC.
The support of the load on the belt is ensured by a sheet steel panel below the belt on which it slides.
The motor rollers are designed to minimise the overall dimensions and do not require external transmission components. They are hermetic and permanently filled with oil, thus requiring no maintenance while guaranteeing safe and silent functioning.
The front and rear support bases are made from sheet steel. They are fitted with removable panels to allow access inside the bases, where any additional electrical panels or power supply junction boxes can be installed (not included in the checkout delivery). The bases are fitted with rubber plinths to insulate the metal parts from the ground.

2.2.2. Electrical system

The checkout is equipped with an electrical system, basically consisting of a control panel housing the devices for the power supply and the checkout controls.
The front part of the panel houses all the control devices (main switch, pushbuttons, luminous indicators and emergency pushbutton).
The panel conforms to CEI regulations and is suitable for the setting in which the checkout will function.
All the external cables connected to the control panel are the flame-retardant type (CEI 20.22).

2.2.3. Protective and safety devices

Photocell

A photocell system is installed at the end of the front belt (fig. 2.2), which stops the belt when an object on the belt reaches the limit position. This photocell also has a safety function since any object or part of the body (of the operator or a member of the public) that is between the belt and the checkout structure causes the belt to stop.

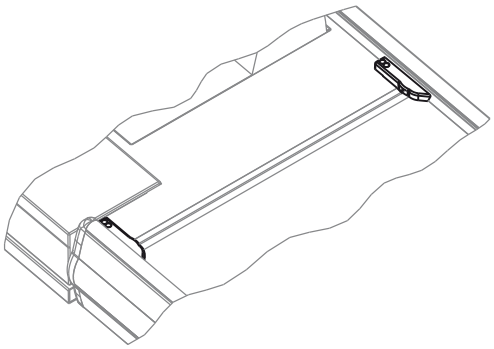

Fig. 2.2 - Photocell system

Microswitch (only for models with two belts)

Positioned beneath the riser at the end of the rear belt (fig. 2.3), this controls the immediate stop of the checkout if any object becomes inserted between the belt and the riser causes it to lift up.
To restart the checkout, the riser must be repositioned correctly and the reset button pressed.

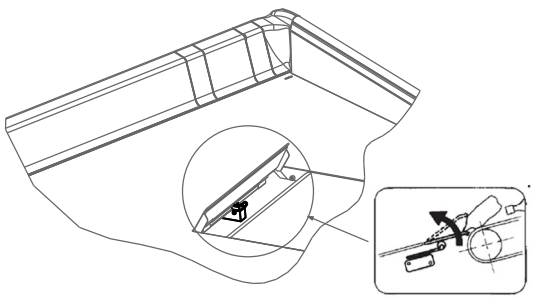

Fig. 2.3 - Microswitch

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Emergency pushbutton
The emergency pushbutton is a red mushroom button: when pressed, all the functions of the checkout are immediately blocked (fig. 2.4).

Fig. 2.4 - Emergency pushbutton

2.3. MANUFACTURER AND CHECKOUT IDENTIFICATION DATA (fig. 2.5).

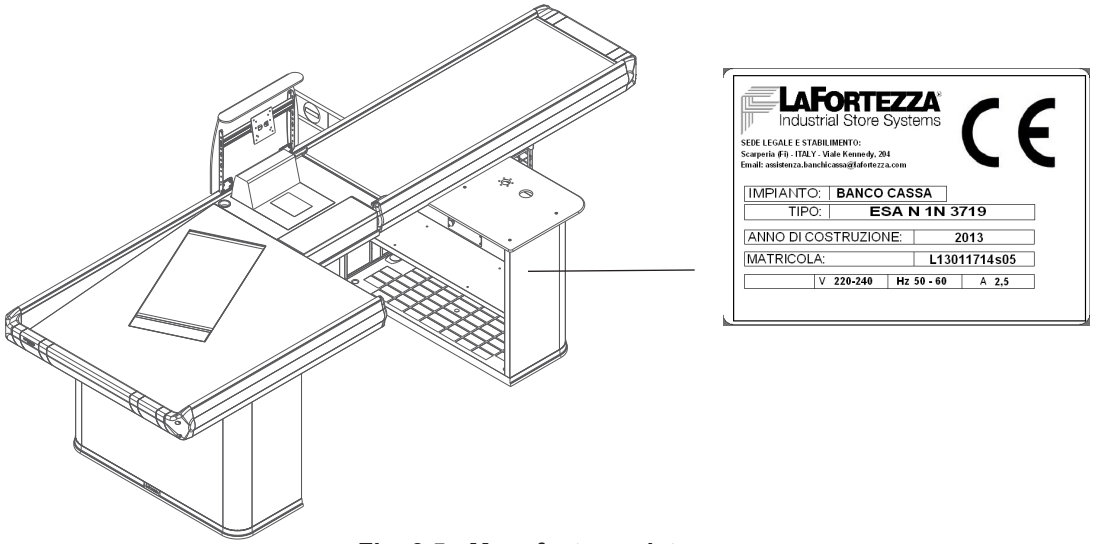


Fig. 2.5 - Manufacturer data

2.4. CONSTRUCTION CHARACTERISTICS AND TECHNICAL DATA

2.4.1 Construction Characteristics

- checkout structure in aluminium and epoxy powder painted sheet metal
- deck in AISI 430 stainless steel.
- front and rear ends in shockproof PVC or semirigid self-extinguishing foamed polyurethane
- side protection strips in shockproof PVC
- electrical control panel model MV4K

2.4.2. Technical Data

Mains power supply:	
Power supply	**220 V**
Phases	**single-phase**
Frequency	**50 Hz**
Absorbed current (max) for one belt	**1,3 A**
Absorbed current (max) for two belts	**2,6 A**
Max belt load	**100Kg**
Dimensions	**According to the various models**

CHAPTER 3

INSTALLATION INSTRUCTIONS

3.1. CONDITIONS REQUIRED FOR INSTALLATION

3.1.1. General indications

For correct installation of the equipment, for correct functioning and for easy maintenance, the following conditions must be respected:

- The equipment must be installed in a covered and appropriately ventilated environment (typically a supermarket).
- The design of the checkout barrier arrangement must take into account the functional requirements of the checkout and the space necessary for customer transit and maintenance of the equipment, ensuring easy access for the operator and maintenance staff.
- A minimum aisle of 65 cm between the checkouts is recommended.
- the floor on which the checkouts are positioned must be perfectly flat and free of bumps.
- The electrical system must comply with EC regulations and sufficient for the number of checkouts to be installed. Bear in mind that a one-belt checkout absorbs approx. 1.5 A with single-phase 220V power supply.
- The electrical panel which controls the checkout cannot power the installed IT system.
  It is therefore advisable to install an additional power supply panel for the power supply sockets and the main switch for the entire system. This panel must be powered by a dedicated line according to the IT system manufacturer's specifications.

Before installation of the checkouts, do not leave them in a damp place or exposed to the elements which could cause damage.

3.1.2. Operating conditions

The ESA model checkout is not suitable for installation in outdoor settings, subject to weather and/or polluted air.
The checkout is not suitable for installation in places where there is a risk of explosion.
The operating conditions are indicated in the table below:

Working temperature	**+ 5 ÷ 30 °C**
Relative humidity	**20 ÷ 70 %**
Atmospheric pressure	**960 ÷ 1040 mbar**
Altitude	**< 2000 m**

3.1.3. Lighting

The lighting of the environment in which the checkout is positioned and of the work place must be sufficient and with the correct contrast to allow the operator to easily carry out all the operations connected with the foreseen commercial transactions, without causing eye fatigue.
At the same time, the lighting must not cause problems due to glare, unwanted reflections, etc.
The lighting level at the operator position must be greater than 500 lux.
Do not position the checkout close to laser sources.

3.1.4. Physical parameters

The operator's working position must also comply with the legal limits relative to danger caused by the following physical agents:

- noise
- vibrations
- electromagnetic non-ionizing radiation
- ionizing radiation

The checkout does not present any risk of danger connected with these physical agents.

3.1.5. Other parameters

The operator's working position must also comply with the legal limits relative to danger caused by exposure:
to dangerous substances,

- chemical agents
- cancerogenous and mutagenic agents
- biological agents
- asbestos

3.2. TYPE OF PACKAGING AND SHIPMENT

The checkout components are delivered dismantled, individually packaged and shipped in a box containing everything necessary for on-site construction of each individual checkout. Any profiles longer than 1.950 mm are additional packages.

The components vary according to the model and the specific accessories ordered; the essential components nevertheless consist of:

- border profiles in aluminium with pre-assembled PVC buffers
- Pair of ABS bases for the checkout supports
- Central section to hold the scanner
- One or two belt frames, pre-assembled with motor, idle roller and conveyor belt
- Control panel
- Stainless steel goods collection deck
- End buffers in shockproof PVC or foamed polyurethane
- Components in painted steel to complete the checkout bases
- Cable duct
- Intermediate shelves
- Worktop for cabinet
- Screws, nuts and bolts
- Any drawers, Plexiglas protective guards, gates and other accessories requested

3.3. LIFTING AND TRANSPORT

Lifting and transport of the pallet on which the checkout parts are packed must be carried out by using a pallet jack or forklift truck, inserting the forks in the correct lifting positions.
The transport of the equipment to the installation position must be carried out using suitable means and under the careful supervision of authorised personnel.

Accident-prevention and safety regulations for movement and lifting operations must be observed.

- During these operations nobody should be present within the operating range of the lifting means.
- Particular care should be taken during transport to avoid striking any obstacles in the surrounding area.

3.4. INSTALLATION OF THE EQUIPMENT

3.4.1. Unpacking

Remove the nylon protection from the pallet and cut the binding straps.

Once the straps have been cut, the contents are no longer stable!
Do not lift or transport the pallet as the stacked components could tip over.

3.4.2. Assembly of the checkout

To assemble the checkout, see the ESA CHECKOUT ASSEMBLY MANUAL

3.4.3. Lifting and transport of the checkout

The checkout must be lifted using a forklift truck, paying particular attention to the position of the forks as shown in figure 3.1.
The checkout can be moved short distances manually, lifting it at the points indicated in figure 3.2.

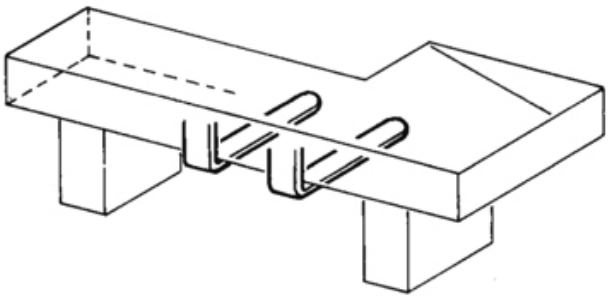


Fig. 3.1.

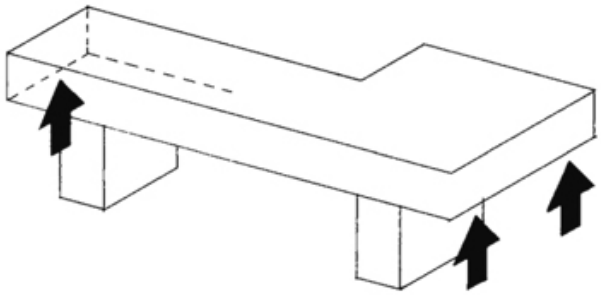


Fig. 3.2

During movement with a pallet jack or forklift truck, make sure to protect the painted surfaces of the checkout and apply the force on the outer aluminium profiles. Once the panels are fitted on the bases, the checkout should only be moved manually.

3.4.4. Positioning

Position the checkouts, maintaining a distance between them that respects the safety regulations, see figure 3.3.
Minimum distances of 65 cm for a standard aisle and 90 cm for a disabled persons aisle between the checkouts are recommended.

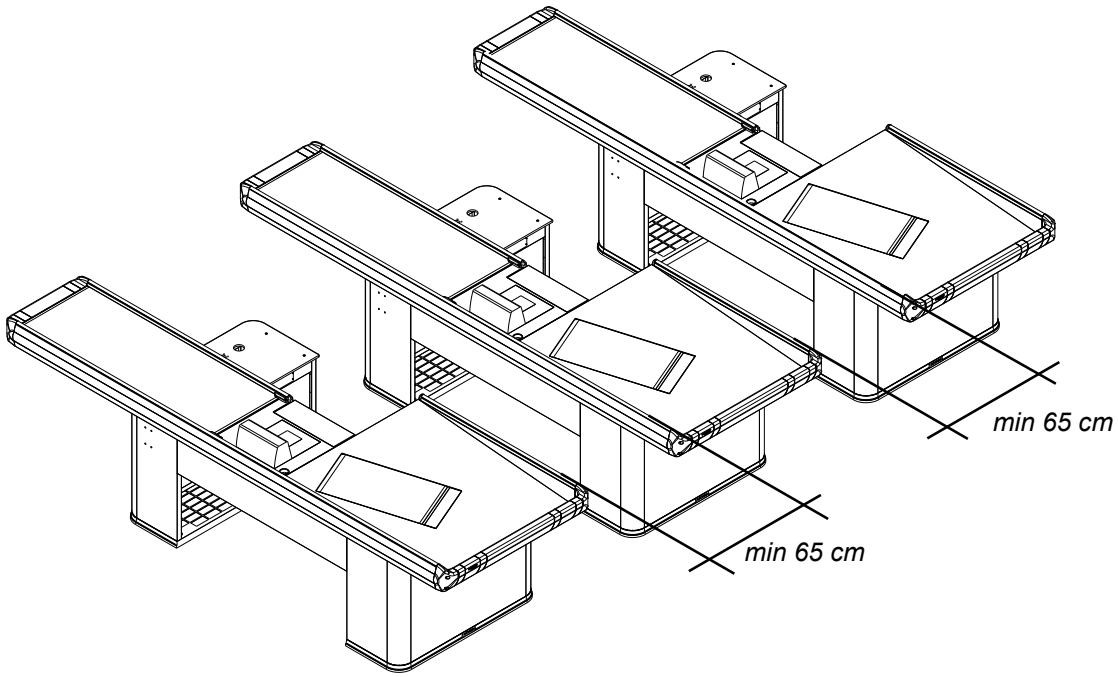


Fig. 3.3

3.4.8. Alignment and levelling

After establishing the correct position of the checkout, it should be perfectly levelled horizontally and aligned with the other checkouts, using the outer edge of the deck as a reference as shown in figure 3.4. A spirit level should be used for horizontal levelling of the front part/belt of the checkout. Correct alignment and levelling of the checkout is fundamental for correct and long-lasting functioning.

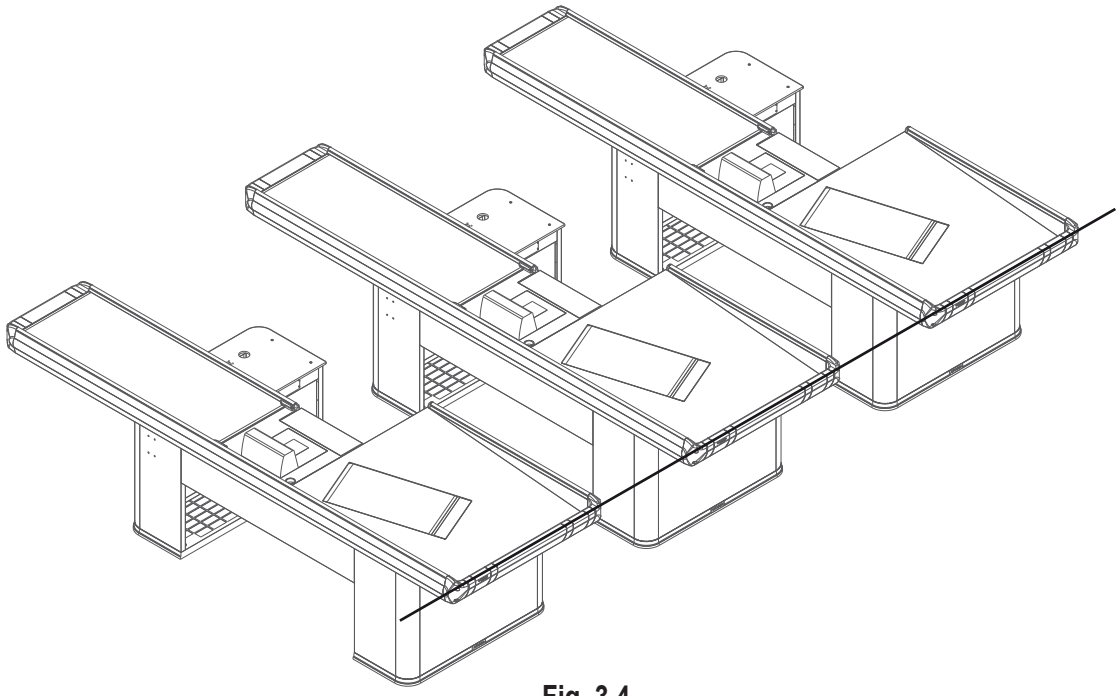


Fig. 3.4

3.4.9. Fixing to the ground

Fix the checkout to the ground, using the relative holes in the bases (see fig. 3.5).

N.B.: Correct fixing is important, to avoid any functioning problems.

Proceed as follows:

1. Mark the position of the holes.
2. Drill the holes using an 8 mm drill bit.
3. Clean the floor thoroughly after inserting the expansion plugs and tightening the screws.

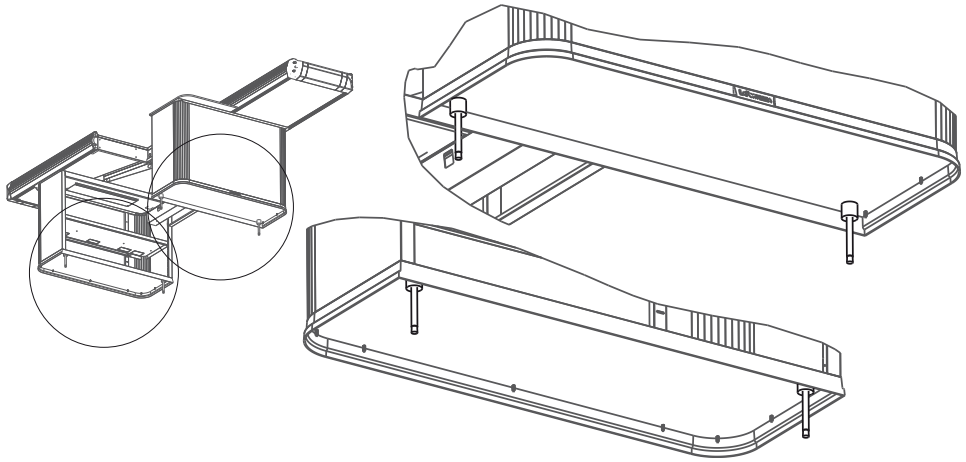


Fig.3.5

3.5. ELECTRICAL CONNECTION OF THE SYSTEM

Once the checkouts have been positioned and fixed to the ground, connect the power supply distribution board to the control panels of the checkouts.
The electrical power supply, appropriate to the number of checkouts, must comply with CEI 64-8 regulations and other applicable CEI regulations.

The power supply line should be protected with an appropriate thermomagnetic switch.
To protect the direct and indirect contacts, it is also necessary to install differential switches;
it is advisable not to connect more than 3 checkouts to the same differential switch, especially if the distri bution system is the TT type. The thermomagnetic switches must be in "A" class, appropriate for the use with electronics components.

Check the efficiency of the protection connection (PE) between the electrical board and the earthing system.

3.5.1. Connection of the control panel MV4K

The various electrical components of the ESA checkout are supplied complete with rapid connectors for connection to the control panel MV4K. Refer to fig. 3.6 and 3.7 for correct connection to the control panel.

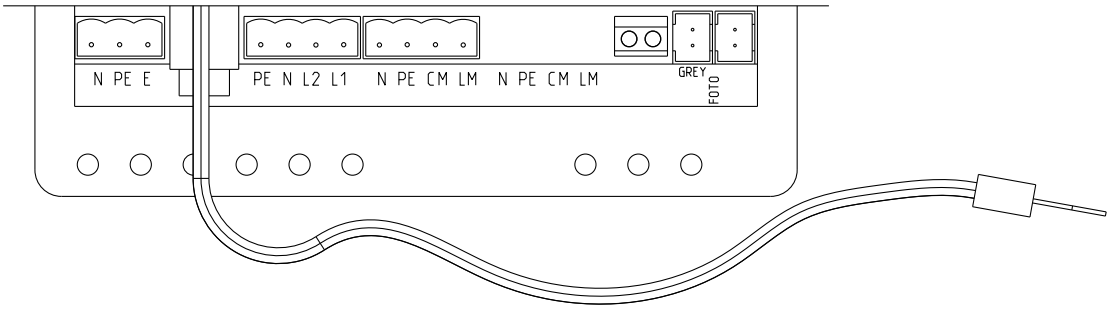


Fig. 3.6 - Rear connection to the one-motor panel

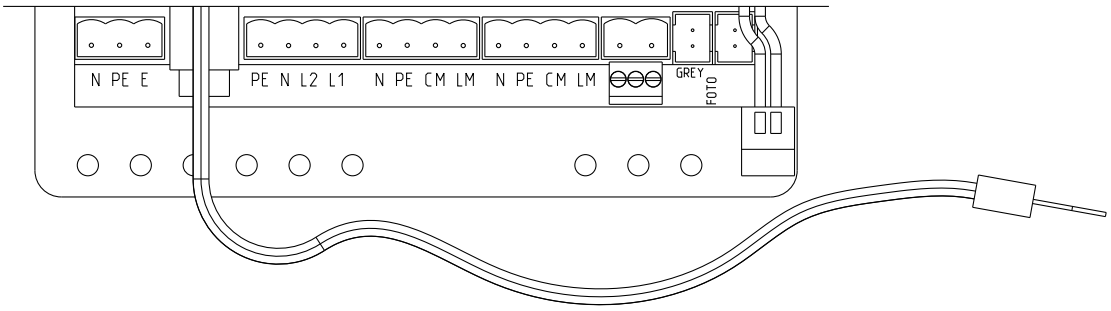


Fig. 3.7 - Rear connection to the two-motor panel

Refer also to the wiring diagrams in chapter 7.

ATTENTION:
incorrect connections can permanently damage the control panel or external devices.
Tampering with the connections or incorrect connection of the inner terminals automatically invalidates the checkout guarantee.

The front panel (fig. 3.8) includes a socket for connection of a control pedal (A).
The cable duct (fig. 3.9) in the base connection crossbar can be used to hold the cables.

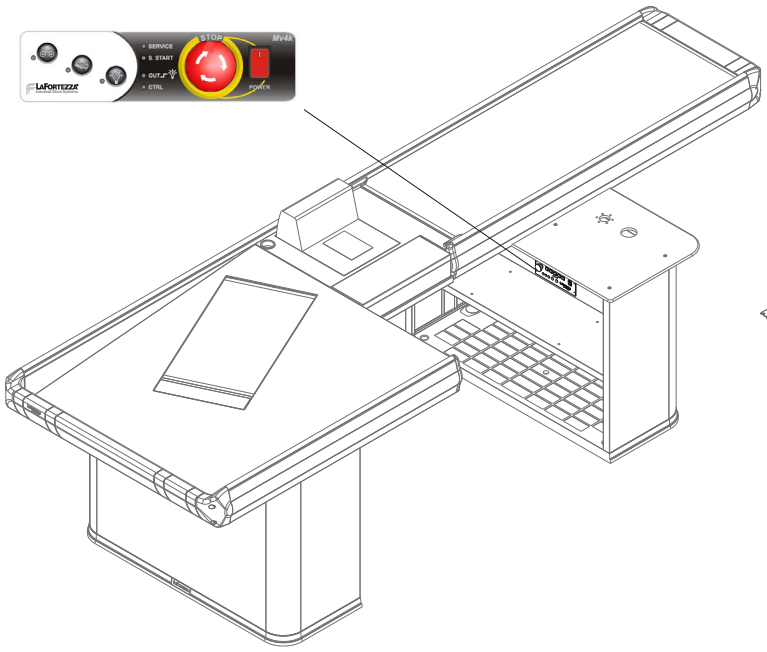


Fig. 3.8

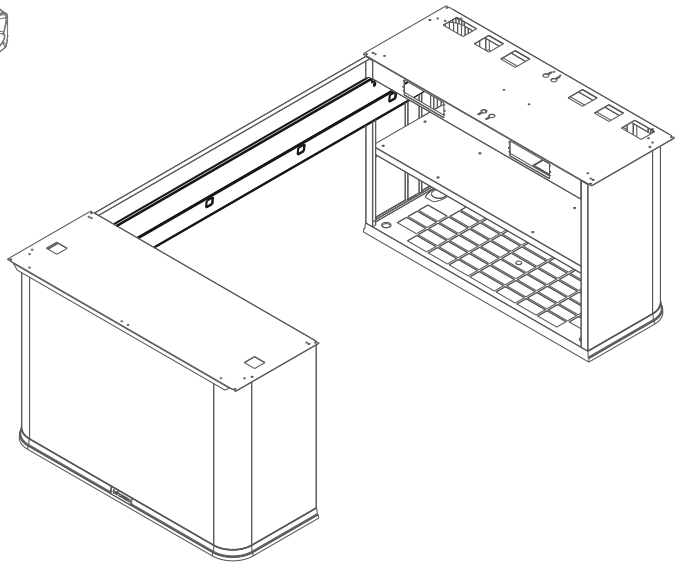


Fig. 3.9

3.5.2. Connection of the checkout central area to the grounding system

While installing the checkout, it is mandatory to connect the grounding cable of the control panel MV4K to the checkout central area.
The grounding cable must be connected onto the stud bolt welded on the checkout frame

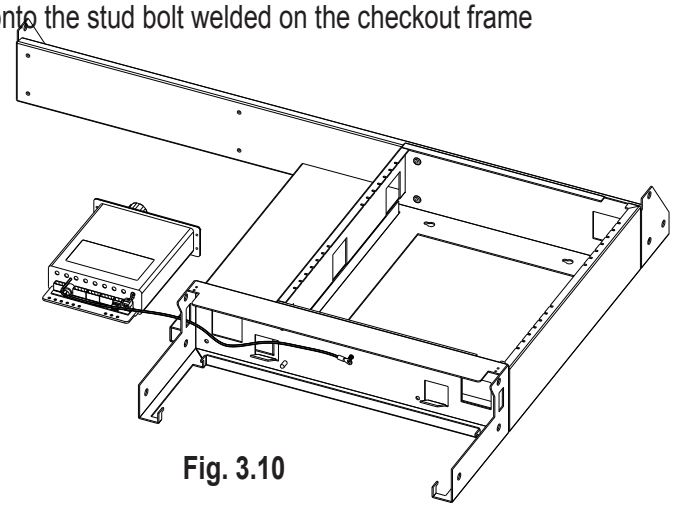


Fig. 3.10

3.6. FIRST INSTALLATION TESTS

Once the checkout has been installed and the electrical system has been completely connected, the following tests should be carried out (the electrical tests should be performed by a specialised technician):

3.6.1. Electrical tests

- Check the functioning of the differential switch (Idn=30mA) upstream of the system;
- Check the continuity of the protection circuit (earth).

3.6.2. Operating tests

- Check the correct functioning of the various controls of each checkout.

3.6.3. Safety tests

- Check the correct functioning of the various safety devices (photocell, microswitches, emergency stop).

CHAPTER 4

OPERATING INSTRUCTIONS

4.1. CHECKOUT COMMANDS AND CONTROLS

4.1.1. Commands and controls on the control panel mod. MV4K

The following commands and controls are present on the control panel (figure 4.1.):

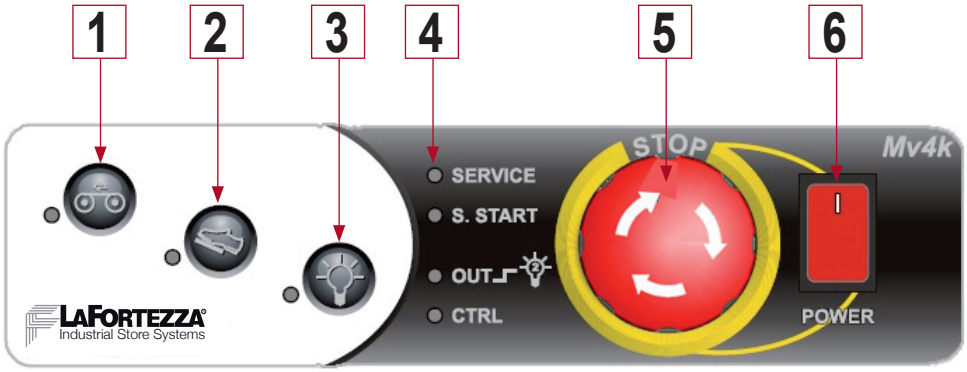


Fig.4.1

1. ***Belt activation push button***
2. ***Pedal operation push button***
3. ***Light activation push button***
4. ***Status LED indicators***
5. ***Emergency push button***
6. ***Power switch***

1. Belt activation push button: *activates photocell-controlled movement of belts.*
2. Pedal operation push button: *when pressed, enables pedal-operated control mode only and deactivates photocells.*
3. Light activation push button: *when first pressed, the checkout signal light will turn on; when pressed again, the light will flash (checkout closing); when pressed for the third time, the light is switched off.*
4. Status LED indicators: *SERVICE is on, when the control panel needs maintenance; S.START is on, when the "soft start" belt activation mode has been set; OUT indicates the output connectors voltage for the signal light (continuous or flashing); CTRL is on, when the motor is in operation.*
5. Emergency push button: *red mushroom push button; when pressed, the belt operation is immediately turned off. When it is pulled back in place, belt operation can start again by either pressing the push button (1) or switching off and then on the control panel.*
6. 220V main power switch: *illuminated red switch which interrupts power supply to both the checkout electrical control panel and the electronic board*

Attention: after switching off, wait at least 5 seconds before switching on again.

4.2. OPERATION

4.2.1. Safety

When using the equipment, the operators must carefully observe the safety warnings as described in CHAPTER 1.

Do not spill liquids on the electrical parts of the checkout.

Avoid the public coming into contact with moving parts of the checkout and if necessary press the emer gency pushbutton on the control panel.

4.2.2. Start-up

1. Turn on the main power switch.
2. Press switch 1.
3. Enable the indicator functions:
   Checkout open light turns on automatically when the checkout is switched on.
   Checkout closing light by pressing the yellow switch.
   Checkout closed light by pressing the red switch.

4.2.3. Stop

The checkout can be stopped with a normal stop or an emergency stop.
Normal stop: press the main switch
Emergency stop: press the red mushroom button

N.B.: THE MUSHROOM EMERGENCY PUSHBUTTON MUST NOT BE USED TO STOP THE MOVE MENT OF THE FRONT BELT TEMPORARILY! IT SHOULD ONLY BE USED TO BLOCK THE CHECKOUT IN EMERGENCY SITUATIONS!
DO NOT USE THE PUSHBUTTON AS A HOOK FOR OBJECTS.
IF THE PUSHBUTTON SHOULD BE ACCIDENTALLY DAMAGED, INFORM THE MAINTENANCE STAFF IMMEDIATELY.

THE CHECKOUT IS FITTED WITH AN AUTOMATIC TIMER THAT STOPS THE MOVEMENT OF THE BELT AFTER A PERIOD OF CONTINUOUS ROTATION OF 20 SECONDS. THE MOVEMENT CAN BE REACTIVATED BY PASSING A HAND IN FRONT OF THE PHOTOCELLS OR PRESSING SWITCH 1 ON THE DIGITAL KEYBOARD

N.B.: To restart after an emergency stop, the emergency pushbutton must be reset by turning it and checking that normal conditions are restored.

CHAPTER 5

MAINTENANCE

5.1. SAFETY

During maintenance, the general warnings and specific safety regulations described in CHAPTER 1 must be kept in mind.

Preventive maintenance work must only be carried out by specifically trained qualified personnel.

Corrective maintenance (repairs) must only be carried out by specialised technicians or by the supplier's Technical Assistance personnel.

5.2. PREVENTIVE MAINTENANCE

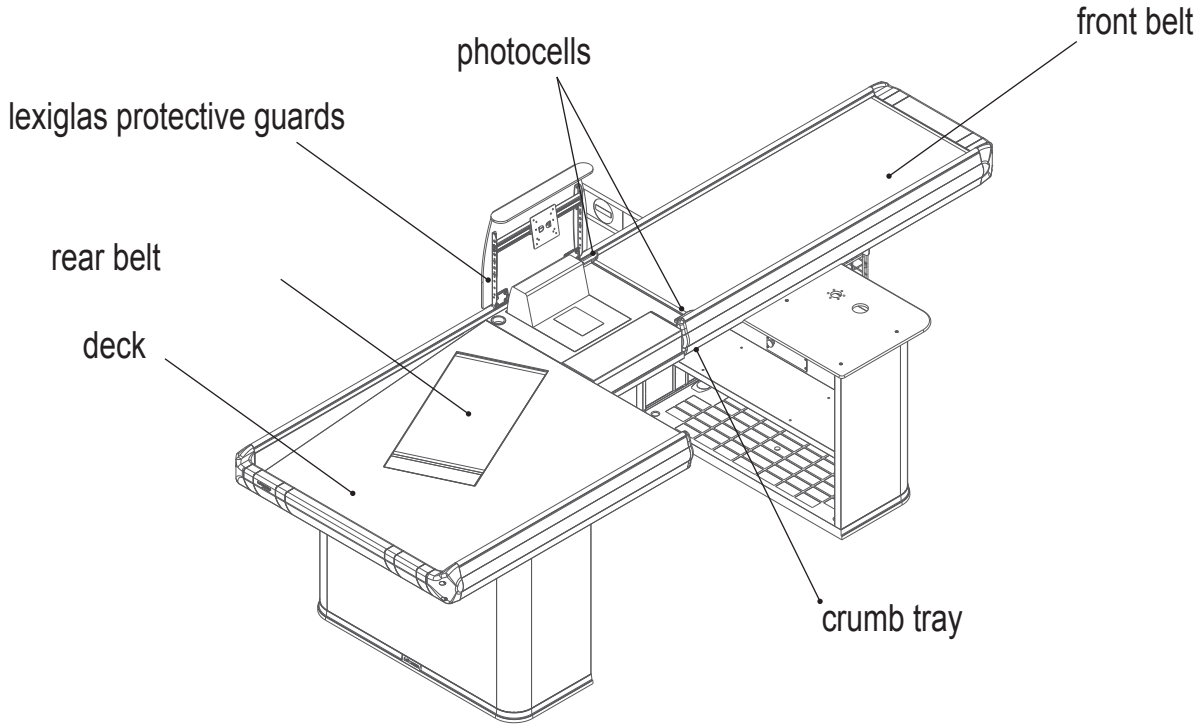
The recommended preventive maintenance operations are as follows:
- General cleaning;
- Adjustments;
- Microswitch check;
- Emergency pushbutton check.

It is advisable to carry out the various preventive maintenance operations on a regular basis according to the working conditions of the equipment and in any case before restarting after a long period of inactivity.

5.2.1. General cleaning

It is necessary to carry out general cleaning of the equipment on a daily basis (fig. 5.1).
Carefully read the instructions on the adhesive label.

When cleaning, avoid liquids coming into contact with the electrical parts (motors, pushbuttons, etc.) which should instead by cleaned with cloths by hand.
If the electrical parts accidentally become wet, dry them carefully before operating the control panel and restarting the checkout.



ENGLISH

Photocell cleaning.
Keeping the photocell bulbs clean (transmitter and receiver) guarantees correct belt functioning and is therefore an indispensable operation every 100 hours of operation.
Use a pad of cotton wool moistened with water, insert in the hole and wipe the bulb.

N.B.: Do not use solvents or alcohol

Belt cleaning.
Careful cleaning of the belt ensures better functioning, a longer life and good hygiene.
Clean with a cloth and denatured alcohol.
This operation should be carried out every day at the end of the working shift.

Cleaning the deck and steel sliding surfaces.
Use a cloth soaked in alcohol or specific products for cleaning stainless steel.

N.B.: For the parts in stainless steel, do not use ammonia-based products, acid solutions, solvents, abrasive powders or steel wool as they can mark or ruin the steel parts.

Plexiglas cleaning.
Use a cloth soaked in a glass cleaning product normally available on the market, that does not contain ethyl or methyl alcohol, solvents, ammonia, acetic acid, phosphoric acid, soda, bleach or acetone which could damage the material.

ATTENTION: do not use ethyl or methyl alcohol or any of the above-mentioned products which could irreparably damage the Plexiglas.

Cleaning the crumb tray.
Periodically check the crumb tray situated under the idle roller of the front belt (fig. 5.2), proceeding as follows:

- switch off the checkout
- pull the tray out from its housing, empty it, wash it and carefully dry it, then reinsert it in the original position.

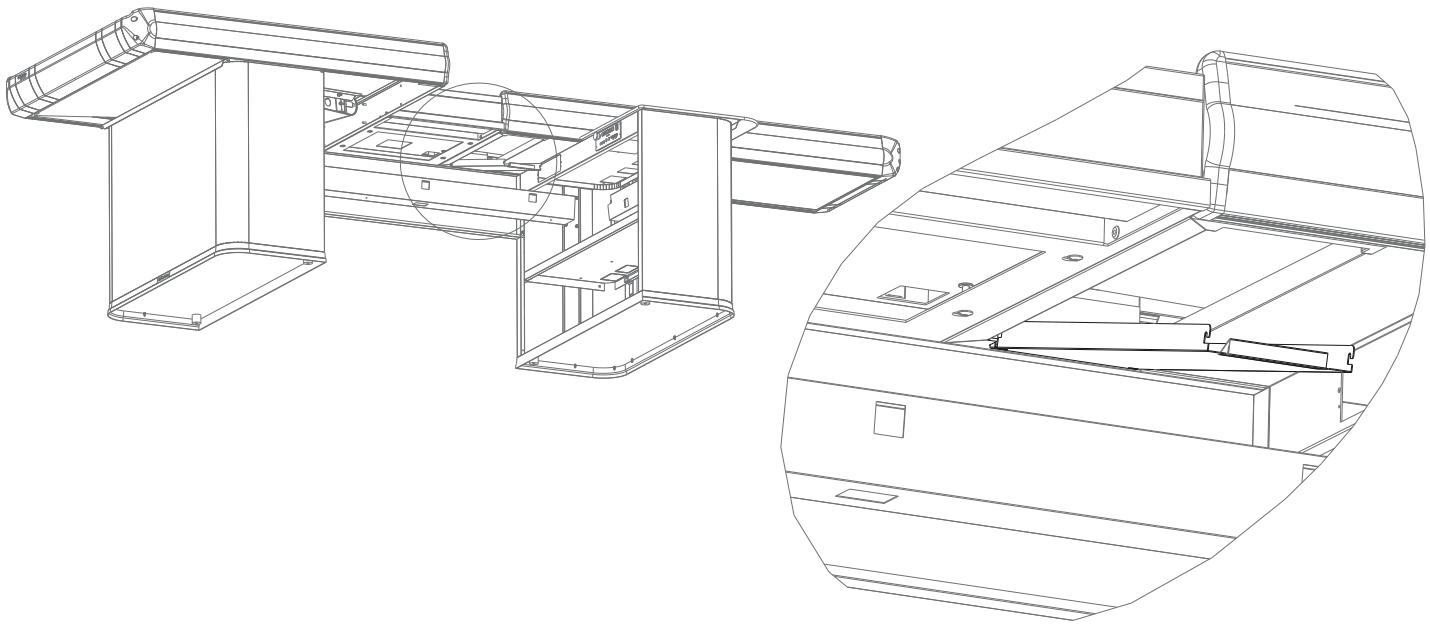


Fig. 5.2

5.2.2. Adjustments

5.2.2.1. Tensioning and centering of the front belt

Tensioning

Use a screwdriver to remove the four screws A (fig. 5.3) which fix the terminal B.
Insert a 5 mm Allen key in the adjustment holes C and D and turn to the right or left to adjust the tensioning of the belt.
Repeat the operation on both sides in order to achieve uniform tensioning on the roller.

Belt centering on the motor roller.

It is necessary to turn the adjustment screws C and D differentially to center the belt. By tightening the screw D the belt moves towards C and vice versa.

N.B.: to center the belt correctly, the belt must be moving.
Turn the relative adjustment screw by 1/4 of a turn, wait for the belt to move and repeat the operation until the belt is centered.

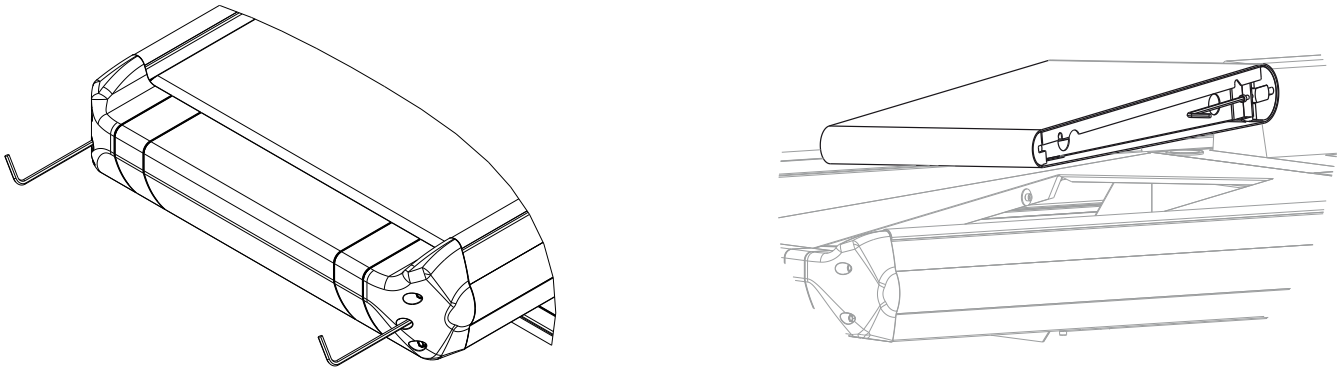


Fig.5.3

5.2.2.2. Tensioning and centering of the rear belt

Tensioning of the rear belt

To tension the belt it is necessary to turn the adjustment screws C and D of the motor roller (fig. 5.4).
Lift the riser (ref. E) and use a 5 mm Allen key to turn both screws equally.

Belt centering on the motor roller.

It is necessary to turn the adjustment screws C and D differentially to center the belt. By tightening the screw D the belt moves towards C and vice versa.

N.B.: to center the belt correctly, the belt must be moving.
Turn the relative adjustment screw by 1/4 of a turn. Wait for the belt to move and repeat the operation until the belt is centered.

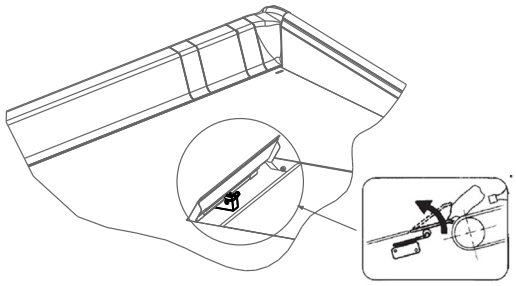


Fig.5.4

5.2.2.3. Microswitch check
Visually check the condition of the microswitch and make sure its stop function is correct.

5.2.2.4. Emergency pushbutton check
Periodically activate the emergency pushbutton to check it is functioning correctly, checking also that the belts remain stationary when the emergency pushbutton is returned to its original position.

5.3 CORRECTIVE MAINTENANCE
Corrective maintenance is necessary to resolve faults and irregularities that can occur during use of the equipment. Corrective maintenance operations essentially consist of the replacement of electromechanical components or control panel components.

FAULT	POSSIBLE CAUSES	TECHNICAL INTERVENTIONS
CONTROL PANEL Does not switch on	Lack of power supply	Verify that the power switch is on. Check the fuse and change it if necessary.
PHOTOCELLS Not reading	Connection to the control panel terminal blocks, photocells cleaning	Check the connection to the terminal blocks (see par. 3.5.1 of the complete user manual). Clean photocells.
FRONT BELT Not rotating	Control panel in emergency, connection to the control panel terminal blocks, photocells not reading, faulty motor.	Verify that the emergency push button is in its rest position, as well as the protection on the second belt (if applicable). Check the connection to the terminal blocks (see par. 3.5.1 of the complete user manual). Clean photocells. Make sure fuse is not broken.
REAR BELT Not rotating	Control panel in emergency, connection to the control panel terminal blocks, protection fuse, faulty motor.	Verify that the emergency push button is in its rest position, as well as the protection on the second belt (if applicable). Check the connection to the terminal blocks (see par. 3.5.1 of the complete user manual). Make sure fuse is not broken.
CHECKOUT "OPEN/CLOSED" LIGHTS Not working	Lack of insertion, protection fuse	Verify that the control panel push buttons are properly lit. Make sure fuse is not broken.

5.3.2. Replacement of fuses
These are located on the front of the control panel and protect the system in the event of a short circuit or a current overload. To replace a fuse, turn off the checkout and unscrew the fuse supports; replace the fuse with one of the same type.

N.B.: do not use fuses with a greater capacity as this could seriously damage the electronic equipment

The technical specifications of the fuses that must be respected are:

F1	*Transformer fuse*	**500mA**	**250V**
F2	*Light and front belt motor fuse*	**2A**	**250V**
F3	*Rear belt fuse*	**1.6A**	**250V**

5.4. TECHNICAL INTERVENTIONS REGISTRATION FORM

DATE	TECHNICIAN	TECHNICAL INTERVENTION

CHAPTER 6

DEMOLITION AND DISPOSAL

6.1 PROCEDURE FOR DEMOLITION AND DISPOSAL

At the end of the checkout's working life, it should be disposed of without causing damage to the environment.
The dismantling and demolition operations must be carried out by qualified personnel, respecting safety in the workplace regulations.
Disposal must be carried out respecting the regulation for protection of the environment.

Generally deteriorated and obsolete machinery and equipment are considered "special waste".

The equipment in question consists of plastic material and metal material which must be separated and delivered to authorised collection centres.

The steps to be followed for demolition and disposal of the equipment are as follows:

- Disconnect all electrical connections.
- Dismantle the equipment, the control panel and all the plastic components. These parts can be disposed of at collec tion centres for plastic material.
- Deliver the remaining metal parts to an authorised centre for metal waste collection, respecting the transport proce dures.

CHAPTER 7

DRAWINGS, DIAGRAMS AND APPENDICES

- **WIRING DIAGRAM FOR MV4K CONTROL PANEL CONNECTION (fig. 7.1).**

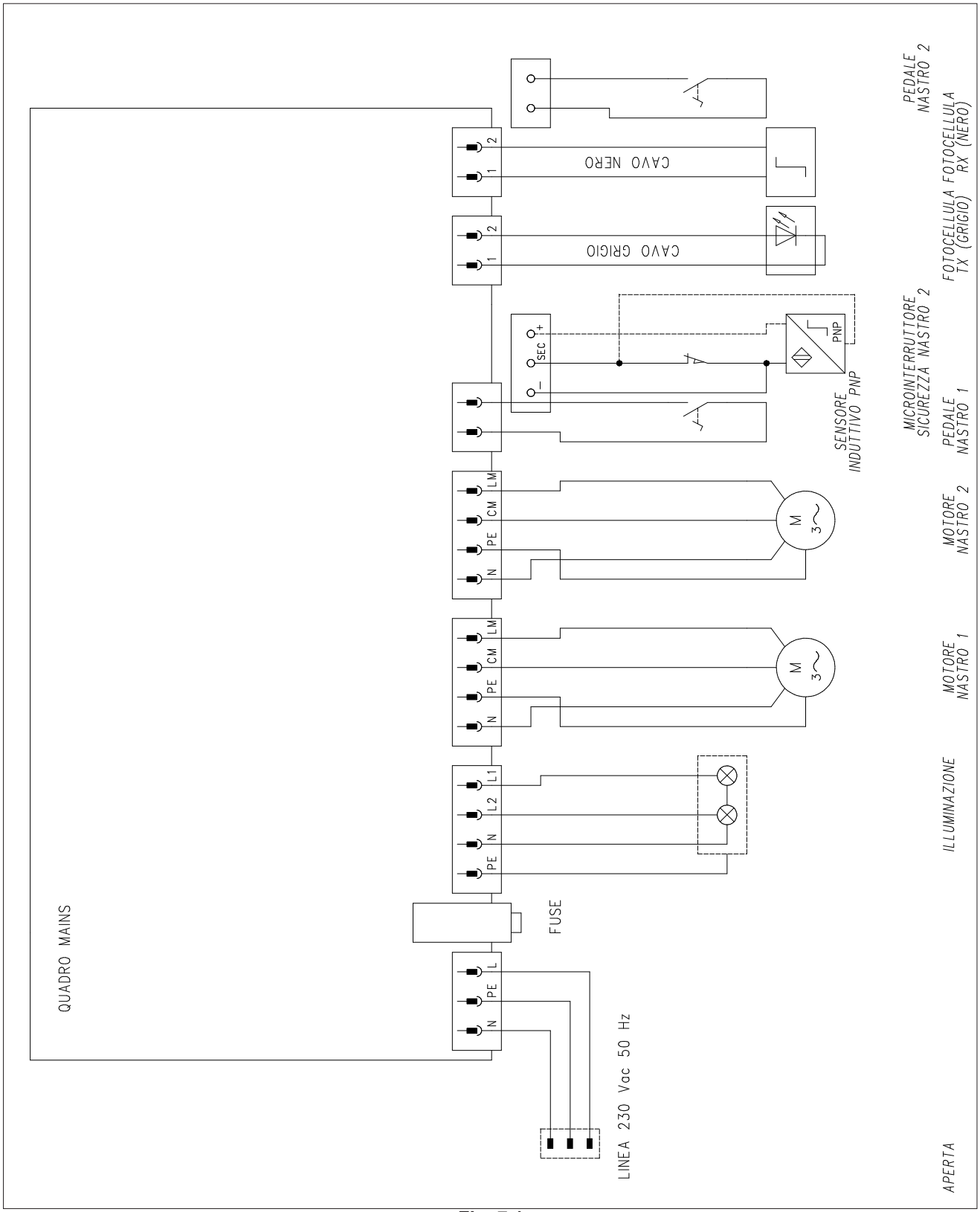
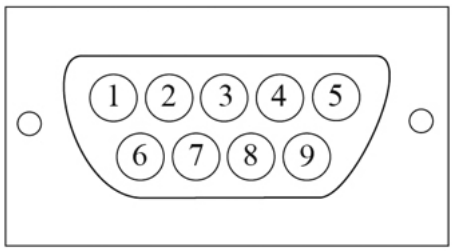


Fig. 7.1

- **WIRING DIAGRAM FOR FORTEZZA MODEL CASH DRAWER CONNECTION (fig. 7.2).**



EXTERNAL PLUG SIDE VIEW
(CONNECTION SIDE)
1) Red + 24 V DC
2) Orange + 12 V DC
3) Not used
4) Orange N-O contact normally open
5) Green N-C contact normally closed
6) Blue - 12 V DC
7) Black - 12 V DC
8) Not used
9) Brown Common

Fig. 7.2