



Original instructions

ENGLISH

Vimec s.r.l

Via Parri, 7 - 42045 Luzzara - Reggio Emilia- Italy

Tel. + 39 0522 970 666 - Fax. + 39 0522 970919

www.vimec.biz

STAIRLIFT V 65 ELECTRONIC MODEL

B.I. - INDEPENDENT BARS

B.R. - RETRACTABLE BARS

USE AND MAINTENANCE

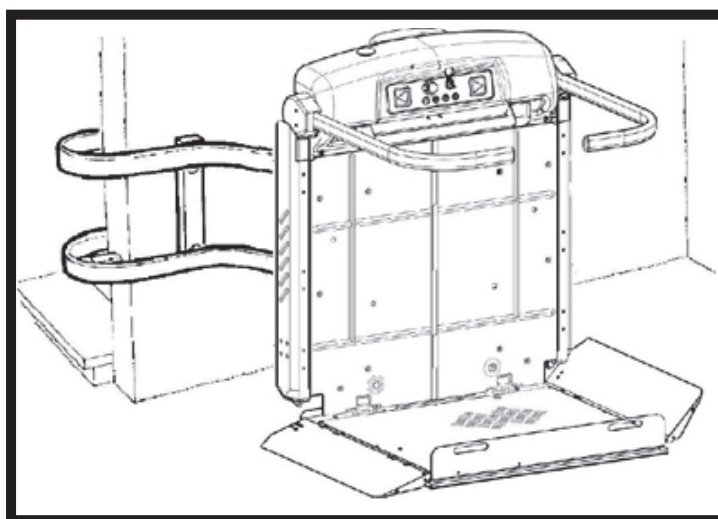
Page 03 - 17

ASSEMBLY INSTRUCTIONS

Page 18 - 42

SPARE PARTS MANUAL

Page 43 - 87



MANUAL CODE

7512132



7512132

DATE 30 - 10 - 2014 APPROVED

Marchetti

“EC” DECLARATION OF CONFORMITY

The manufacturer:



Via Parri n.7 , 42045 Luzzara (R.E.) ITALIA
Tel. 0522/970666 r.a. Fax 0522/970919

(Name and address of the person authorised to compile the technical file:

Name: Marco Marchetti

Address: Via Parri n.7, 42045 Luzzara (R.E.) ITALY - Tel. +39/0522/970666)

states on his own responsibility that the stair lift for users on a wheelchair type:

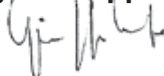
V65 – B.I. – B.R. – Serial Number:

complies with the following Directives:

- Directive 2004/108/EEC **“Electromagnetic Compatibility”**
- Directive 2006/95/EEC **“Low Voltage”**
- Directive 2006/42/EEC **“Machinery Directive”**

The Legal Representative

Ing. Giuseppe Lupo



Luzzara, li

31/01/2010

USE AND MAINTENANCE

CONTENTS OF THE MANUAL

1. Stairlift and manufacturer identification data	Page 04
2. After-sales service	Page 04
3. Description of the stairlift	Page 05
4. Technical specifications	Page 08
5. Intended and improper uses of the stairlift	Page 09
6. Preparation for commissioning	Page 09
7. Correct use of the stairlif in independent bar and retractable bar version	Page 10
8. Safety systems	Page 13
9. Maintenance	Page 15
10. Wiring diagrams	Page 17
11. Vibrations - Airborne noise levels	Page 17
12. Information on disposal of substances and parts of the stairlift	Page 17

TO ENSURE SAFE OPERATION

WARNING



This symbol indicates important instructions for safety.

Compliance with these instructions does not release users from their obligation to follow all additional safety regulations.

Read this manual carefully before assembling, starting up, using or maintaining the stairlift.

The best way of preventing accidents is care and attention when using the stairlift.

Comply with the information supplied by the data-plates of all kinds applied to the stairlift.

Replace any damaged data-plates immediately.

All procedures on the stairlift except for normal use must be carried out by professionals.

Comply with the skill level indicated for the various operations, with reference to the following symbols:

- O** Trained operator
- OC** Trained operator with specific skills
- OS** Skilled operator committed by the manufacturer

The stairlift must always be operated by an ADULT well informed about all the operating functions and the precautions envisaged by this manual.

1) STAIRLIFT AND MANUFACTURER IDENTIFICATION DATA

  I - 42045 Luzzara (RE) Via Parri,7 - Tel. + 039 0522 970 666	
TYPE	V65
SERIAL Nr. (Nr)	----
YEAR OF MANUFACTURE	----
WORKING LOAD (Kg)	--- 
POWER (V / A / Hz)	230 / 5 / 50
WORKING LOAD --- kg 	
SERIAL Nr.	SERIAL Nr.
----	----

2) AFTER-SALES SERVICE

--

DEALER STAMP AND REFERENCE FOR AUTHORISED AFTER-SALES SERVICE

3) DESCRIPTION OF THE STAIRLIFT

3.1) Description

Lift unit - Fig. 1

Comprises:

- carriage
- load-bearing structure
- safety bars - Fig. 1/a.
- load platform - Fig. 1/c.
- casing - Fig. 1/b.
- control board - Fig. 1/d.

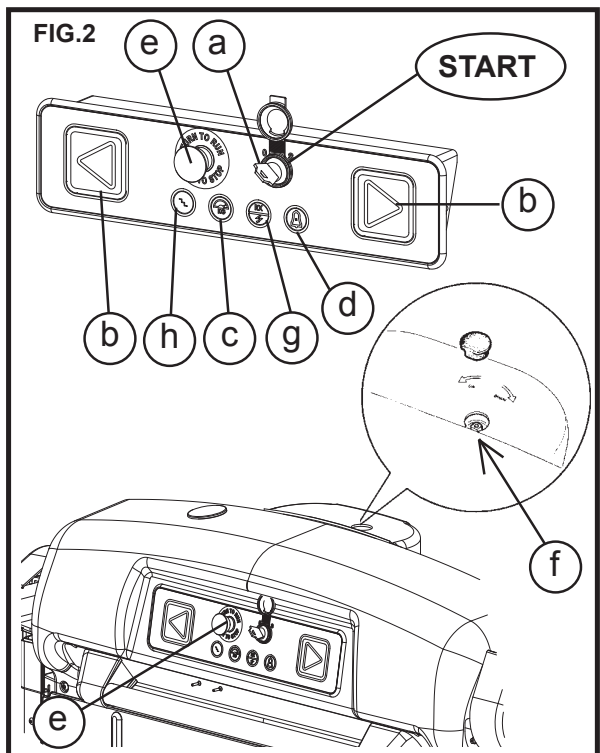
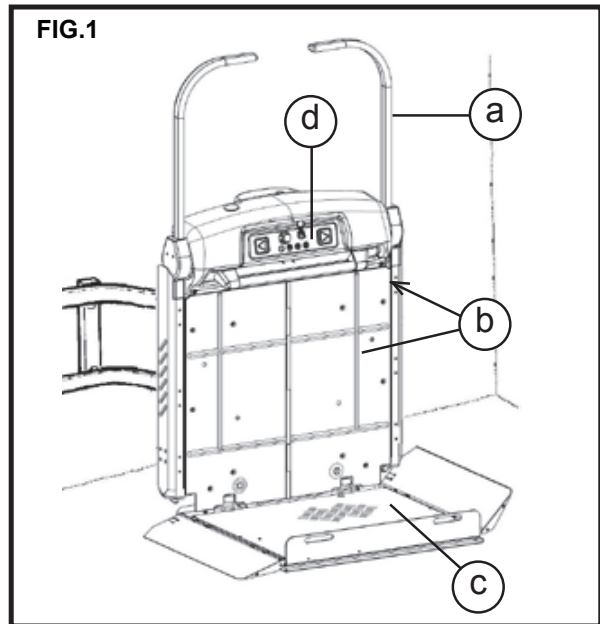
Contains:

The control board carries the following controls:

- control enabling key with start button - Fig. 2/a.
- up/down buttons - Fig. 2/b.
- overload indicator light - Fig. 2/c (standard operated only for 1250x800 and 1050x900 platforms).
- bell push-button - Fig. 2/d.
- emergency stop (red mushroom-head button) - Fig. 2/e.
- radio and stairlift tension indicator light - Fig. 2/g.
- floor selector button - Fig. 2/h

On the lift unit:

- connection for handwheel for manual operation - Fig.2/f.
- motor - Fig. 3/a.



- transmission components - Fig. 3/b (units with gradient $< 20^\circ$).
- electric system - Fig. 3/c.

As an optional, the stairlift can be also provided complete with double drive chain (Fig. 3 bis) and chain microswitch (Fig. 3 bis).

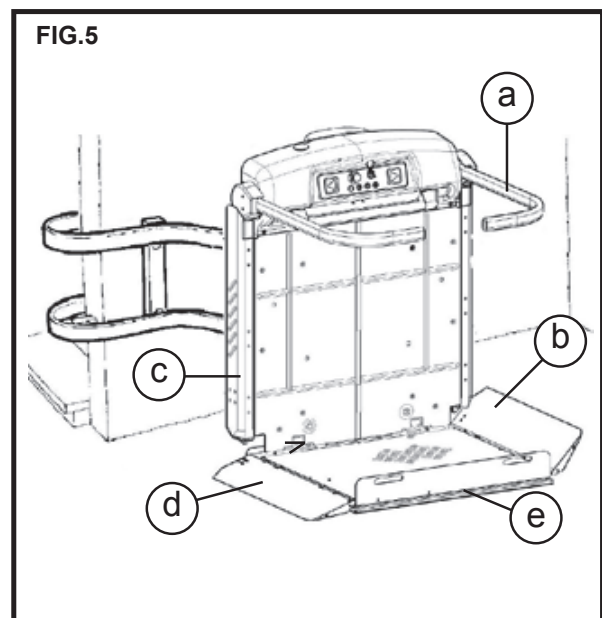
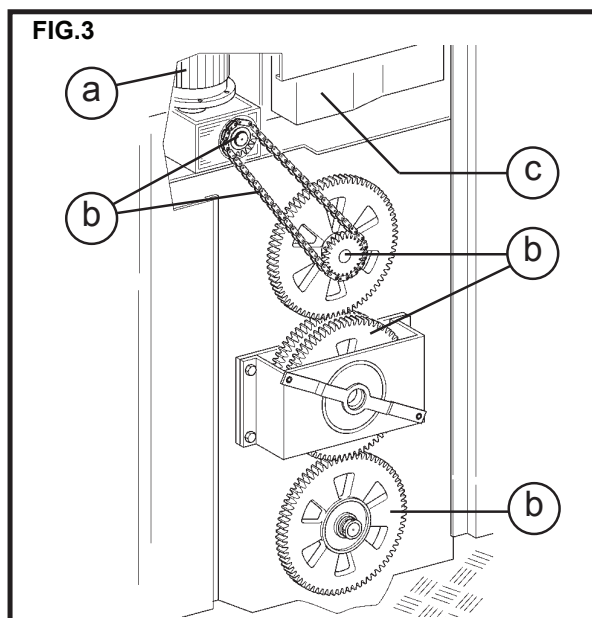
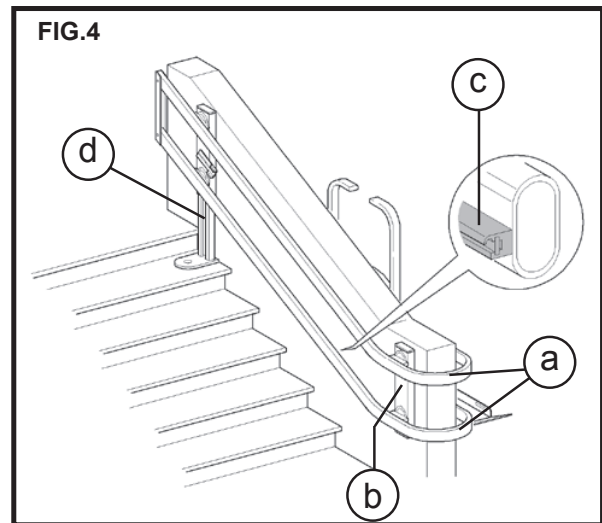
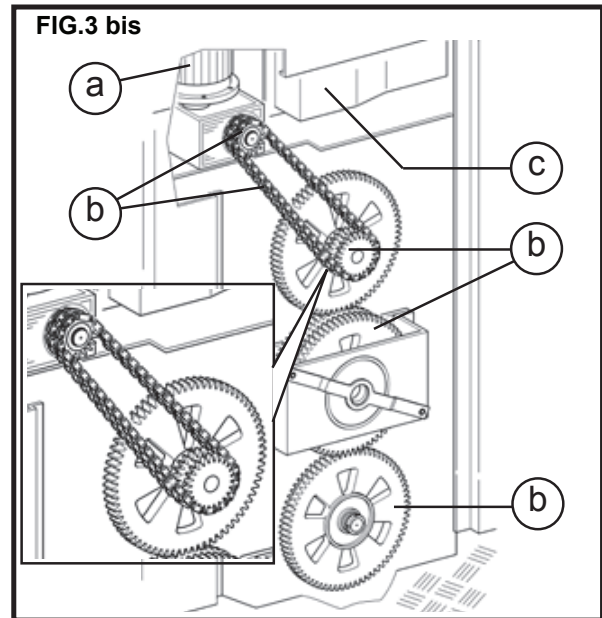
Rails - Fig. 4

Comprises:

- Rail - Fig. 4/a.
- Wall connections - Fig. 4/b.
- Charging station or busbar - Fig. 4/c.
- Feet for stairs (optional) - Fig. 4/d.

3.2) Main safety measures against risks of a mechanical nature

- Safety bars - Fig. 5/a.
- Retailer guard boards - Fig. 5/b.
- Anti-impact and anti-shearing sensor edges on stairlift body - Fig. 5/c.
- Anti-impact and anti-shearing sensor edges on platform - Fig. 5/d.
- Anti-crushing sensor base in platform - Fig. 5/e.
- Gradual action mechanical safety gear - Fig. 6/a.



3.3) Main safety measures against risks of an electrical nature

Protection against overcurrents, overloads, accidental contacts and direct and indirect contacts.

- Differential circuit breaker on power supply system.

3.4) Warning and compulsory procedure signs and data-plates

The stairlift is fitted with the following warning and compulsory procedure signs and data-plates:

- Emergency switch must be pressed before operation in manual mode - Fig. 2/e.
- Stairlift identification plate.
- Sign for manual release of bars and platform

3.5) Supply condition

- Rails and rail connections - Fig. 7/a.
- Frame with carriages - Fig. 6.
- Set of bars - Fig. 7/f.
- Platform - Fig. 7/c.
- Casing - Fig. 7/d.
- Handwheel for manual operation - Fig. 7/e.

 **The system must be installed by skilled operators authorised by VIMEC.**

FIG.6

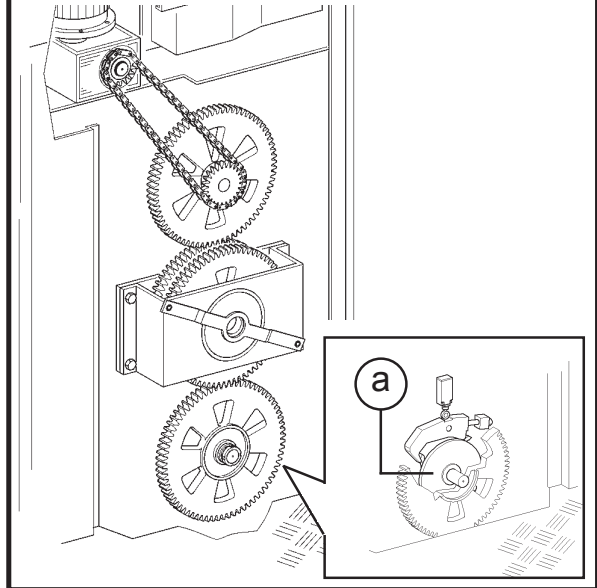


FIG.6 bis

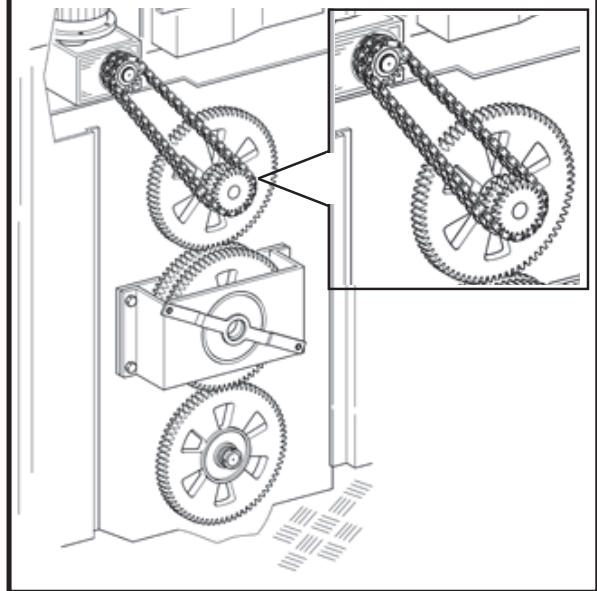
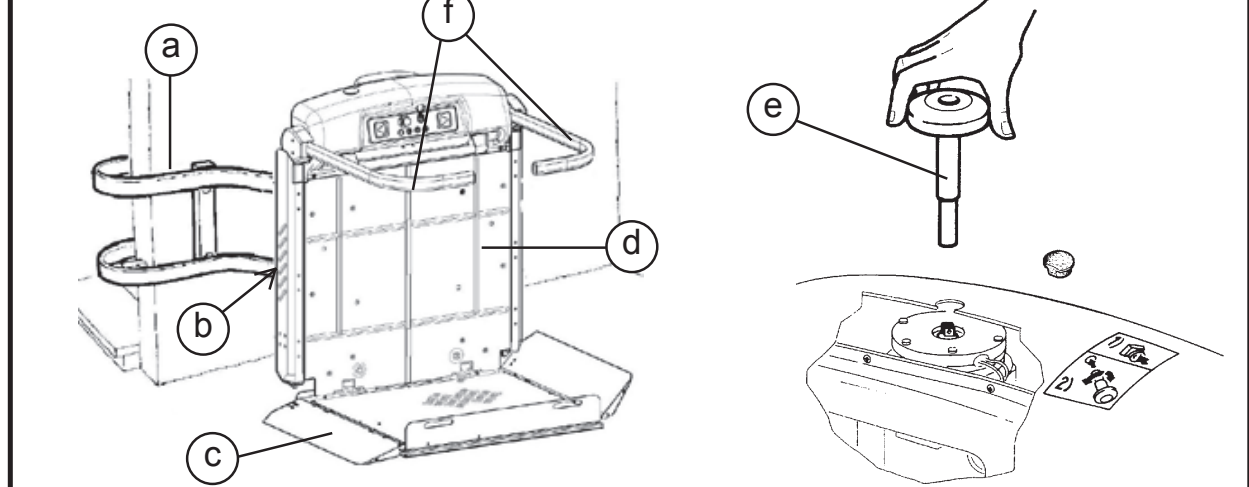


FIG.7



3.6) Reference technical standards

The stairlift complies with the following norms:

- Directive 2004/108/EEC "Electromagnetic Compatibility"
- Directive 2006/95/EEC "Low Voltage"
- Directive 2006/42/EEC "Machinery Directive"

4) TECHNICAL SPECIFICATIONS

- Drive system	
Worm gear reduction unit	Ratio 1/40
- Performance levels	
Travel direction	Forward/backward
Speed (up/down)	0.15 m/s
Capacity	1 person
Gradient	from 0° to 50°
Working load	250 kg up to 45° - 300 kg for platform with $P \leq 770$ and gradient up to 45° - 250 kg for platform with $P > 770$ and gradient up to 45° - 200 kg with gradient between 45° and 50°
- Duty cycles	
Normal service	20 min/hour max.
- Ambient conditions for outdoor stairlifts	
Temperature	From -10°C to +60°C (suggested and recommended)
Humidity	maximum 70% (use in bathrooms and swimming-pools is not permitted) (suggested and recommended)
- Electrical system	
Drive motor	24 V d.c. 1 kW
Power absorption	40 A
- Controls	
Up/down control button	"Dead man" type
Emergency stop button with detent	
Key-switch	

5) INTENDED AND IMPROPER USES OF THE STAIRLIFT

5.1) Intended uses

The stairlift is a system for transporting one person **SEATED ON A WHEELCHAIR OR ON A SPECIAL SEAT (optional)**, suitable for installation on staircases having the following characteristics:

- Location: Indoor and outdoor
- Steps: Parallel
- Gradient: Minimum 0° - Maximum 50°

Intended user: The intended user is self-sufficient and physically and mentally capable, familiar with the stairlift's operations and the use and maintenance instructions.



WARNING: If the person using the system is not self-sufficient, the stairlift must be operated by another person acting as attendant. While the stairlift is in motion, sit still and do not move or rock.

5.2) Improper uses

- Transporting objects on the platform
- Overloading the stairlift (e.g., disabled person with electric wheelchair having total weight in excess of the maximum permitted working load. See section 4, Technical Specifications).
- Use of the stairlift by unauthorised persons (e.g. children, people who do not meet the requirements specified in point 5.1)

Improper uses

Use on stairs having gradient greater than 50°:

User standing on platform:

Operation by unsuitable operator:

Transporting more than one person:

Problems

Overheating of motor

Risk of falling

Risk of falling

Risk of falling and of overheating of motor



AWARNING: DO NOT MAKE MODIFICATIONS INTENDED FOR ANY USE, DO NOT INSERT EXTRANEIOUS OBJECTS OR LIQUIDS IN HOLES OR CRACKS, DO NOT SPRAY LIQUIDS ONTO THE STAIRLIFT

6) PREPARATION FOR COMMISSIONING

6.1) Preliminary checks



Checks to be made before the stairlift is put into service.

Skill level: OS - Skilled operator committed by the manufacturer.

ITEM CHECKED

RESULT OF CHECK

Controls:

Correct operation in response to controls.
Efficiency of emergency stop.

Safety devices:

- Sensor edges
- Electric limit switches
- Over-run safety device
- Anti-crushing platform base

Check that the safety device is tripped, stopping the stairlift.

Power supply:

230 V - 5A - 50/60 Hz.

Earth connection:

Check that the stairlift system's earth line is connected to the earth line of the mains system.

7) CORRECT USE OF THE STAIRLIFT IN INDEPENDENT BAR AND RETRACTABLE BAR VERSIONS

⚠ WARNING: BEFORE USING THE STAIRLIFT, READ THIS MANUAL CAREFULLY. The stairlift must only be used in accordance with the intended uses described in section 5.

7.1) Starting position

The stairlift is parked at one end of the staircase with the platform folded up (Fig. 8/a) and the bars in rest position (Fig. 8/b) with the master key turned to ON. The stairlift is powered up.

7.2) Using the stairlift

⚠ WARNING: Always keep access to the platform and the master switch unrestricted. NEVER overload the stairlift.

1) For stairlifts with manual platform (standard).

- Bring the down side bar into the working position by pressing the button (Fig. 9/d) on the control board at the floor.
- Lower the platform by hand.
- If the stairlift is at the lower floor, bring the down side bar into the rest position to allow the wheelchair to move onto the platform.

1) For stairlifts with motor-operated platform (optional)

- Insert the key and turn it to position (1) ON using the control board at the floor.
 - Open the platform by pressing the button provided (Fig. 9/e). The side guard moves to the drive-on position and the down side bar to the working position.
- If the stairlift is at the lower floor, return the down side bar to the rest position to allow the wheelchair to move onto the platform.

- 2) Get onto the platform, facing in the travel direction and in a central position (Fig. 10) to allow the guard to move into its sensor position. Lock the wheelchair brakes. If the wheelchair is electric, turn it off.

⚠ WARNING: The wheelchair must be positioned on the platform so that no part of the body or the wheelchair projects from the platform. When the stairlift is in motion sit still without moving or rocking.

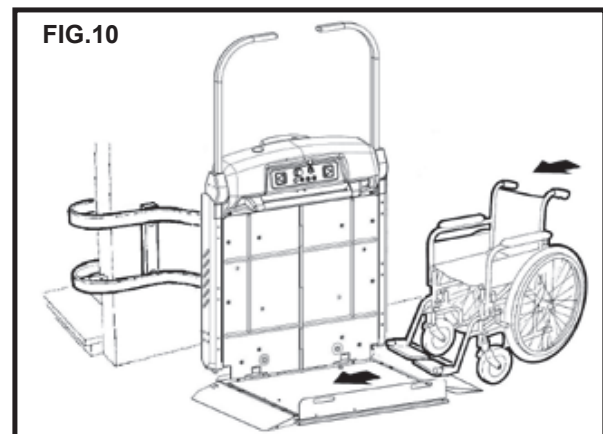
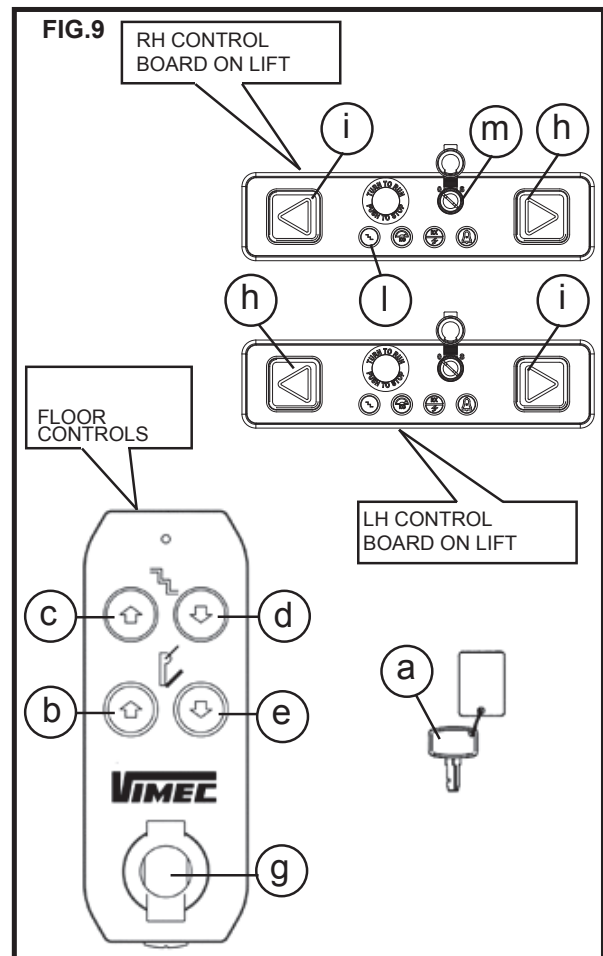
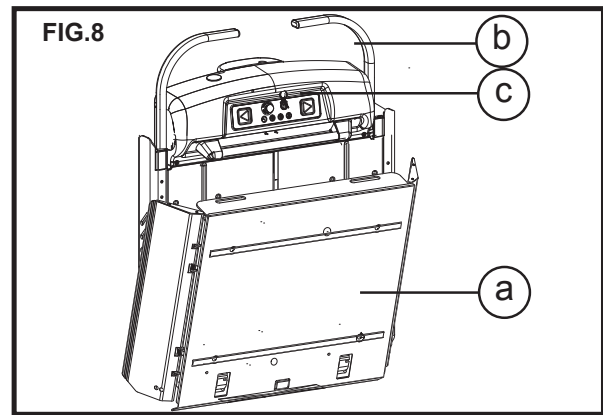
- 3) Insert the key (Fig. 9/m) and turn it to position (1) ON, then turn to S and release.

- 4) Press the up button (Fig. 9/i); the guards and bars automatically move to the safety position and the stairlift sets off.

In stairlifts with an intermediate stop, press the button (Fig. 9/l) once to select the first stop, press twice for the second stop, three times for the third stop, and so on. Then keep the up/down button pressed until the landing floor is reached.

The yellow light of the button (Fig. 9/l) flashes upon selection and until arrival to the selected floor, then the light is on without flashing.

In case the floor selection is wrong, keep the button pressed for 3 seconds to reset, then select again



- 5) The stairlift stops at the destination floor; release the up button and press it again, the bars and the guard facing in the up direction automatically move to the drive-off position. The guard and the bar facing in the down direction are now locked in the safety position, to ensure safety during drive-off and upon new drive-on.
- 6) When the down button (Fig. 9/h) is pressed, the bars and guard facing in the up direction move to the safety position and the stairlift sets off.
- 7) The stairlift stops at the destination floor; if the down button (Fig. 9/h) is kept pressed, the bars and the guards automatically move to the drive-off position.
- 8) Return the stairlift to its initial condition (with platform folded up and bars in rest position) (Fig. 8), turn the key off and remove it.

N.B: The bars and guards are mechanically locked in position as long as the stairlift is travelling between the floors.

 **WARNING:** The passenger must always remain in the recommended position, with the wheelchair brakes on, if the wheelchair is electric, turn it off, as long as the stairlift is in motion. The feet must be kept on the wheelchair foot-rest and the free hand on the platform handle (Fig. 11/c).

 **WARNING:** The passenger must always look in the travel direction and must stop the stairlift immediately if there is anyone on the travel route.

 **WARNING:** During operation of the stairlift the landings and travel route must always be illuminated (minimum 50 Lux measured at floor level).

 **WARNING:** Use of the stairlift by unauthorised persons is not permitted. The key which enables use of the stairlift must always be kept in a safe place and must only be accessible to authorised persons. The key must always be removed at the end of each trip. Leaving the key always in place is not permitted.

 **WARNING:** Never leave the platform halfway up the staircase.

 **WARNING:** Never use the stairlift unless a trained person is available to operate it in manual mode in an emergency.

 **WARNING:** Never place your hands or any objects close to the rails or platform while the stairlift is in motion.

 **WARNING:** If the machine is installed outside, always cover it with its protection cloth after using it. Remove the keys from the control panels and close the rubber lid (Fig. 9/g).

Note for motor-operated platform

This device tips up the platform by means of an electro-mechanical actuator.

The platform may be opened and closed by pressing the buttons provided on the control board at the floor (Fig. 9/b) and (Fig. 9/e). A special manual device makes it

FIG.11

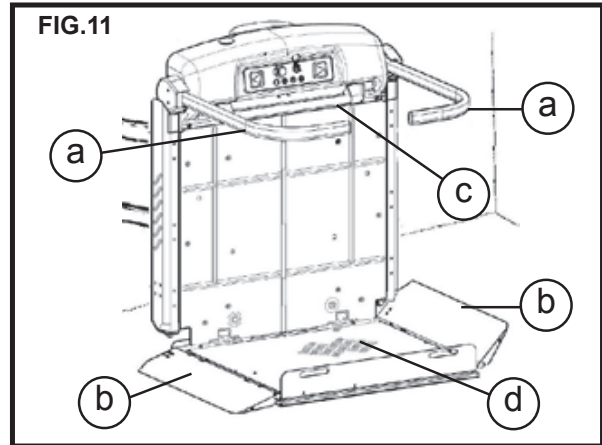
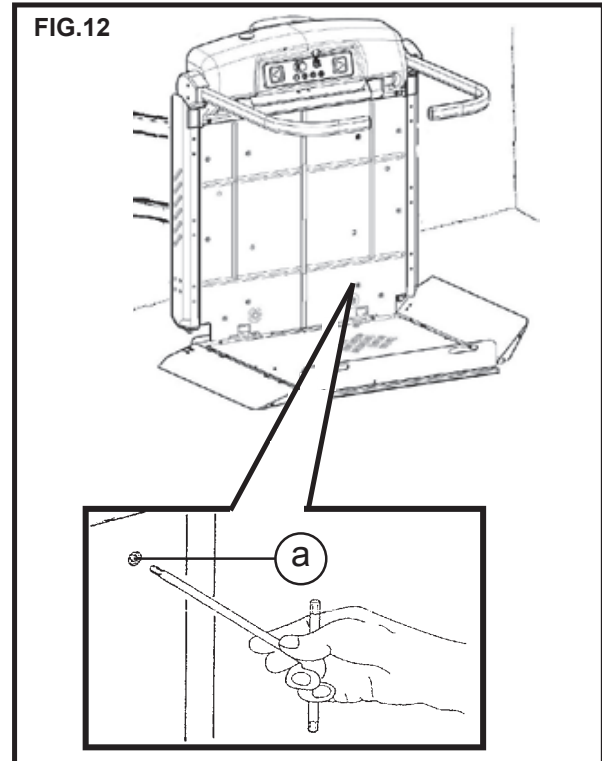


FIG.12



possible to close the platform in case of emergency:

- 1) Push the release button (Fig. 12/a) paying attention to make a light pressure on the platform to avoid a sudden shutting.
- 2) Pull the platform gently, until the complete shutting.
- 3) Reset the normal functions of the stairlift after the emergency by a manual complete opening of the platform.

 **WARNING:** The platform can only be operated with the down side bar in the working position.

N.B: If the platform folding-up button is accidentally pressed when someone is on the stairlift, a motor overcurrent device is tripped and cuts out the electro-mechanical actuator. The device resets automatically when the button is released.

7.3) Stairlift operated by attendant.

If the person using the stairlift is not self-sufficient, it must be operated by an attendant, using the remote control board (Fig. 13) or the control board with spiral cable (Fig. 14), depending on the customer's request. The attendant must follow the stairlift from behind with respect to the moving direction.

Note

Push the floor selection button (push only once for the first intermediate floor; twice for the second intermediate floor) (Fig. 14).

7.4) Stairlift stopped at the other end of the staircase (optional call - send function).

- 1) Insert the key in the control board at the floor and turn it to ON.
- 2) Keep the call or send button (Fig. 9/c) and (Fig. 9/d) pressed until the stairlift has reached its destination.
- 3) Remove the key in the control board, close the rubber lid (Fig. 9/g).

WARNING: The call/send function only works with the platform fully folded-up.

WARNING: Never send/call the stairlift to/from a floor unless the **WHOLE** travel route can be seen.

7.5) Stairlift with seat for transporting a seated passenger (optional)

WARNING: the seat max. working load is 115 kg. While the stairlift is in motion, the passenger must always remain in the position shown in Fig. 15 and must always keep their free hand on one of the bars. After use, raise the folding seat and set the stairlift as described in 7.2-8 (Fig. 8).

7.6) Emergency manual operation

Skill level OC: Trained operator with specific skills

This emergency operating mode is used to bring the passenger to a floor in case of a power black-out or system failure.

WARNING: before operating in manual mode, the operator **MUST** press the emergency switch and remove the key (Fig. 9/m).

Proceed as follows:

Moving the stairlift

- 1) Remove the central cap from the casing (Fig. 16/a).
- 2) Fit the handwheel provided (Fig. 16/b) into the hole, fitting it into the square shaft (Fig. 16/c) and turn the handwheel to move the stairlift.
- 3) After reaching the floor, remove the handwheel and close the cap again.
- 4) Restore normal operation of the stairlift once the emergency conditions cease.

FIG.13

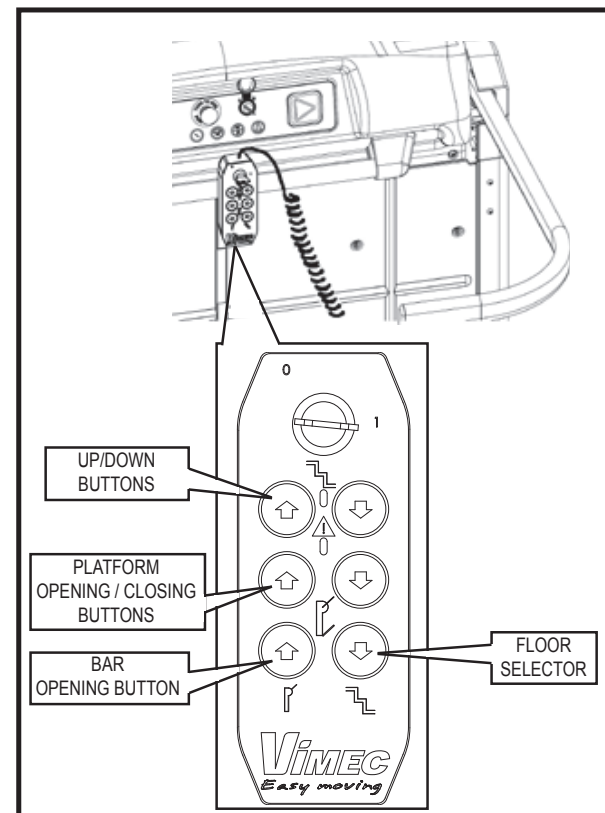
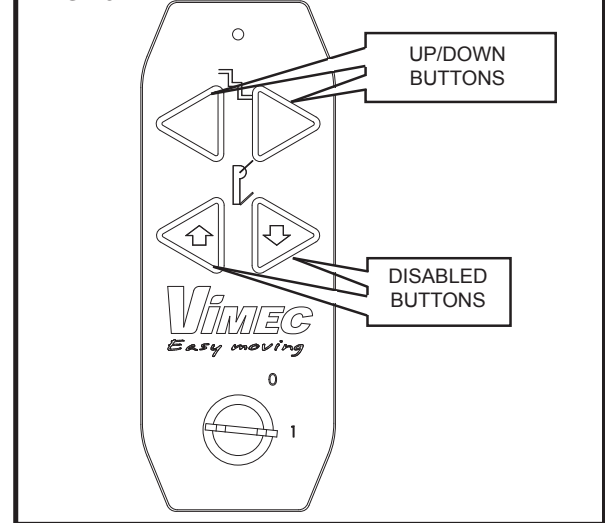


FIG.15



5) Bring the stairlift to the "home" floor (reset) to reset its programming.

Releasing the safety bars in an emergency

1) Press the emergency STOP button.

2) **B.I. (Independent bars)**, unscrew the two bar release screws on the front of the stairlift body above the handle (Fig. 17/a).

2) **B.R. (Retractable bars)**, screws at the bottom on the front have to be undone (one for each safety bar - Fig. 18/a).

3) Raise the bars by hand (Fig. 17/b-18/b) and hold them in position while the passenger gets off the stairlift.

4) Screw the release screws down again, holding the bar in the working (lowered) position (Fig. 17/b).

5) Check that the bars are fixed.

6) Reset the emergency STOP button.

 **WARNING:** During the emergency operation do not forget that the safety bars are not fixed in the opening position.

 **WARNING:** Operations 4 to 6 must be carried out by a skilled technician authorised by VIMEC.

 **WARNING:** In case of a system failure or tripping of the safety gear, call in an authorised VIMEC technician.

In case of any kind of malfunction, put the stairlift out of use by turning the key (Fig. 9/m) to OFF.

8) SAFETY SYSTEMS

8.1) Safety devices to prevent impacts and shearing along the travel rails.

When in motion, the platform and the body of the stairlift are protected by sensor edges which stop the stairlift if it touches an obstacle of any kind - Fig. 5.

However, they do allow the stairlift to be moved in the opposite direction to that in which the obstacle was encountered, to allow removal of the obstruction.

8.2) Safety devices for the user.

a) Safety gear - Fig. 6/a.

The stairlift is equipped with a gradual action mechanical safety gear. It is tripped if the drive components fail, or if the normal downward travel speed is exceeded by a pre-set amount.

When tripped, this device stops the stairlift.

 **ATTENZIONE:** in this case the stairlift remains locked out of use and an authorised VIMEC technician must be called in to put it back into service.

b) Bars and guard boards

During use the platform (Fig. 11/d) is protected by two bars (Fig. 11/a) about 100 cm above the platform surface. The platform is also protected by two guard

FIG.16

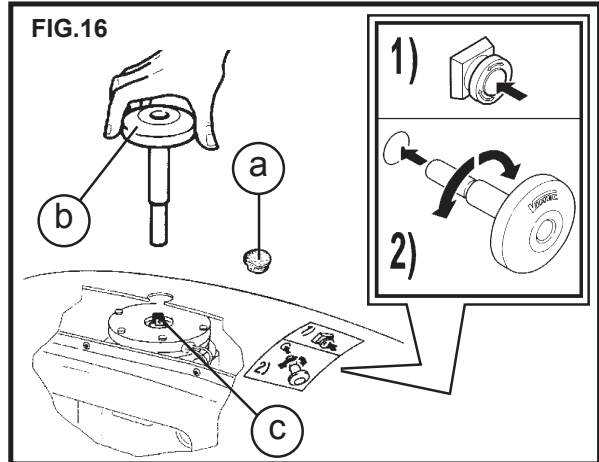


FIG.17

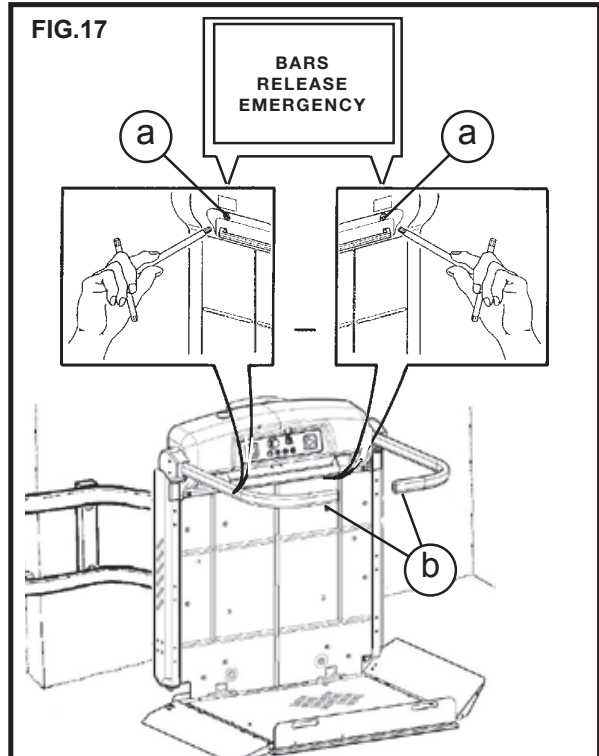
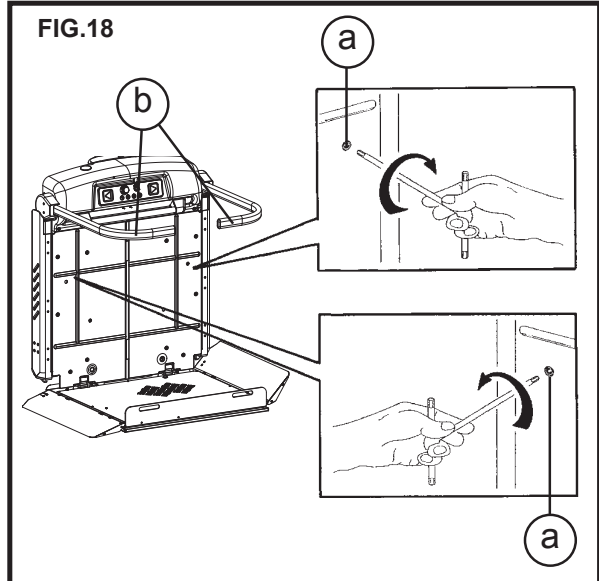


FIG.18



boards (Fig. 11/b) which have the dual function of facilitating access to the stairlift at the floors (open position) and of retaining the wheelchair while the stairlift is moving (safety position at 50°, approximately 155 cm beyond the platform surface).

The bars and guards automatically move to the safety position before the stairlift leaves the floor.

The guard facing in the downward direction only opens at the lower floor.

If the bars or guards encounter an obstacle as they move into position, a surge protector is tripped, preventing operation of the stairlift. Release the button to restore operation.

c) Handle

In the top of the stairlift body, it can be used as rest while the stairlift is in motion - Fig. 11/c.

8.3) Other safety devices

a) Electrical and mechanical limit stops

The “home” sensor acts as limit switch at the bottom floor. The positions of the other floors, including the upper floor, are programmed through encoder. In case of a malfunction, an over-run safety stop device stops the stairlift - Fig. 19/b



WARNING: In this case the stairlift remains locked out of use and an authorised VIMEC technician must be called in to put it back into service.

b) Power supply

The power supply is 220 V~ input from the mains and 27 VDC as output on the busbar or at the charging stations. The battery on the stairlift is at 24 VDC.

All power and auxiliary circuits are supplied at 24 VDC.

c) Controls

All controls are of the “dead man” type (the stairlift stops if the finger is taken off the button).

All the control stations (on the stairlift and at the floors) are enabled by a removable key (no-one can use the stairlift if the key is not inserted).



WARNING: Do not use the stairlift if the controls are no longer operating in the “dead man” mode.

d) Operation by hand

The stairlift can always be operated by hand to bring the passenger to a floor in case of a system failure or power black-out.

e) Irreversible drive

The worm gear and spiral gear wheel ensure that the stairlift cannot descend under its own weight and allow smooth stopping.

f) Motor brake

The electric brake fitted on the motor ensures quick stopping and stability.

FIG.19

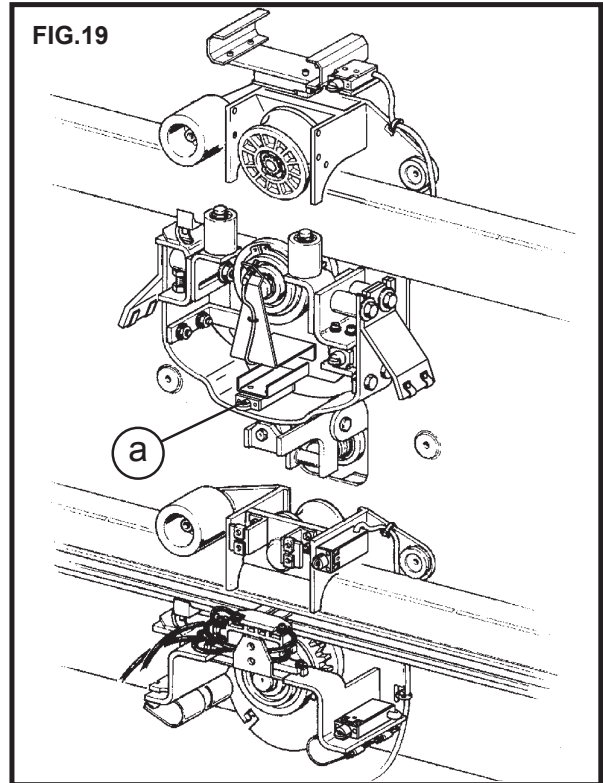


FIG.20

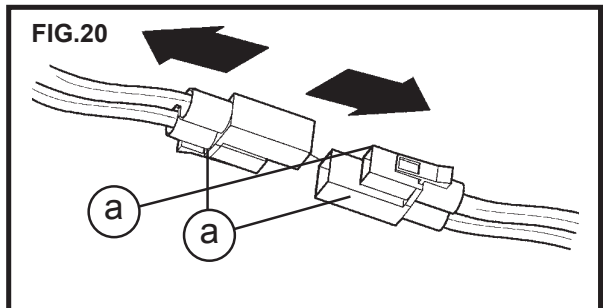
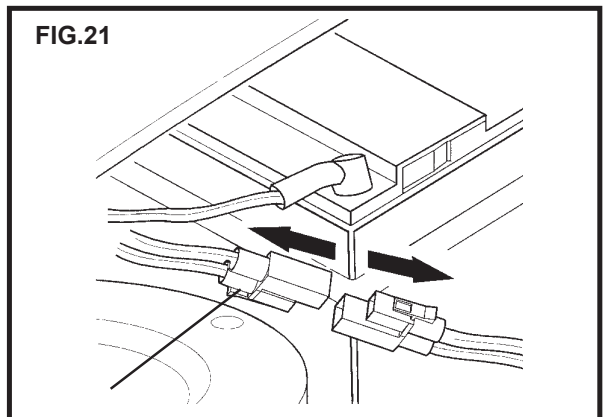


FIG.21



g) Emergency stop button

The stairlift is fitted with a red emergency STOP button (Fig. 2/e) which stops all stairlift movements when pressed.

Stairlift operation is restored by turning the same button clockwise through 45°.



WARNING: Check monthly that the emergency STOP button is working properly. If the STOP button does not halt stairlift movements, **DO NOT USE** the stairlift! Call in an authorised VIMEC technician immediately.



WARNING: If the stairlift is to be out of use for a long time or the power supply is disconnected, turn the key (Fig. 9/m) to OFF so that the batteries do not discharge.



WARNING: If the stairlift is not used for a long period of time, connect the power supply to the mains for at least 12 hours every month to keep the batteries charged.

9) MAINTENANCE

VIMEC products are built in compliance with the current Machinery Directive, that emphasizes the importance of safety both in designing and building the machines, as well as of proper installation and maintenance over time.

Therefore the product warranty is subject to an ordinary and accurate maintenance of all safety devices and guards. The maintenance service shall be carried out by skilled technicians specially trained for this task, in charge of performing the operations described below.

9.1) Precautions for long periods of disuse:

If the stairlift is to be left unused for a long time, switch on the power supply to charge the batteries at least every month.



WARNING: In all cases, call in only staff authorised by VIMEC for servicing and repairs; use only original spare parts.



WARNING: The recommended maintenance frequencies must be complied with.

9.2) Parts requiring regular inspection

Skill level: OS - Skilled operator authorised by VIMEC.



WARNING: Before starting servicing work on the rail or stairlift, disconnect the electricity by pulling the power supply plug (Fig. 20/a) and taking care to disconnect the battery on the stairlift (Fig.

21/a).

Monthly checks:



WARNING: If the stairlift is used for more than 30 trips per day, check the mechanical drive components, safety devices and parts subject to wear and tear.

Six-monthly checks:

a) Safety devices

Check that on contact with an obstacle, the anti-impact and anti-shearing sensors stop the stairlift and allow it to be started in the opposite travel direction.

Check that the stairlift stops in the required positions at the floors.

b) Checking the interlocking of the platform with independent or retractable bars (manual platform)

Check that as long as the down side bar is in the rest position the platform remains locked, whether in the working or the rest position.

c) Electromagnetic brake

The electromagnetic brake on the motor must stop the stairlift when fully loaded before the over-run device is tripped. If necessary, replace the whole brake unit.

c) Drive mechanics

Check that the teeth of the drive sprockets and the nylon wheels on which the stairlift runs are not worn or damaged. There must be no grooves or flattening on the wheels. Check the chain for wear.

e) Safety gear

Check that the hook device is free to operate without friction or excessive clearances and that it trips the safety microswitch correctly.

To check operation of the safety gear, proceed as follows:

- Move the stairlift 1-2 metres from the floor.
- Disconnect the power supply by turning the master switch to OFF.
- Remove the protective panel (Fig. 1/b).
- Press the safety gear hook with a plastic/wooden rod.



WARNING: Keep well away from all unprotected moving parts.

- Restore the power supply and press the down button until the hook engages. The stairlift will stop when the safety microswitch is pressed by the hook.

- Reset the safety gear by moving the stairlift upward in manual mode (see point 7.6).

f) Stability of the rail

Check all the fixing screws of the connections to the mounts and any expansion plugs present.

g) General checks

Check all moving parts, the guards, labels and signs.
Check the batteries and the warning lights of the power supply unit.

h) Rail cleaning

Clean the rail thoroughly.

Annual checks:

a) Controls

Check their operation by trying out the stairlift in all functions from on board and from the control boards at the floors in the working modes envisaged.
Make sure that the system has not been tampered with or modified.

b) Floor control panels

Check that these devices are operating correctly.

c) Electrical system

Check that all electrical components, contactors and microswitches are operating correctly.
Check the continuity of the earth conductors.
Check that the earth conductors are properly connected to earth.

d) Testing for stairlifts with sections of rail having gradient of less than 20°

Move the stairlift to the area with gradient of more than 25° and check that the cam drive roller is 0.5÷1.5 mm from the cam (see Fig. 64 page 41).

Then move the stairlift to the area with gradient of less than 20°, and place a weight of 250 kg on it with its centre of gravity 150 mm from the edge (see Fig. 63 page 41).

Check that the stairlift does not tilt by more than 2°.

e) Check the tension of the drive chain and stretch it as described at point 19 on page 40 if necessary.

9.3) Problem - Possible causes - Possible remedies

Skill level: O - Trained operator

Problem	Possible causes	Possible remedies
The stairlift does not move in either travel direction.	Control enabling key.	Turn the key to ON.
	Emergency STOP pressed.	Turn the button clockwise through 45°.
	Differential circuit breaker tripped.	Press the reset button. If it does not remain in the ON position, call in an authorised VIMEC technician.
	No power supply.	Check the power supply; see point 7.6 (operating by hand).
	A safety device has been tripped.	Call in an authorised VIMEC technician.
The stairlift moves downward more quickly then cuts out.	Safety gear tripped.	Call in an authorised VIMEC technician.
The stairlift does not move from either end of the stair.	Over-run safety device tripped.	Call in an authorised VIMEC technician.
The stairlift does not move in one direction.	Control enabling key.	Turn the key to ON.
The stairlift hits the stop buffers.		Check that there are no obstacles activating the safety devices (Fig. 5/c-d-e). Call in an authorised VIMEC technician.
The stairlift cuts out and the buzzer sounds.	The bars or bottom safe edge of the platform have been excited 10 times in about 30 seconds.	Switch the stairlift off and then back on with the key. When instructed to move, the stairlift automatically returns to the home floor. The stairlift responds correctly to all subsequent controls.
After the stairlift is switched on and the start button is pressed, the stairlift moves to the home floor.	The stairlift has been switched off when not at the parking station.	Wait for the stairlift to reach the home floor.

10) WIRING DIAGRAMS

The wiring diagrams are in the folder supplied with the stairlift

11) VIBRATIONS - AIRBORNE NOISE LEVELS

a) Vibrations

The stairlift induces vibrations in the body and limbs of the passenger having:

- low frequency and very low acceleration;
- short exposure times for the exposed person.

This parameter is therefore not significant for safety purposes.

b) Airborne noise: less than 70 dBA.

12) INFORMATION ON DISPOSAL OF SUBSTANCES AND PARTS OF THE STAIRLIFT

a) Disposing of rubber and plastics

Place in clean containers and consign to disposal centres authorised as required by the regulations in force.

b) Oil and toxic materials

The stairlift does not contain any oil or toxic materials for disposal.

c) Disposing of batteries

Consign batteries to authorised disposal centres or dispose of them in accordance with the relevant regulations in the country where the stairlift is installed.

ASSEMBLY INSTRUCTIONS

CONTENTS OF THE MANUAL

1. System supply condition	Page 19
2. Installing the lower rail	Page 20
3. Installing the upper rail	Page 22
4. Assembling the carriage	Page 23
5. Positioning the charging station (if applicable)	Page 25
6. Connecting the power supply unit	Page 27
7. Connecting the installation engineer's control panel	Page 27
8. Fixing the connecting feet	Page 29
9. Fitting the bars	Page 30
10. Assembling the platform with driven front access	Page 31
11. Assembling the platform	Page 34
12. Preparing the stairlift for setup	Page 36
13. Setting up the stairlift	Page 37
14. Checks on installation	Page 37
15. Adjusting rail bend rollers	Page 38
16. Adjusting guide shoe supports	Page 38
17. Fitting the over-run device cams	Page 39
18. Check the position of the over-run device cam and plates	Page 40
19. Stretching the chain	Page 40
20. Final testing	Page 40
21. Fitting the casings	Page 41
22. Fitting the caps and end covers	Page 42

1) SYSTEM SUPPLY CONDITION

The stairlift is supplied subdivided into the following components:

Lift structure (Fig. 1/a)

Complete with gear motor, drive components with safety gear and electrical system.

Batteries (Fig.1/e).

Carrier platform (Fig. 1/b)

Complete with guard boards and bottom safe edge controlled by safety microswitches.

Bar assembly (Fig. 1/c).

Fixed or retractable (optional) protective bars.

WARNING: Remove the bar assemblies (Fig. 1/c) before fitting the carriages onto the rails.

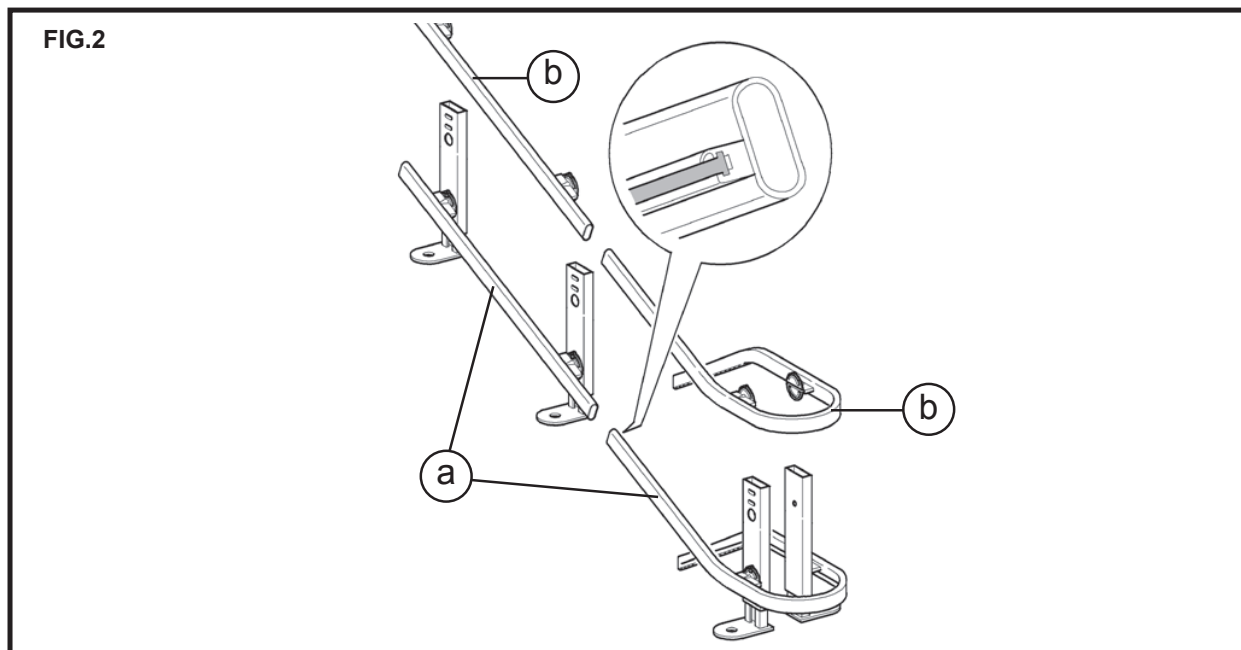
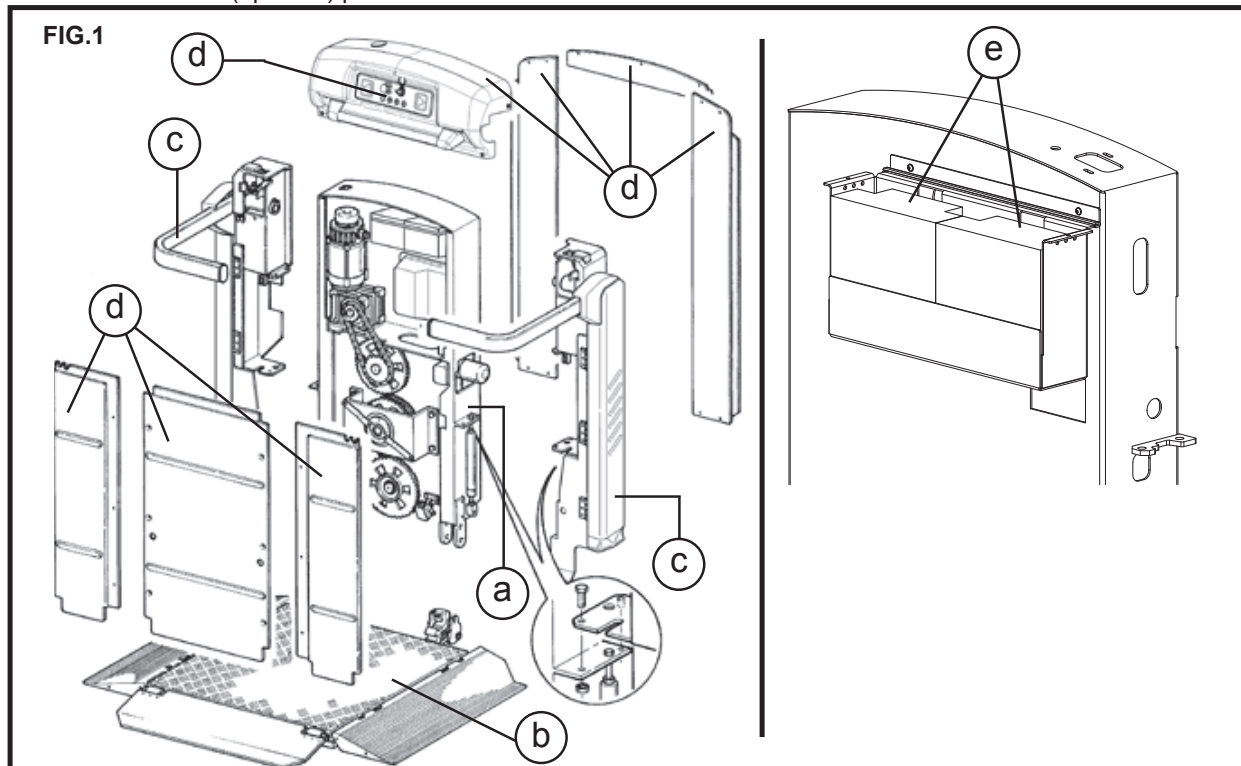
Casings and on-board control panel (Fig. 1/d).

WARNING: Remove the upper and lower casings (Fig. 1/d) before fitting the carriages onto the rails.

Rail assembly (Fig. 2)

Comprising:

- Lower rail complete with power bus bar for special applications and supporting feet (Fig. 2/a).
- Upper rail (Fig. 2/b).
- Mounting accessories.



2) INSTALLING THE LOWER RAIL

- Use the assembly markings (Fig. 3/b) to identify the first section of rail, with the bend (Fig. 3/a) starting from the top floor.

N.B.: If there are no bends, find the first straight section (Fig. 4/a) starting from the top.

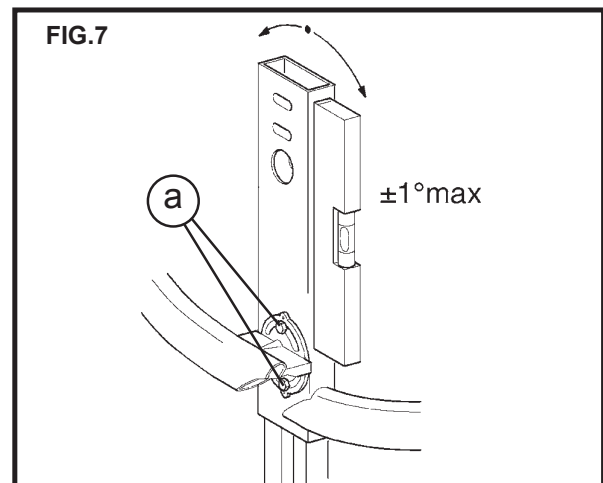
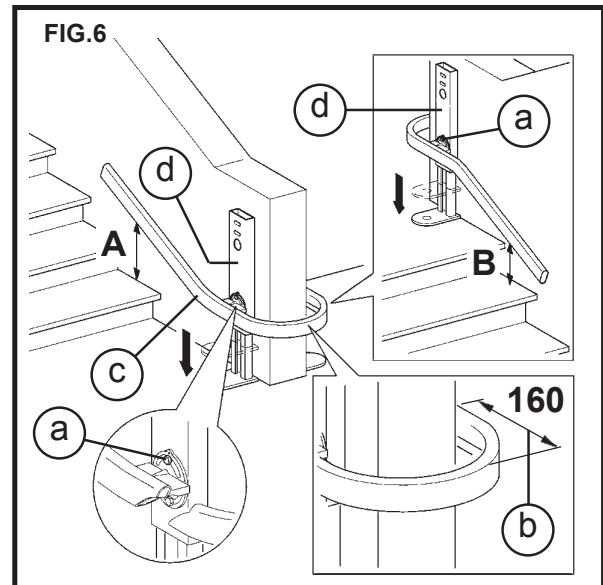
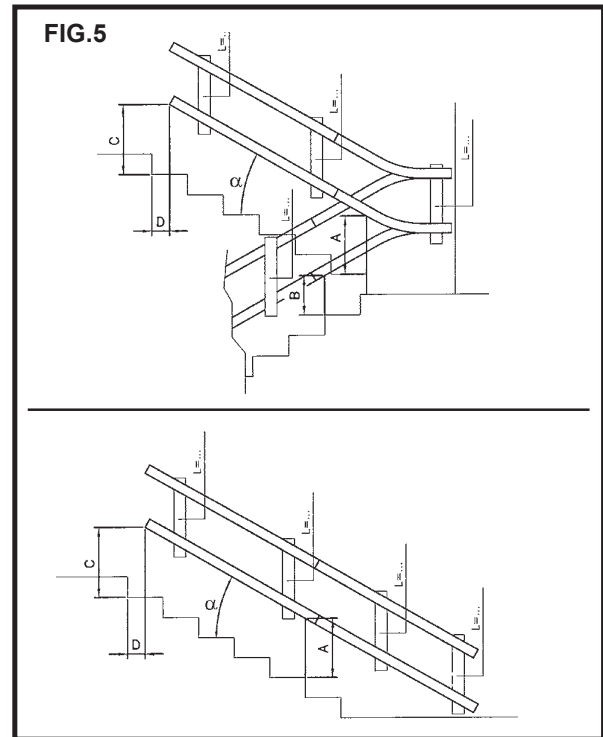
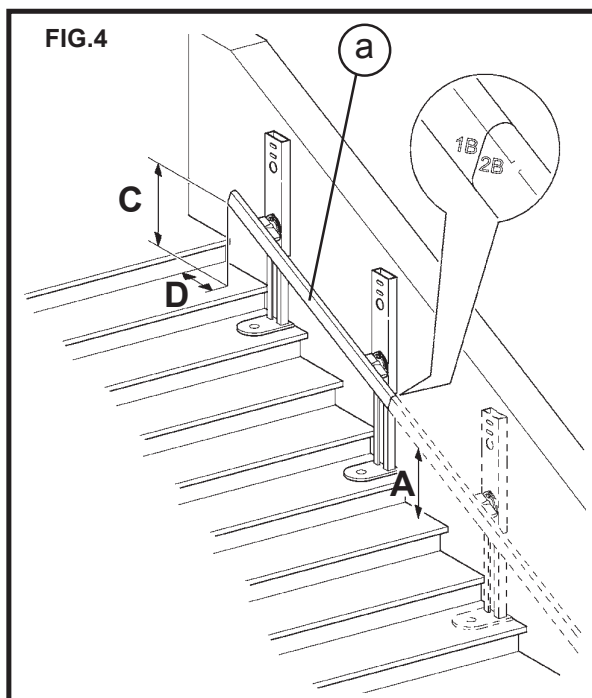
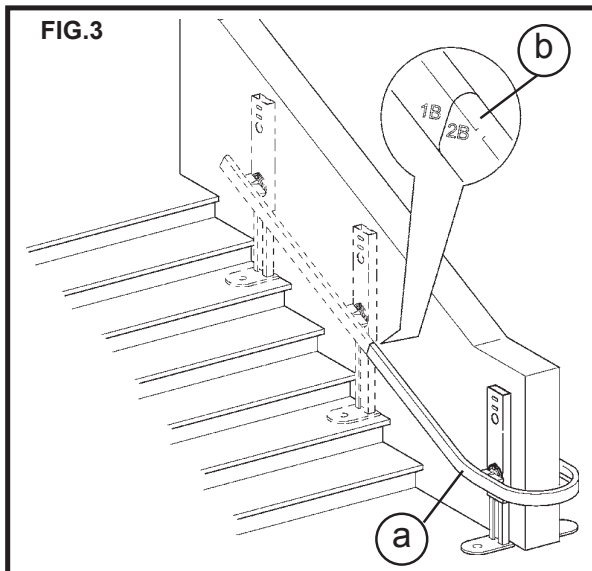
- Place the bend in the installation point (Fig. 6/c).

- Referring to the dimensions shown in the installation drawing (example Fig. 5) extract the feet and lock them lightly in position with just one screw (Fig. 6/a) for each connection device (Fig. 6/d).

N.B.: First connect up all sections; only fix the feet afterwards.

N.B.: Make sure that the outer edge of the rail is 160 mm (Fig. 6/b) from the banister or dividing wall.

- Set the bend connection fixtures perfectly vertical (Fig. 7) and tighten both the fixing screws once adjustment is complete (Fig. 7/a).

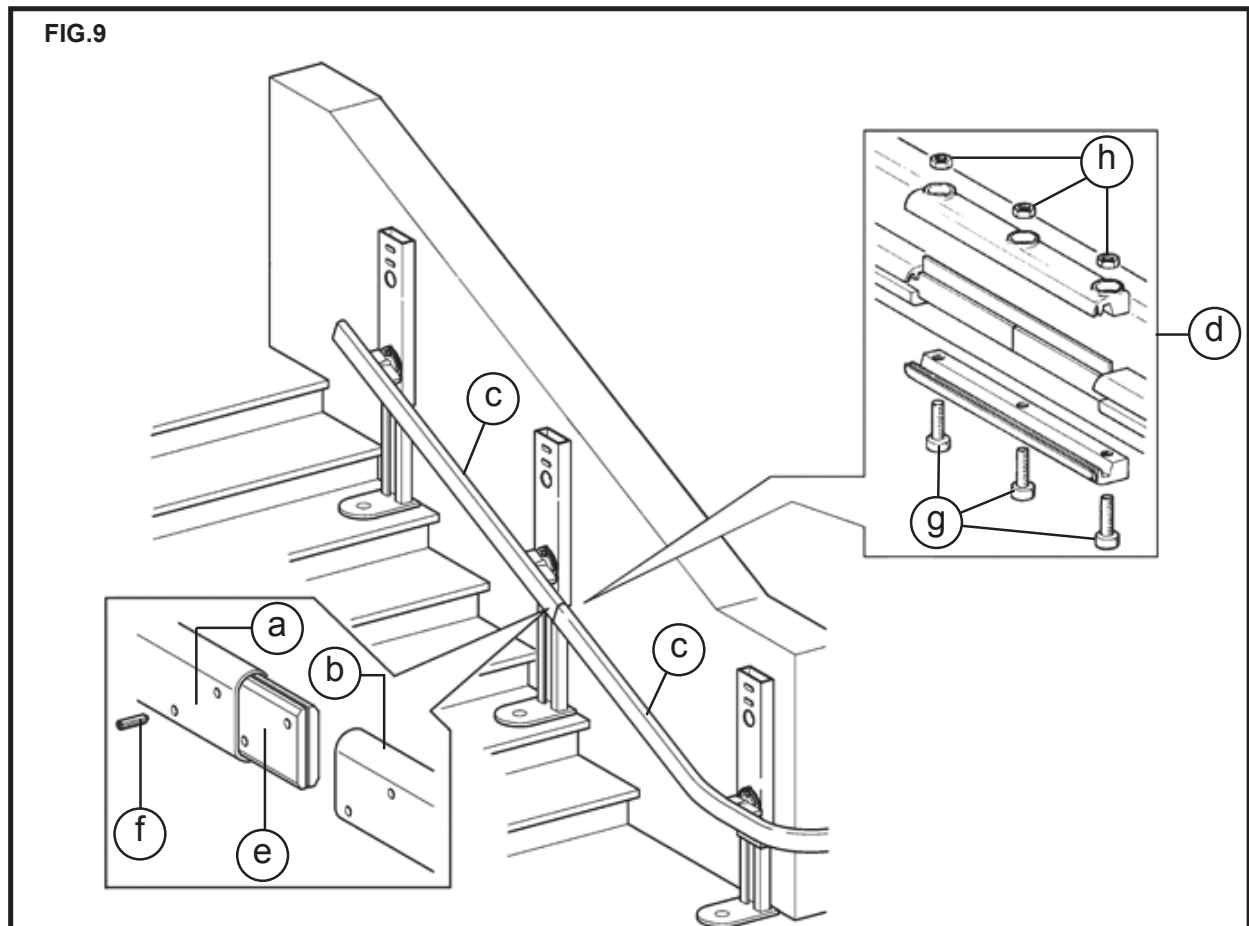
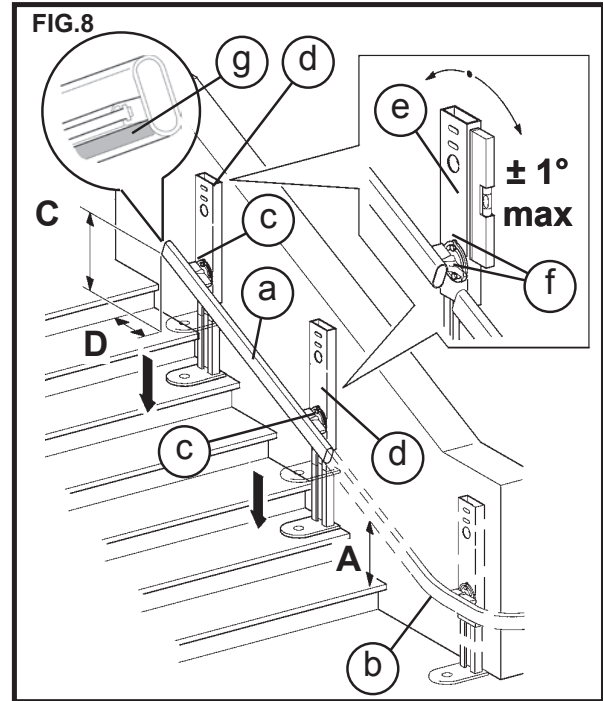


N.B.: Check that the part of the lower rail (Fig. 8/g) on which the brushes operate is clean, and remove any dirt if necessary.

WARNING: The rail fixing screws (Fig. 7/a) must be tightened to a torque of 9-10 daNm.

- Use the assembly markings (Fig. 3/b) to identify the section of rail with feet (Fig. 8/a) to be placed just above the bend just installed (Fig. 8/b).
- Position the rail correctly for installation (Fig. 8/a), referring to the dimensions shown in the installation drawing (example Fig. 5), extract the feet and lightly tighten just one bolt (Fig. 8/c) for each connection fixture (Fig. 8/d).
- Fit the joint plates (Fig. 9/e) into the tubular rail (Fig. 9/a) and lightly tighten the first 2 dowels (Fig. 9/f).
- Place the lower section of rail (Fig. 9/b) in position, fit the other dowels and tighten to a torque of **4-5 daNm** after checking that the tubular rails are correctly aligned and there is no gap between the rail sections. Fit the busbar connection joint (if any) as shown (Fig. 9/d) after checking that the components are clean.
- As already done with the bend, install the connection fixtures (Fig. 8/e) in perfectly vertical position, by tightening both fixing screws (Fig. 8/f) after adjustment.
- Install all the remaining rail sections **except the last one** as previously described, all the way down to the bottom of the staircase.

In order to make assembly for wall fixing easier (Fig. 10/a), it is advisable the use of special test feet (Fig. 10/b) (contact Vimec's assistance since they are excluded from the supply) to be plugged into the rail instead of the intermediate connections (about 1-2 per each ramp).



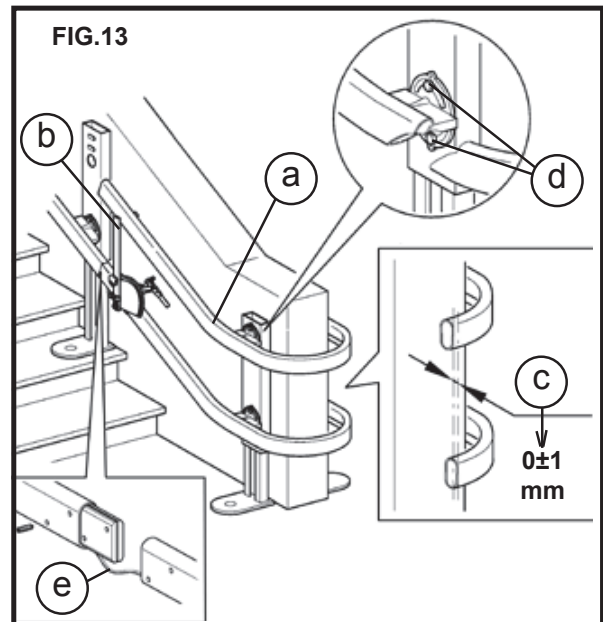
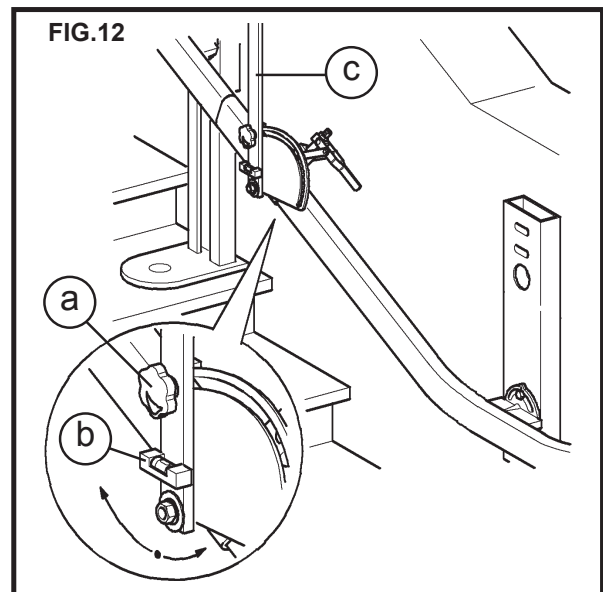
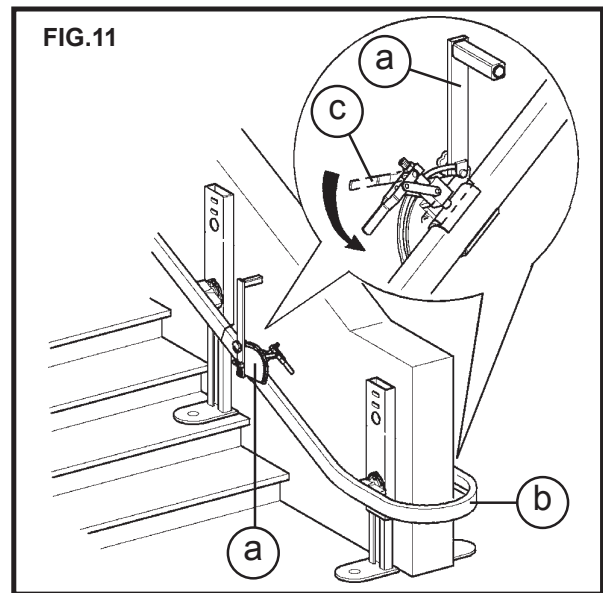
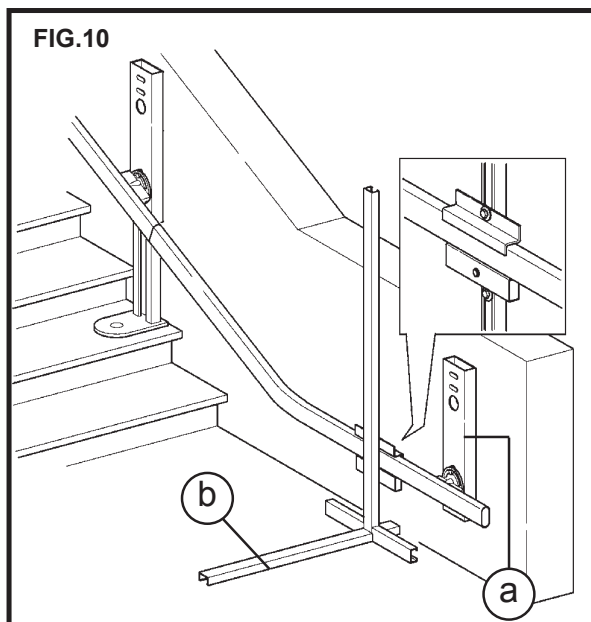
N.B.: The connection (Fig. 10/a) must be secured to the wall before test operation of the stairlift.

3) INSTALLING THE UPPER RAIL

- Place the spacers (Fig. 11/a) (order them from the Vimec service department since they are not included in the supply package) at each end of the first section of rail installed (Fig. 11/b) (bend) and lock them firmly in position by turning the lever as shown (Fig. 11/c).
- Undo the handwheel (Fig. 12/a) and use a spirit level (Fig. 12/b) to position the supporting arm (Fig. 12/c) perfectly vertical. After adjustment, tighten the handwheel firmly (Fig. 12/a).
- Place the upper rail (Fig. 13/a) on the spacers (Fig. 13/b) just fitted, and after **checking that the components are vertical** (Fig. 13/c) tighten the screws firmly (Fig. 13/d).

WARNING: The rail fixing screws (Fig. 13/d) must be tightened to a torque of 6-7 daNm.

- Install all the remaining sections of rail **except the last one** as just described, down to the bottom of the staircase. If supplied, to proceed with rail connecting, fit the charging station cable (Fig. 13/e) in the lower guide.
- After assembly, use the black paint supplied to repair any chips on the rails and seal the screws (Fig. 9/g) and nuts (Fig. 9/h) of the busbar joint (where present) with silicone.



4) INSTALLING THE CARRIAGE

- Place the main structure, complete with carriages, in the parking area at the bottom floor.

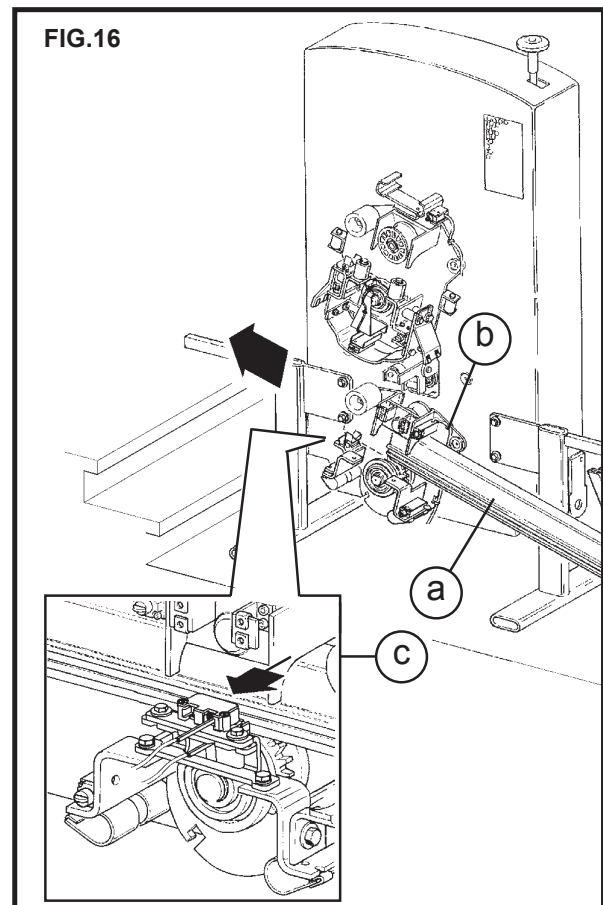
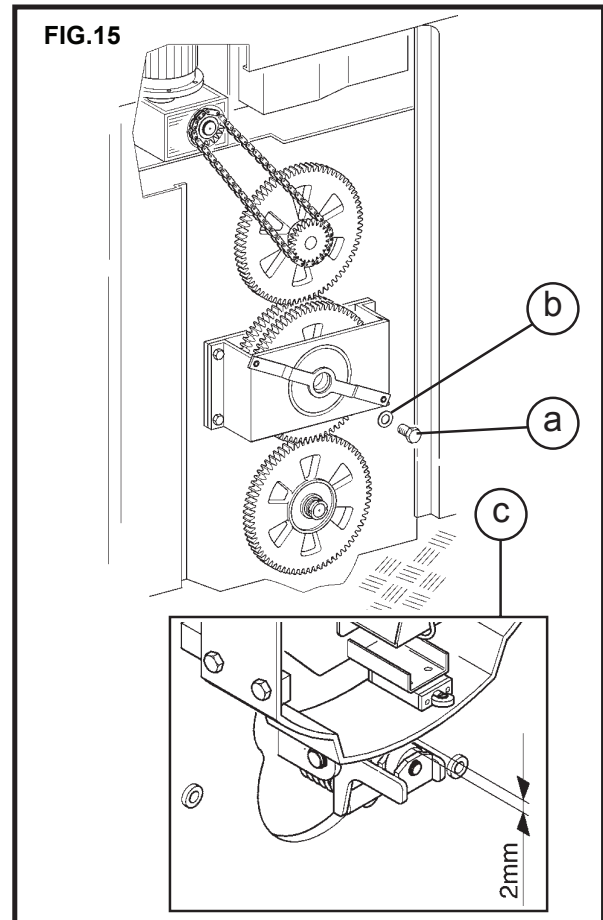
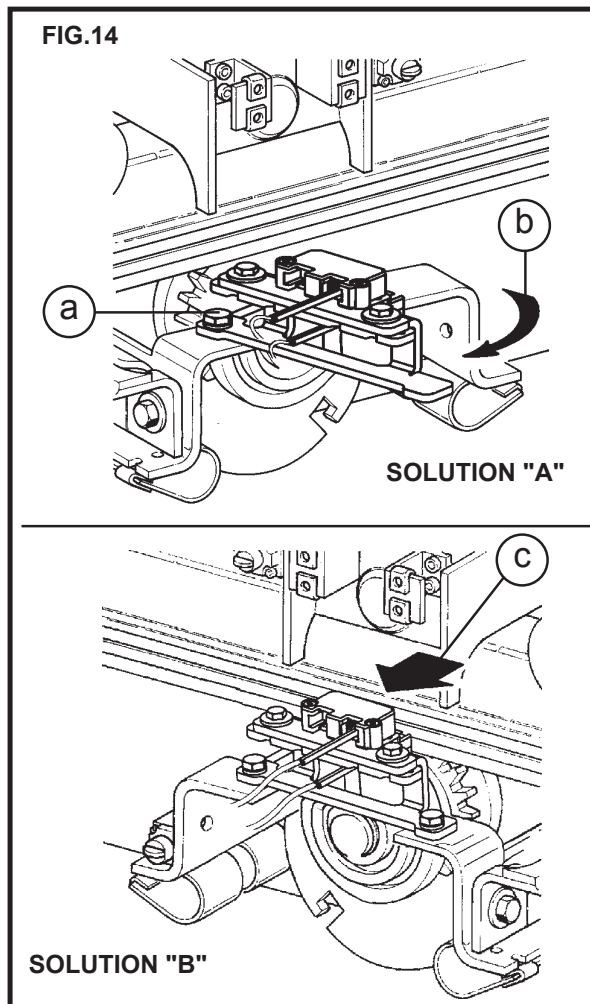
- Screw the M10x30 screw (Fig. 15/a) with washer (Fig. 15/b) onto the clutch plate assembly (if installed) in order to release the upper carriage from the clutch assembly. The gap is correct when the clutch assembly cam is about 2 mm from the carriage (Fig. 15/c).

- Unscrew the brush-holder fixing screw (Fig. 14/a) and turn it in the direction shown by the arrow (Fig. 14/b) or pull the brushes backwards (Fig. 14/c) while fitting the tubular rail into the bottom carriage.

N.B.: During the steps described below, grease the guide shoes and then take special care to position them correctly (Fig. 17/f - 18/e).

- Insert the bottom tubular rail (Fig. 16/a) into the bottom tilting device (Fig. 16/b) remembering to pull back the brushes (Fig. 14/c) if they have not been turned around (Fig. 14/b).

- Insert the bottom tubular rail (Fig. 17/a) into the tilting device (Fig. 17/b), checking that the drive sprocket teeth (Fig. 17/e) engage inside the holes correctly, to the point where the rail is joined to the section installed earlier (Fig. 17/c).



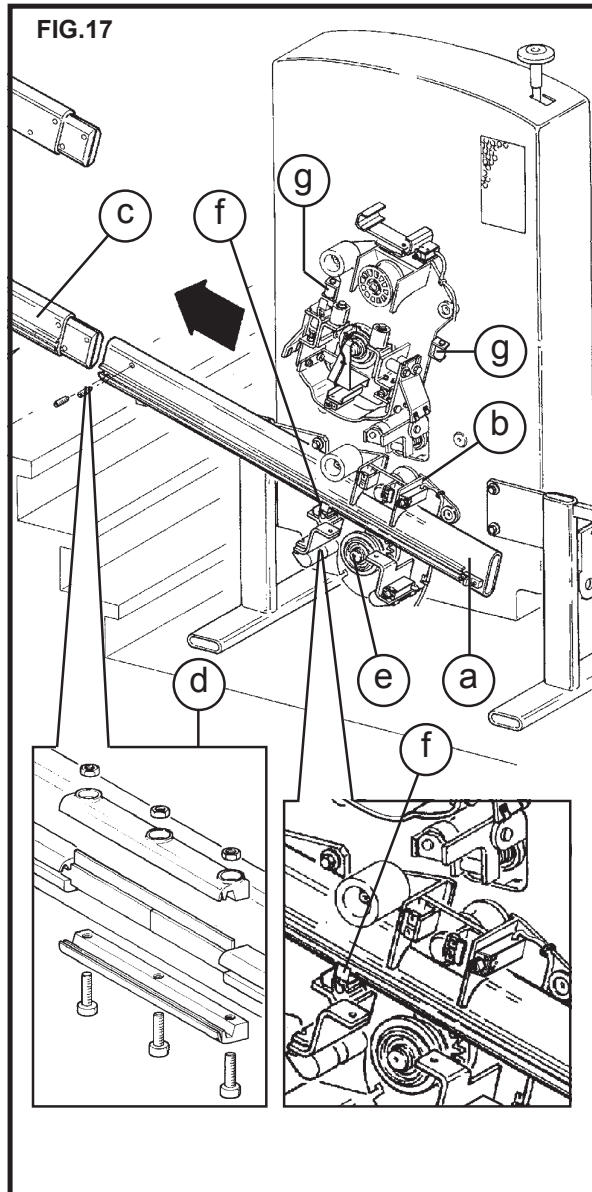
- Make the joint in the busbar (Fig. 17/d) as described earlier.
- Fit the upper rail (Fig. 18/a) into the tilting device (Fig. 18/b) and use the upper handwheel (Fig. 18/c) to insert it until a joint is formed with the rail (Fig. 18/d) installed earlier.

N.B. In the event of excessive play between the “straight rail roller” (Fig. 17/g) and the rail (Fig. 18/g), replace the roller with another of larger diameter, supplied in the package.

- If you turned the brush-holder unit around earlier (Fig. 19) turn it back into the original position.

- Version with busbar

- Press the assembly (Fig. 19/c) by hand in the direction shown by the arrow (Fig. 19/d) until both brushes are retracted by at least 5 mm.
- Keeping the assembly (Fig. 19/c) pressed against



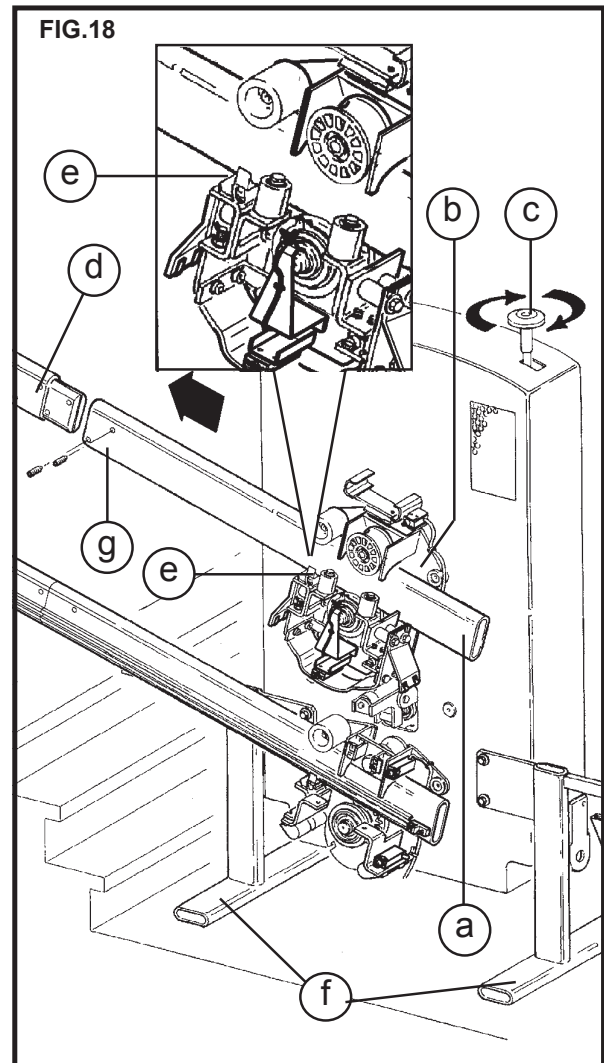
the rail (Fig. 19/e), firmly tighten the screws (Fig. 19/a and 19/f).

- Version without busbar

- Put the brush-holder unit back in its initial position, reassembling the fixing screw.

WARNING: Do not allow the connection wires to project beyond the edge of the brush-holder, to allow the protective casing to close correctly.

- Undo the screw (Fig. 15/a) and its washer (Fig. 15/b) and remove them from the stairlift to re-engage the clutch plate assembly with the tilting device and remove the supporting feet (Fig. 18/f).



When assembly of the rail is complete, for stairlifts with constant gradient of less than 20°, check the gradient of the entire rail (maximum permitted error 1°) before putting the stairlift into operation (see Fig. 27).

5) POSITIONING THE CHARGING STATION (if applicable)

- First position the stairlift where you wish it to stop. This applies both to the top and bottom stops and to the intermediate stops. In the case of the first stop (the lowest) or last stop (the highest), the aluminium profile that holds the recharging contacts (Fig. 20a) should already be fixed to the rail.

- In the case of an intermediate stop, position the stairlift at the stop and use the biadhesive tape provided to fix the contact profile to the lower rail so it is centred with respect to the brushes (see Fig 20). Respect the measurements in (Fig. 21) when positioning the profile. If there is no hole for the power cables to pass through near the intermediate stop, make a 10 mm diameter hole as shown in (Fig 21/a).

- Insert the charging shoes in the contact profile so that the negative pole (black wire) is ALWAYS to the left, and the positive pole (red wire) is to the right (Fig. 22), when looking at the rail from the rear. The charging shoes must have the slanting side (Fig. 22/a) facing so that the contacts on the carriage can easily slide onto them. Slide the charging guide shoes along the profile to centre them perfectly with the brushes.

FIG.20

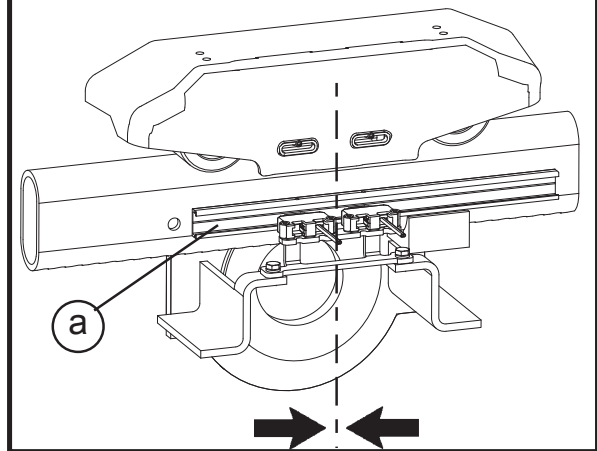


FIG.21

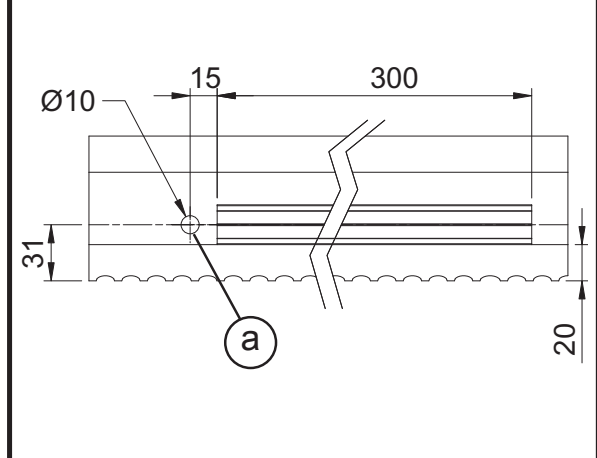
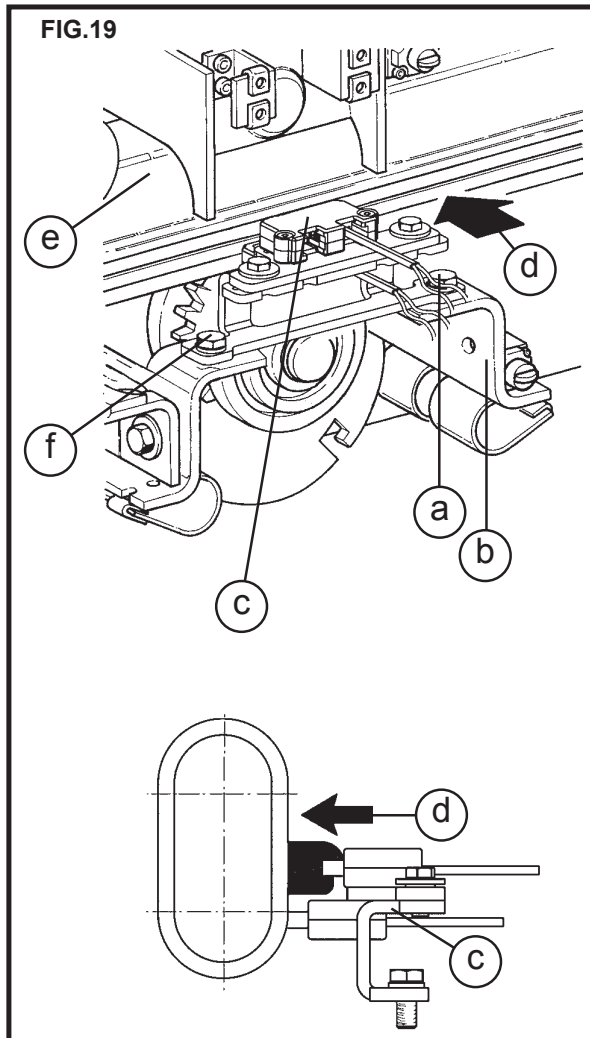
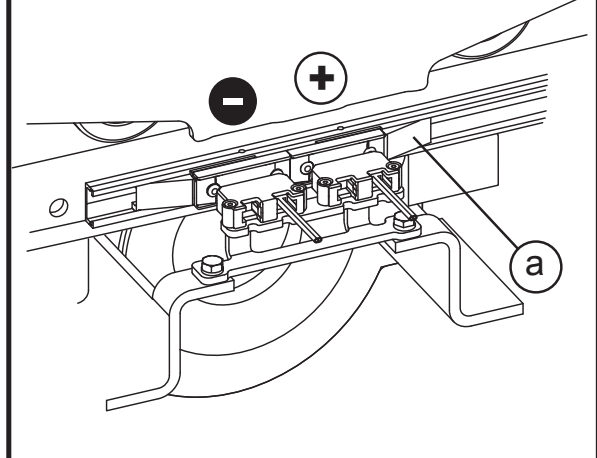


FIG.22



- Move the stairlift to a position where it does not get in the way of the assembly procedure, then pass the cables from the power supply unit through the hole shown Fig. 23/a (female connection) and connect them to their respective contacts (male connection) respecting the polarity. The contacts have additional female connectors to take the power line to the next charging stations (Fig. 23/b).

- Hide the cables in the rail and insert the cable protection plate in the contact profile (Fig. 24/a), cutting the plate to the right size. Perform this operation on both sides of the contacts. Then block the charging shoes in place with the two 2.9x9.5 self-threading screws supplied (Fig. 24/b).

- Return the stairlift to the charging station and check that the brushes' load and alignment are correct and will ensure effective contact (Fig. 25/a).



WARNING: connection of the rail to earth is absolutely forbidden.

FIG.23

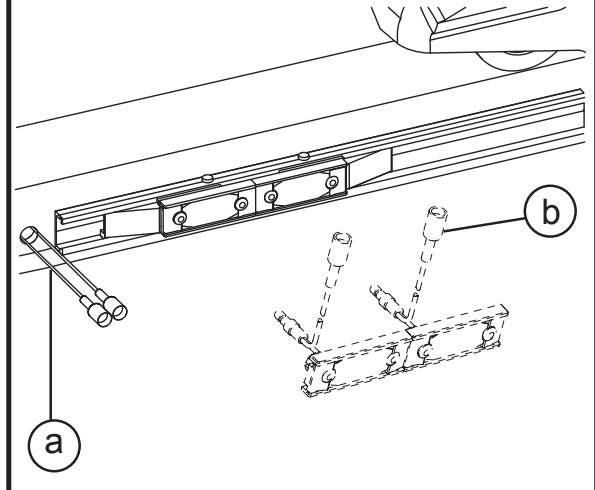


FIG.24

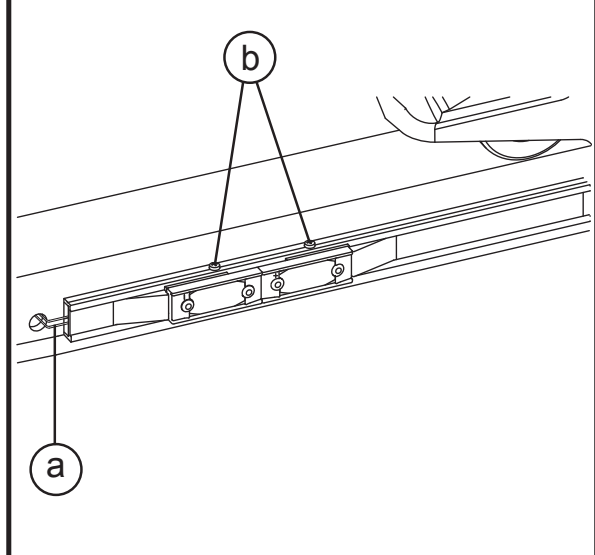
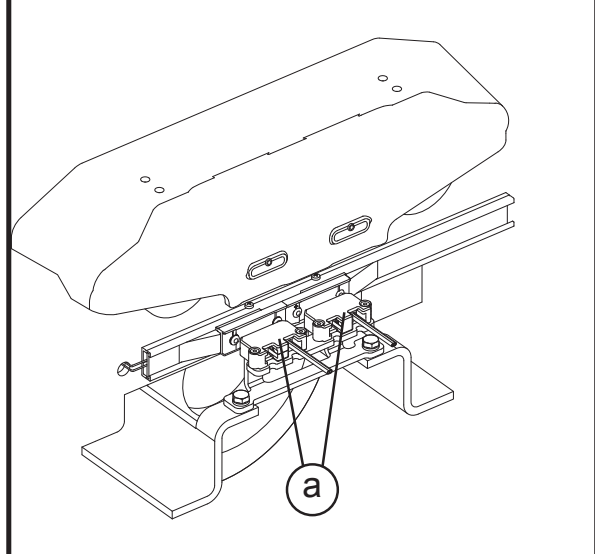


FIG.25



6) CONNECTING THE POWER SUPPLY UNIT

- Connect the cables (positive and negative) to the busbar terminal provided, fixed to the rail (Fig. 27/a-Fig. 27/b).
- If the charge station is installed, connect the cables leading from the station direction to the power supply unit cables.
- Connect the 230 V 50 Hz power supply to the power socket (Fig. 27/c).
- After installation, power up the system by connecting the plug (Fig. 27/d).
- Connect the battery connector on the stairlift (Fig. 28) and turn the on-off key on the casing to ON (Fig. 9/m in use and maintenance manual). Once the stairlift has been switched on, remove the key and keep it with the documentation, the manual operation handwheel and the bar release Allen key.

 **WARNING:** all safety devices are deactivated (the operator is responsible for ensuring safety).

FIG.27

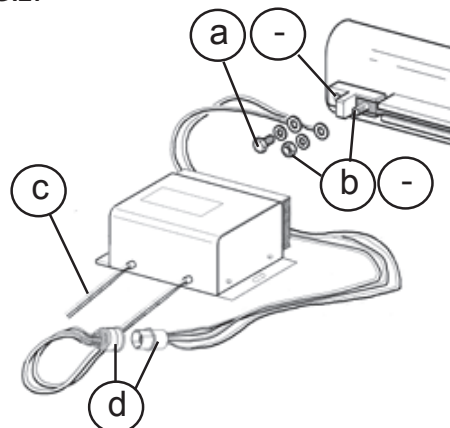
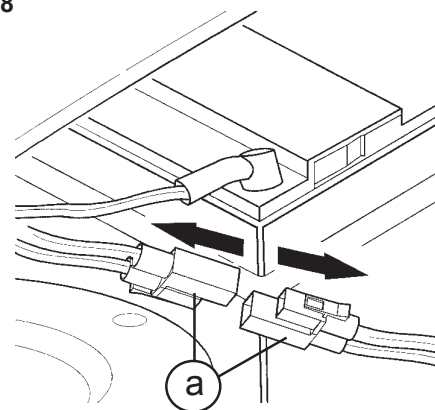


FIG.28

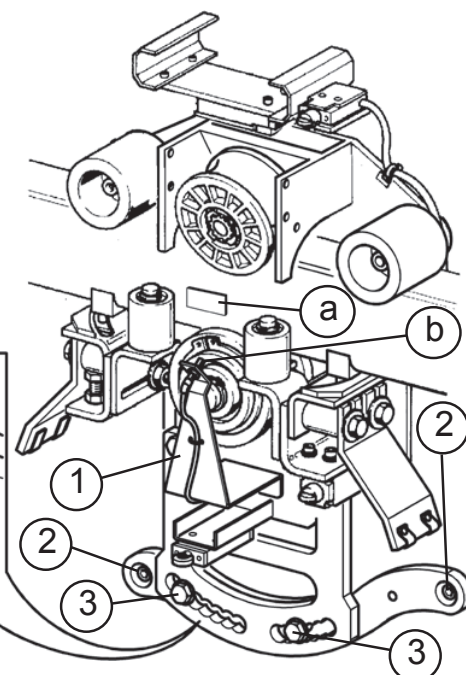
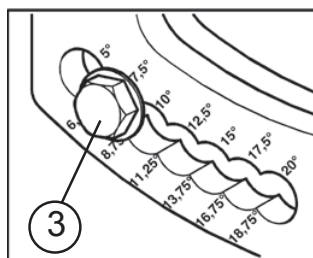


7) CONNECTING THE INSTALLATION ENGINEER'S CONTROL PANEL

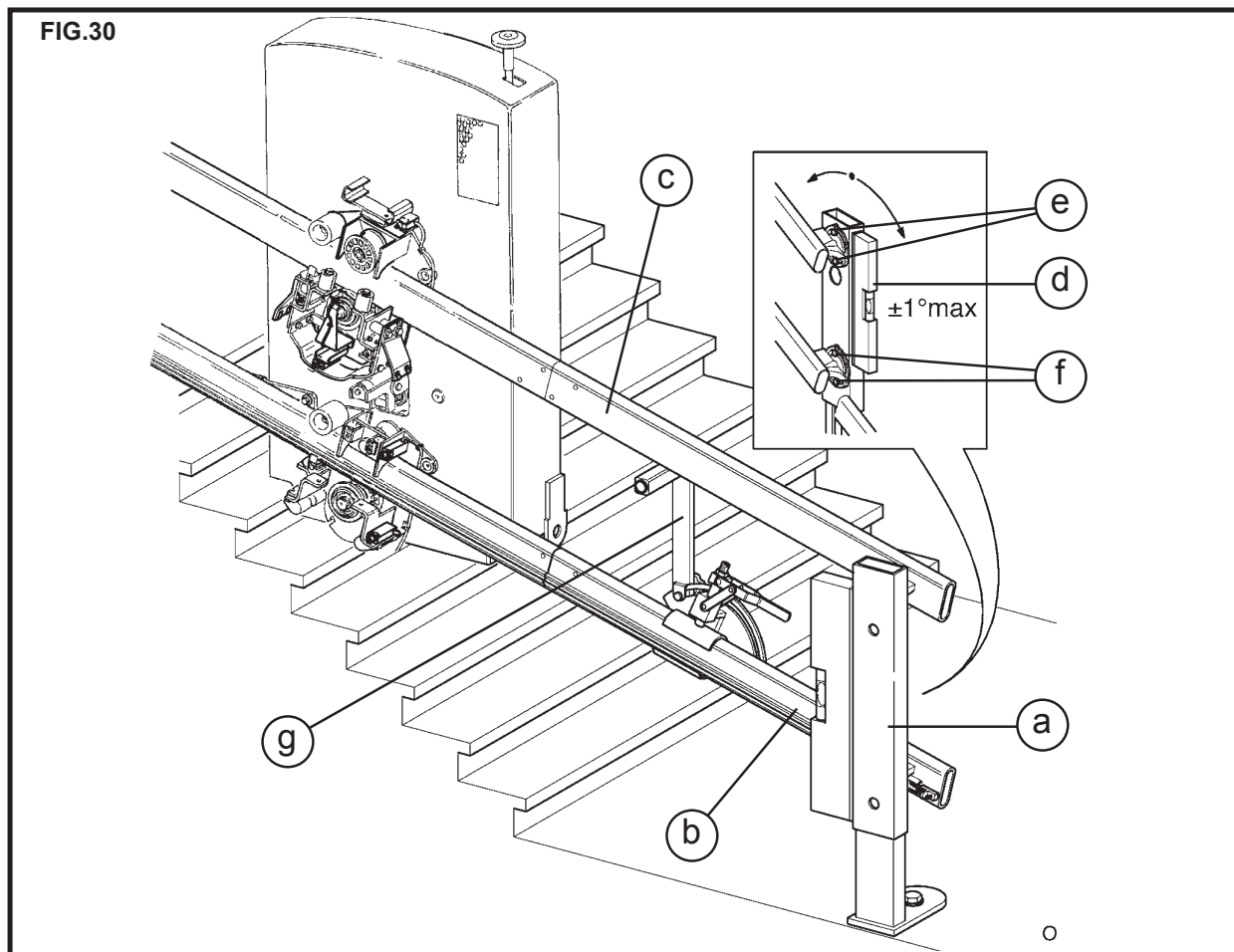
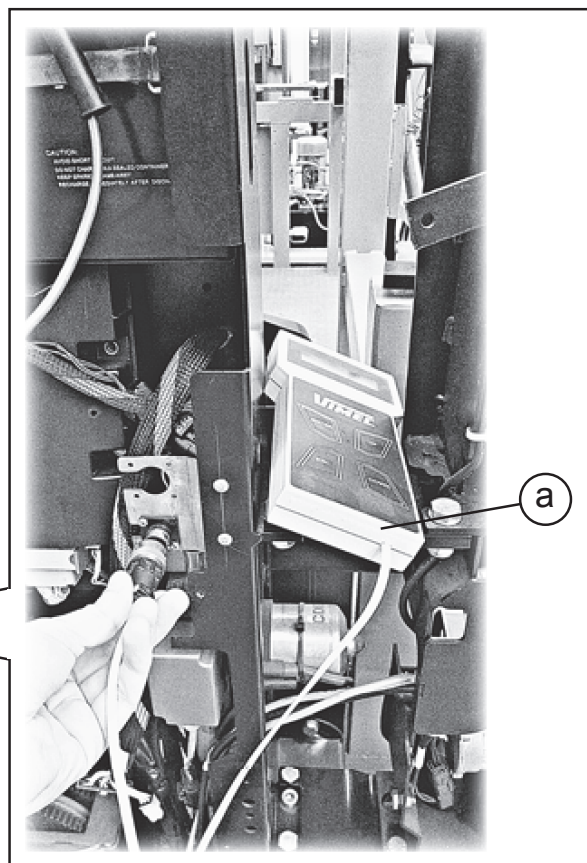
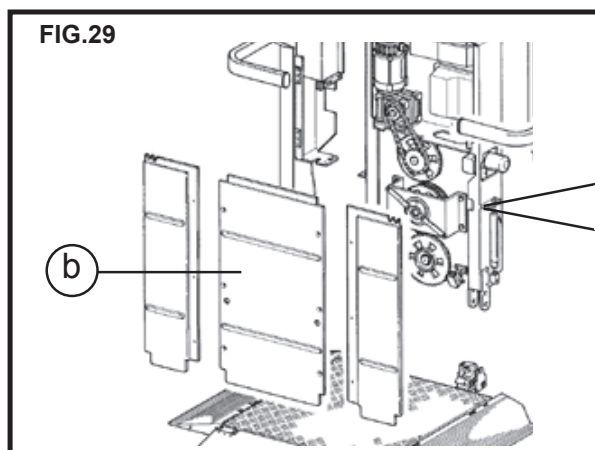
- Disassemble the casing (Fig. 29/b) by unscrewing the fixing screws and connect the console (Fig. 29/a) to the connector provided.
- Access the **"Position"** subroutine.
- Press **"Enter"**.
- Type the **"Password"**.
- From the **"Control from console"** menu.
- Press **"Enter"**.
- **"UP"** to ascend, **"DOWN"** to descend.
- Temporarily fit the magnet to the rail (Fig. 26/a) in line with the home floor recognition sensor (Fig. 26/b). Then press the UP button once to acquire the home floor position and allow the stairlift to move.

FIG.26

POS.	DRIVING TORQUE (daN X m)
1	2,5
2	6,0
3	4,5

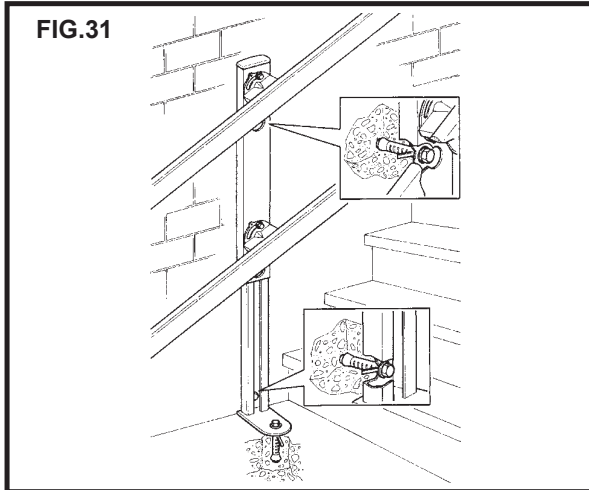


- Use the UP and DOWN controls on the control panel (Fig. 29/a) to bring the structure, complete with carriage, to the chosen floor, in order to continue assembly operations in complete safety.
- Reassemble the casing (Fig. 29/b).
- Fit the spacing gauge (Fig. 30/g) between the rails and install the connection/foot (Fig. 30/a).
- After setting the rail at the correct distance (Fig. 30/b – Fig. 30/c) using the spacing gauge (Fig. 30/g), and after checking that the components are vertical (Fig. 30/a) tighten the screws firmly (Fig. 30/e and Fig. 30/f).



N.B.: Move the stairlift up to the 1st rigid connection and if it is not horizontal, screw down the M10x30 screw (Fig. 15/a) with washer (Fig. 15/b) onto the clutch assembly to release the upper tilting device from the clutch assembly. The gap is correct when the clutch assembly cam is about 2 mm from the carriage (Fig. 15/c).

- Move the stairlift up a short way to allow it to settle back into position.
- Undo the screw (Fig. 15/a) and its washer (Fig. 15/b) to re-engage the clutch plate assembly with the tilting device.



8) FIXING THE CONNECTION FEET

After performing a stairlift trial run to make sure that everything has been assembled correctly, the next step is to fix the mounting feet to the floor and the connections to the wall (where possible, in the latter case).

Depending on the type of foot which appears in the installation drawing, fit the feet firmly as shown by the examples below (Fig. 31-32-33).

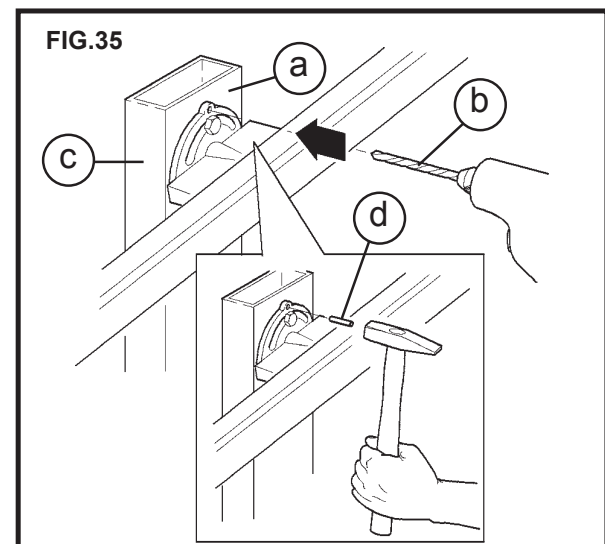
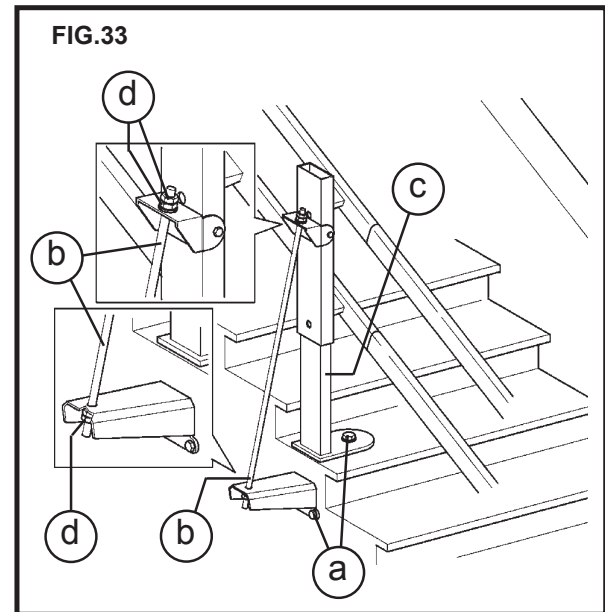
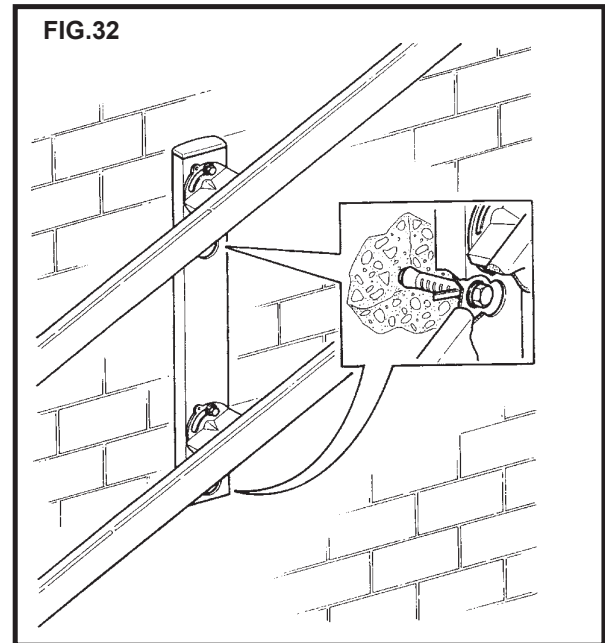
If the feet are fixed to the step (Fig. 34), drill the holes in the steps and fix using the screws (Fig. 34/a) supplied.

After the fixing operation, tighten the screws hard (Fig. 34/b).

If the feet have a hinged support (Fig. 33), drill the holes in the fixing points and fix using the screws (Fig. 33/a) supplied.

Tighten the foot (Fig. 33/c) by fitting the threaded bar into the holes provided (Fig. 33/b) and screwing down the nut and lock-nut (Fig. 33/d) until the tension is correct.

To ensure that the angle of the rail (Fig. 35/a) does not change over time, check again that all parts have been assembled correctly and then drill a hole (Fig. 35/b) in the connecting joint (Fig. 35/c) and fit a locking pin (Fig. 35/d) into the hole.



9) FITTING THE BARS

Fit the bar supports (Fig. 36/b) on the stairlift frame (Fig. 36/a), aligning the locator pins provided (Fig. 36/c).

Fix the bars with the screws supplied (Fig. 36/d).

Then connect the sheaths

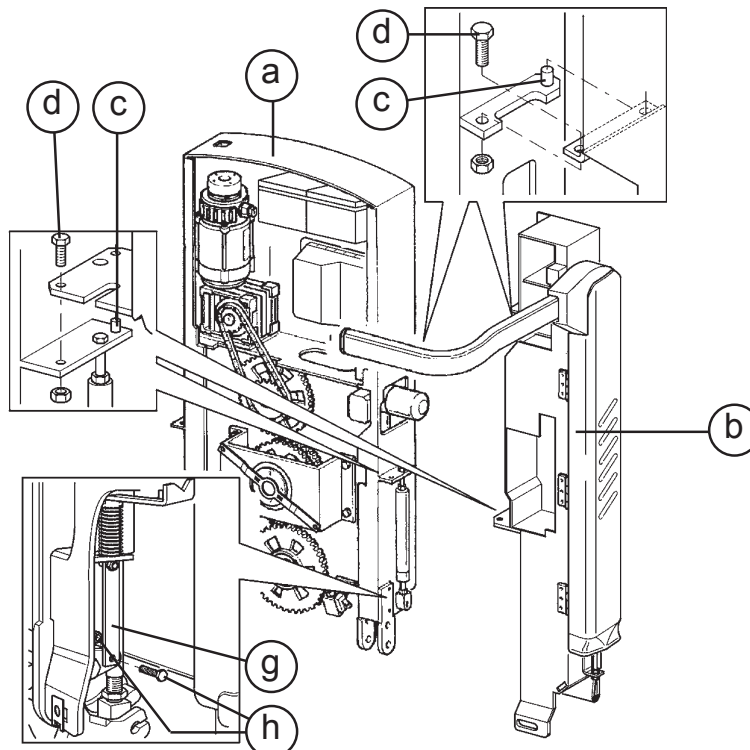
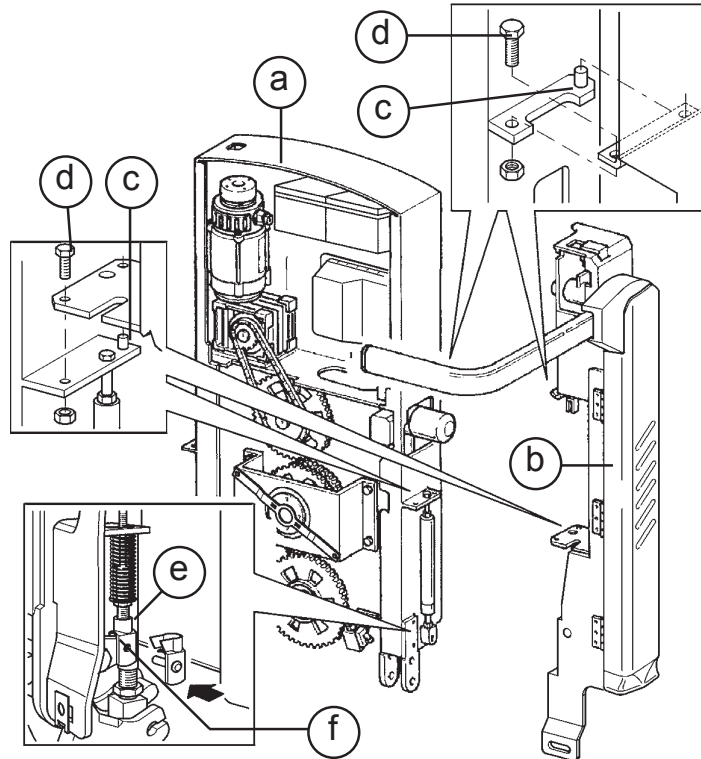
9.1) Independent bars

In the bottom of the bar, connect the wire (Fig. 36/e) to the platform interlock system (Fig. 36/f).

9.2) Retractable bars

In the bottom of the bar, connect the lever (Fig. 36/e) with the screw and the self-locking nut (Fig. 36/h).

FIG.36



7) ASSEMBLING THE PLATFORM WITH DRIVEN FRONT ACCESS (B.I. - B.R.)

On customer request it is possible to have a platform with overturning front side (Fig. 37/a).

Such a platform permits, on the lower floor only, to access/go down perpendicularly to the machine.

7.1) Assembling the platform

a) Remove the top plate from the platform by undoing

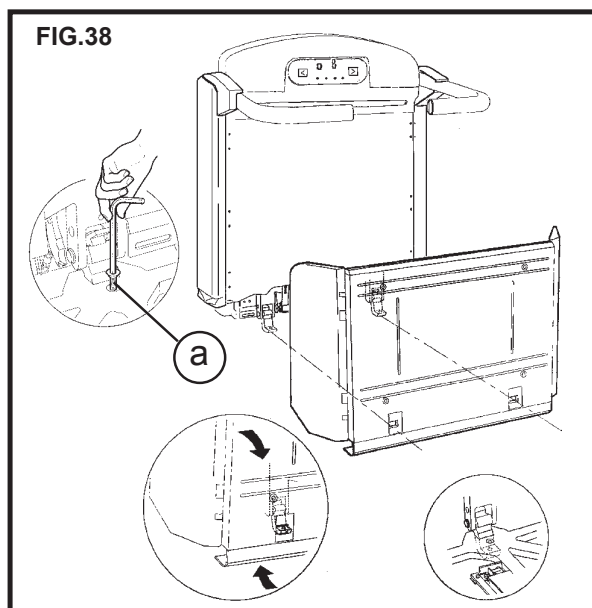
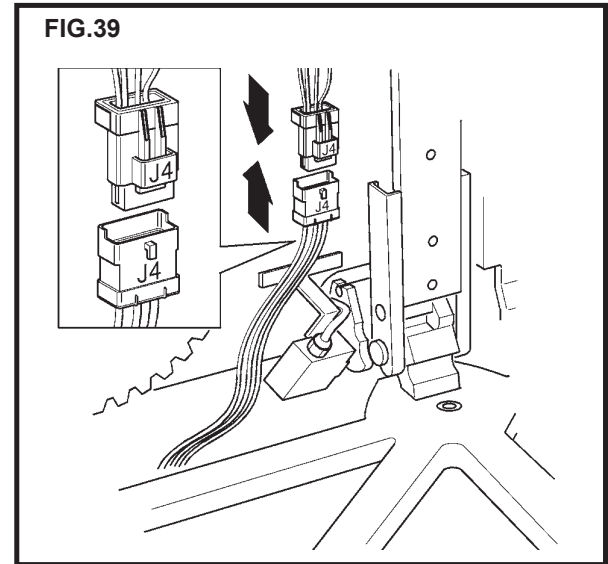
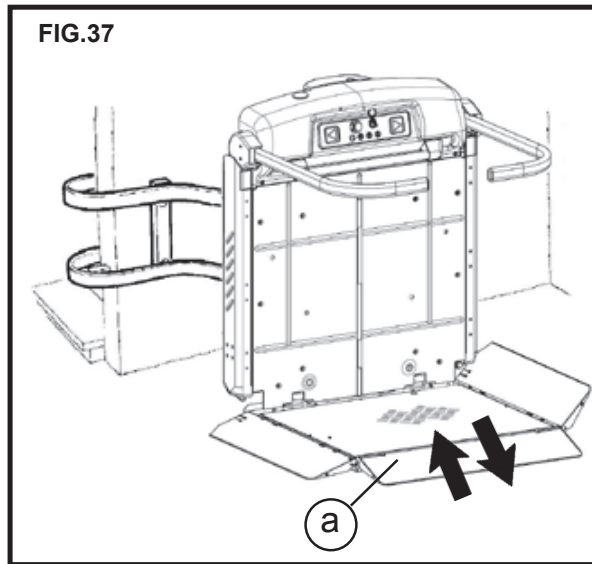
the relative screws.

b) Make sure that the two platform supports, fixed by a wedge and a plastic clamp, are in the assembly position (Fig. 40/a/b).

c) Fit the platform, keeping it vertical and turning it through 90° as shown in (Fig. 38).

d) Fix the platform to the frame using the TSPCE M8 flat-head screws provided (Fig. 38/a).

e) Plug in the connector j4 (Fig. 39).



- Insert the eccentric (Fig. 41/f) with front guard board handling belt (Fig. 41/g) on the special pin (Fig. 41/d) and fix it with a snap ring (Fig. 41/a).
- Fix the cable eye (Fig. 41/e) to the eccentric (Fig.

- 41/f) using the screw, nut and lock-nut, leaving the necessary clearance to allow the rotation of the eye itself.
- Connect the wire (Fig. 41/h) to the side guard board with the screws provided, passing it around the pin (Fig. 41/i).

FIG.40

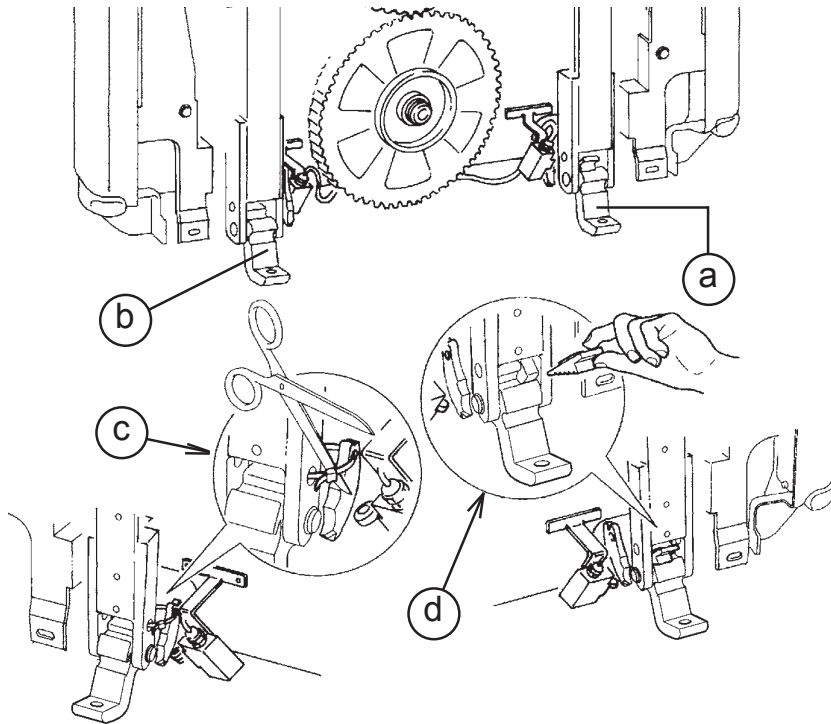
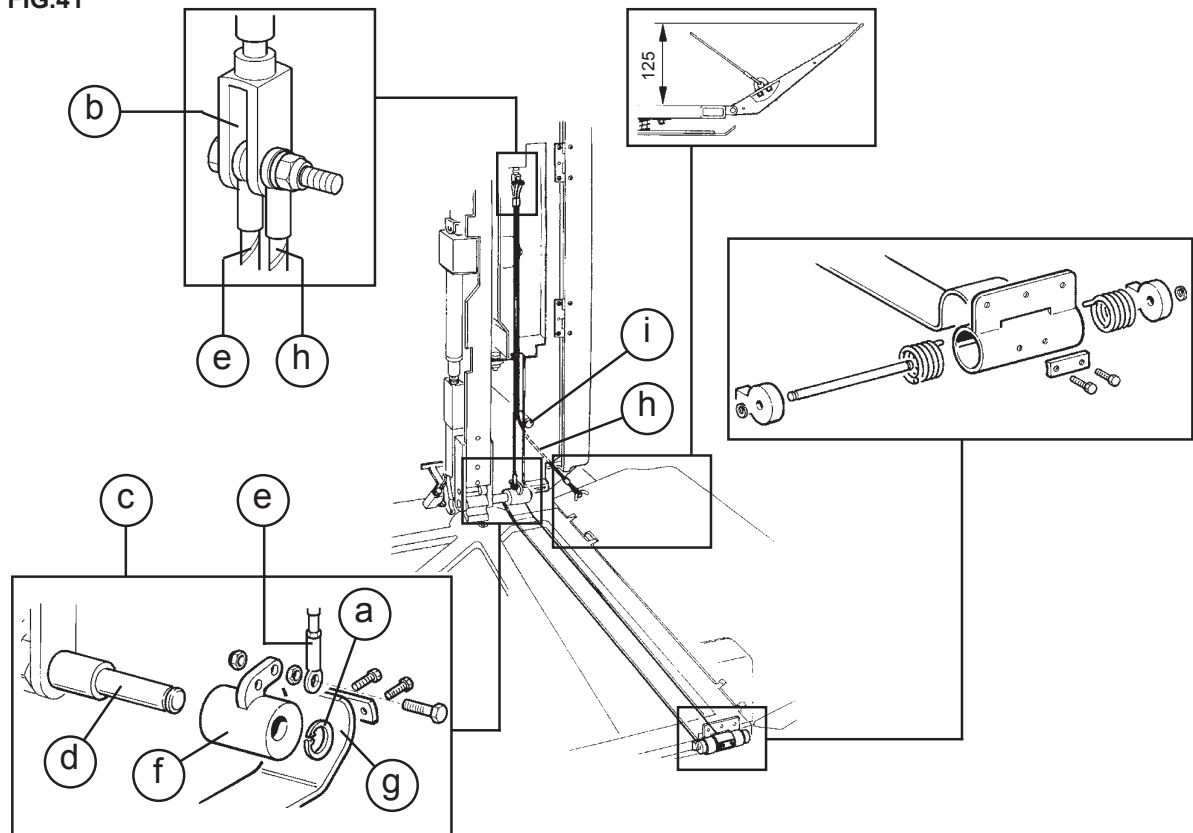


FIG.41



B.R.: Fix the cable (Fig. 42/a) already fitted to the bars on the side bar guard board with the screws provided.

- Fix the cable eye (Fig. 42/b) to the eccentric (Fig. 42/c) using the screw, nut and lock-nut, leaving the necessary clearance to allow the rotation of the eye itself.

- Plug in the connectors J14 - J16 (Fig. 43).

Proceed to check the proper working of the front access guard board:

- Check that the angle between the guard board (in the working position) and the platform is 90° (see Fig. 44).

- Check that the front access guard board microswitch is tripped with a maximum rotation of 30° of the same guard board with respect to the working position, as in Fig. 44.

- If the guards are not opened or closed correctly, adjust to the specified position using the register fork (Fig. 41/b).

g) Close the platform using the cover plate and the fixing screws provided.

h) Remove the wedge and plastic clamp (Fig. 40/c,d) used to hold the platform horizontal during

adjustment from the platform supports.

(i) Tighten the nut and lock-nut with a driving torque of $4 \text{ daN} \pm 0.1$ (Fig. 45/a,b).

FIG.43

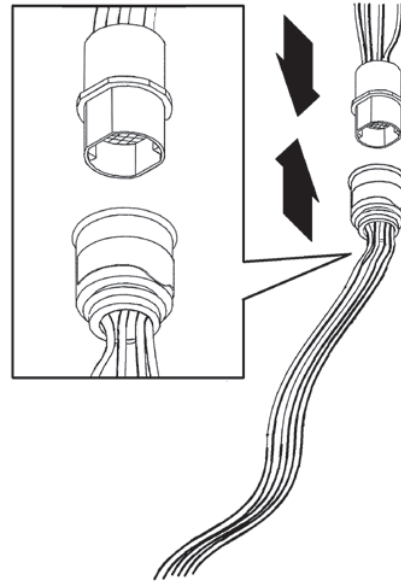


FIG.42

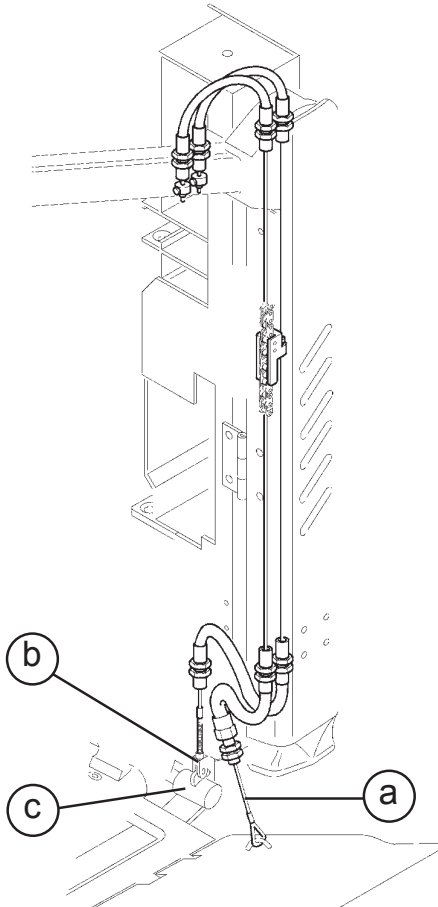


FIG.44

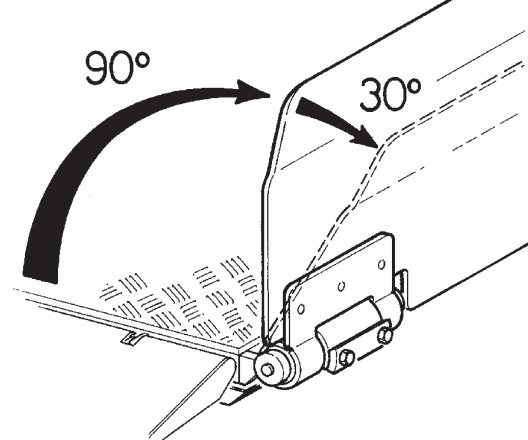
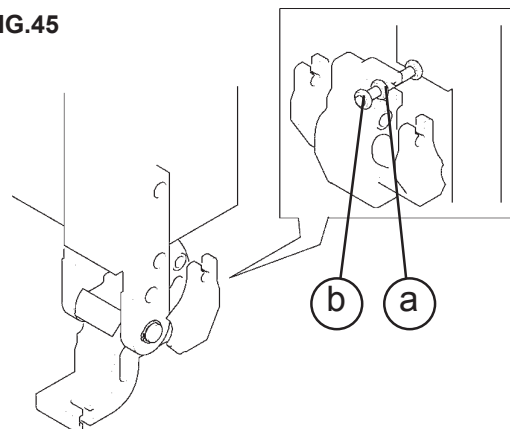


FIG.45



11) ASSEMBLING THE PLATFORM

- a) Remove the top plate from the platform by undoing the screws provided.
- b) Make sure that the two platform supports, fixed by a wedge and a plastic clamp, are in the assembly position (Fig. 46/a,b).

c) Fit the platform, keeping it vertical and turning it through 90° as shown (Fig. 47).

d) Fix the platform to the frame using the TSPCE M8 flat head screws provided (Fig. 47/a).

e) Plug in the connector j4 (Fig. 48).

FIG.46

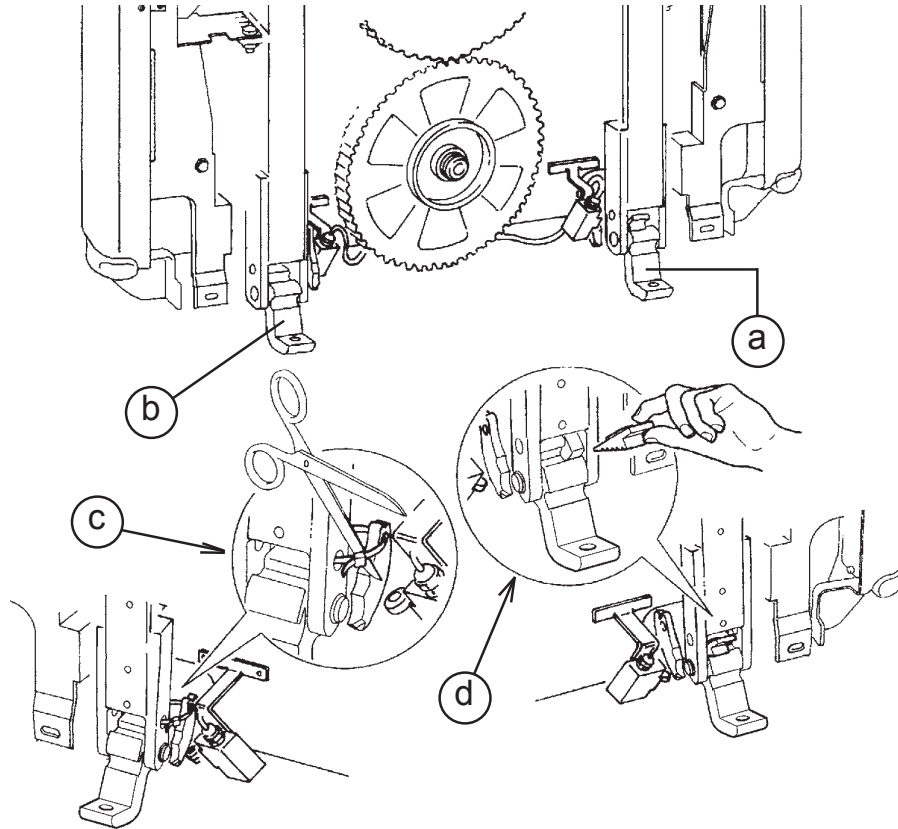


FIG.47

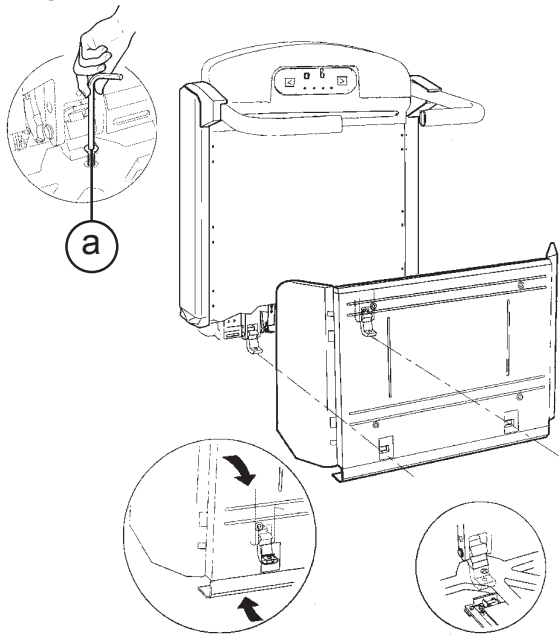
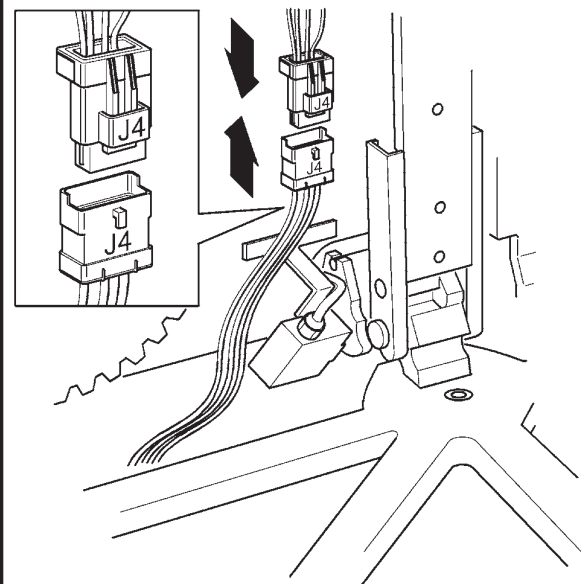


FIG.48



f) Connect the wires (Fig. 49/c) to the side guard boards, passing them around the pin (Fig. 49/a).
If the guards are not opened or closed correctly, adjust to the specified position using the register fork (Fig. 49/b).

g) Close the platform using the cover plate and the fixing screws provided.

h) Remove the wedge and plastic clamp (Fig. 46/c,d) used to keep the platform horizontal during adjustment from the platform supports.

i) Tighten the nut and lock-nut with a driving torque of $4 \text{ daN} \pm 0.1$ (Fig. 51/a,b).

l) Plug in the connectors J14 - J16 (Fig. 50).

CLINOMETER RESET

The 1250x800 and 1050x900 standard platforms, and

other platforms upon customer's request, are equipped with a clinometer to check any footboard overloads (Fig. 52/a).

Once the platform is completely installed, it must

FIG.51

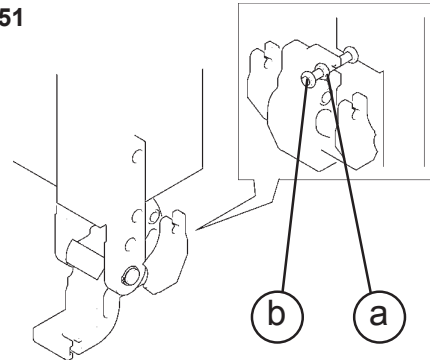


FIG.49

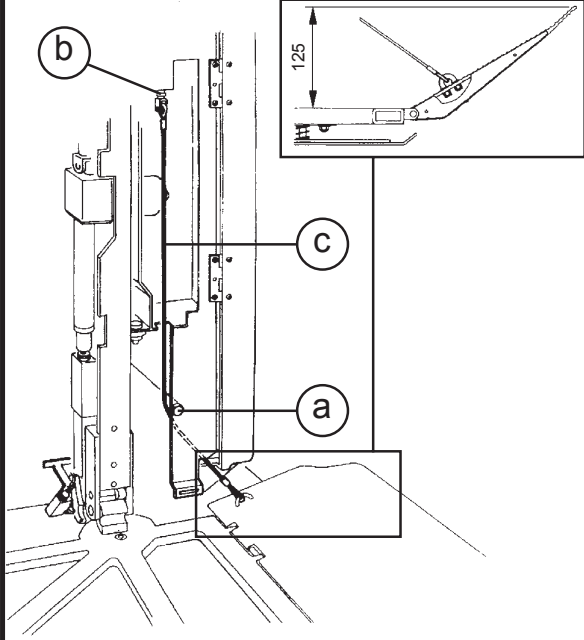


FIG.52

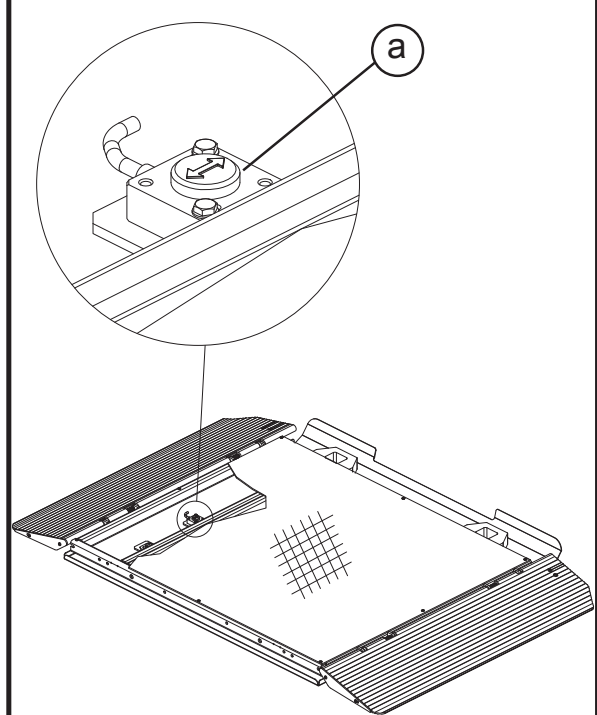


FIG.50

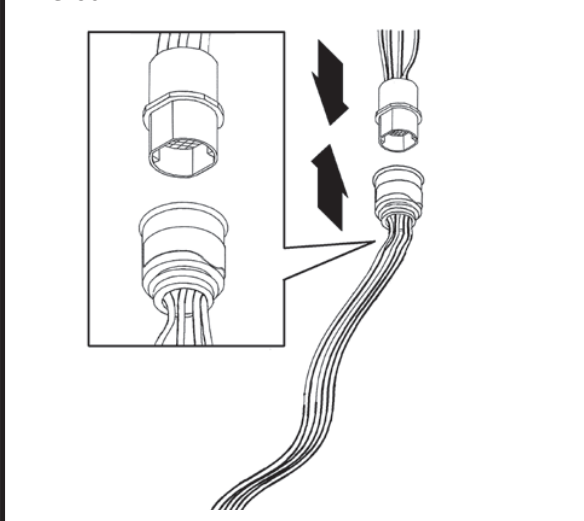
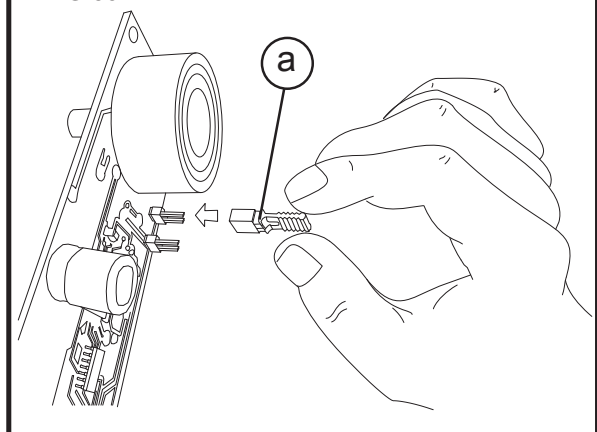


FIG.53



be fully open in work mode.

To remove any possible clearances, a load of around 75-100 kg must be applied to the platform (it is sufficient that an installer gets onto the footboard to remove such clearance).

Now, reset the clinometer by making a jumper on the rear of the card (Fig. 53/a); the sound of the card indicates that the setting is in progress.

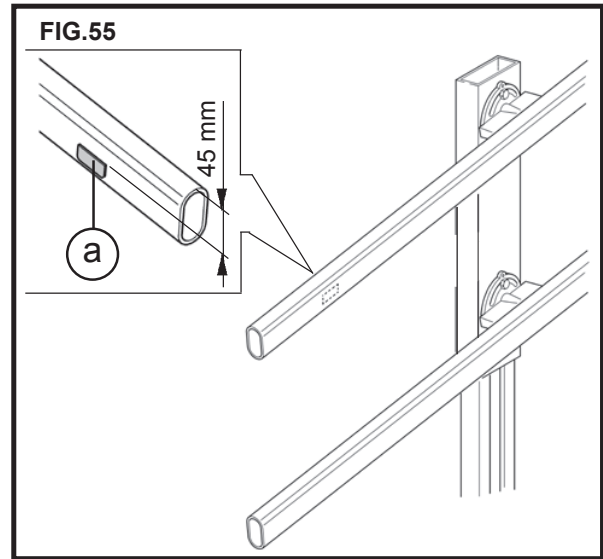
Press the "bell" push-button.

Remove the jumper.

The buzzer will indicate when the reset is completed.

12) PREPARING THE STAIRLIFT FOR SETUP

Glue the magnet (Fig. 55/a) supplied to the bottom end of the top rail as shown in Fig. 55.



13) SETTING UP THE STAIRLIFT

Power up the stairlift by connecting the connector (Fig. 28/d).

The display lights up, and the name "VIMEC V65" appears:

- Press **"enter"**.
- Press the  arrow to scroll through the menu to the **"position"** option.
- Press **"enter"**.
- Press the  arrow to scroll through the subroutine to the **"deceleration speed"** option.
- Using the button on the on-board control panel, bring the stairlift to the centre of the first bend.
- Press **"enter"** (to confirm).

This operation has to be repeated for all the bends in the system.

- When complete, press **"esc"** and press the  arrow to access the **"floor data"** field in the **"position"** subroutine.
- Press **"enter"**.
- Use the down button of the on-board control panel to locate at the height of the 1st intermediate stop (if there are no intermediate stops, move on to the **"top floor position"** section).
- Press **"enter"** on the console; the letter **"A"** starts to flash. Press **"enter"** again and the letter **"E"** starts to flash. Press **"UP"** or **"DOWN"**, and the letter **"L"** starts to flash. Press **"enter"**; the letter **"L"** stops flashing and the floor position has been acquired.
- Repeat the operation for all the other intermediate floors.
- To set the top floor position, simply access the **"top floor position"** menu and use the manual controls to move to the top floor. Press **"enter"** 3 times to fix the position corresponding to the top floor.
- Press **"esc"** to exit the subroutine.
- Press **"esc"** again to return to the main menu.

14) CHECKS ON INSTALLATION

- Check that all the stairlift's microswitches are correctly positioned and functioning correctly, with reference to the electrical wiring diagrams provided.
- Also check that all the controls are operating correctly.

a) Safety devices

Make sure that on contact with an obstacle the anti-shearing sensors stop the stairlift, and the anti-collision sensors stop the stairlift and allow it to be restarted in the opposite direction.

Check that the limit switches stop the stairlift in the required positions at the floors.

b) Electromagnetic brake

The electromagnetic brake on the motor must stop the stairlift when fully loaded before the over-run device is tripped. If necessary, replace the whole brake unit.

c) Drive mechanics

Check that the teeth of the drive sprockets and the nylon wheels on which the stairlift runs are not worn or damaged. There must be no grooves or flattening on the wheels. Check the chain for wear.

d) Safety gear

Check that the hook device is free to operate without friction or excessive clearances and that it trips the safety microswitch correctly.

To check operation of the safety gear, proceed as follows:

- Move the stairlift 1-2 metres from the floor.
- Disconnect the power supply by turning the master switch to OFF.
- Remove the protective panel (Fig. 1/d).
- Press the safety gear hook with a plastic/wooden rod.



WARNING: Keep well away from all unprotected moving parts.

- Restore the power supply and press the down button until the hook engages. The stairlift will stop when the safety microswitch is pressed by the hook.
- Reset the safety gear by moving the stairlift upward in manual mode.

e) Stability of the rail

Check all the fixing screws of the connections to the mounts and any expansion plugs present.

f) General checks

Check all moving parts, the guards, labels and signs.

Check the batteries and warning lights of both power supply units.

15) ADJUSTING THE BEND ROLLERS

Working on the bend with the lowest gradient (Fig. 56/a) set the bend rollers in contact with the rail (Fig. 56/b).

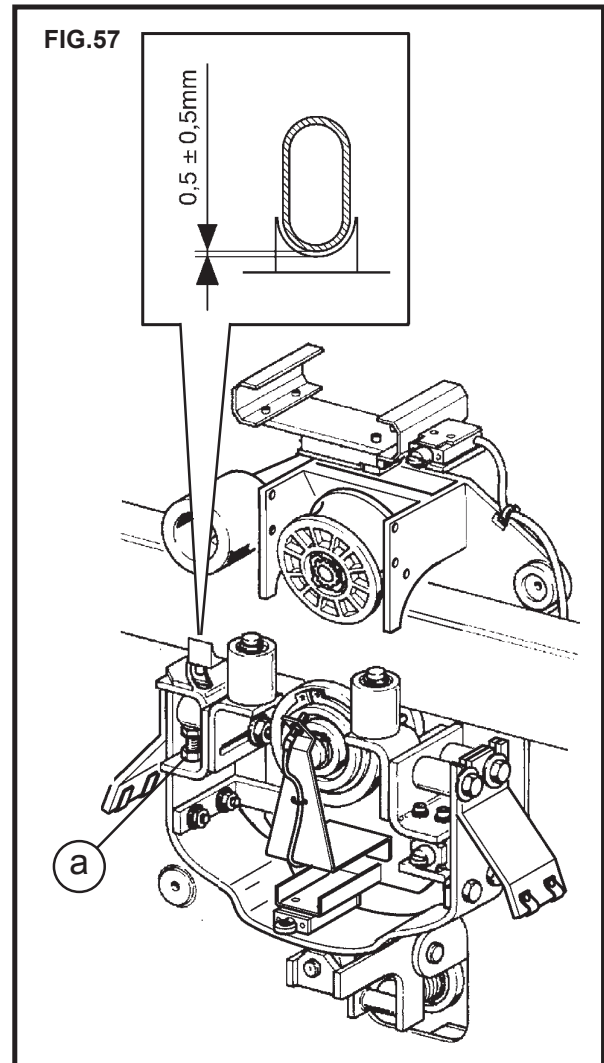
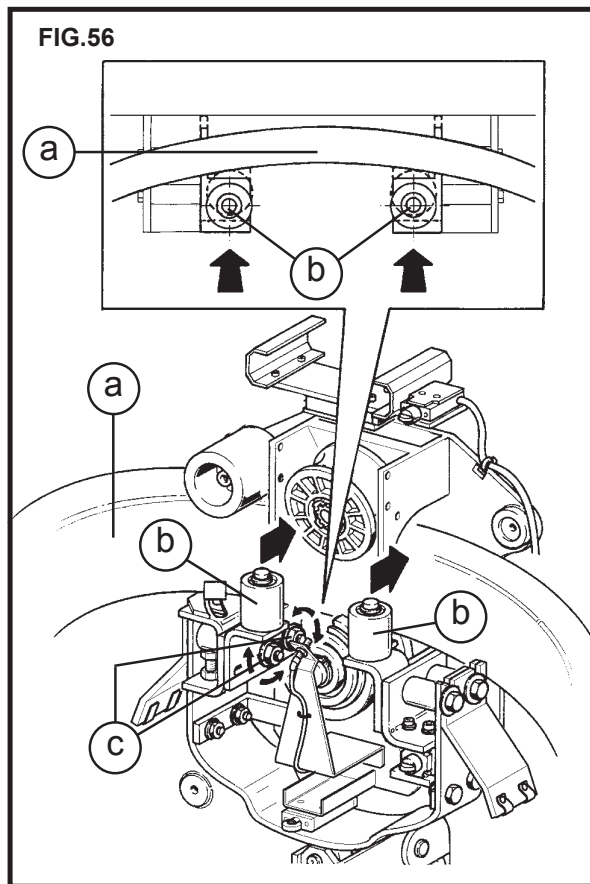
After adjustment, tighten the roller fixing screws (Fig. 56/c) to a torque of 2 daNm.

This adjustment will be maintained for the other bends.

Check that the stairlift travels smoothly, with no bumps or vibrations on the bends.

16) ADJUSTING THE GUIDE SHOE SUPPORTS

Use the screw (Fig. 57/a) to adjust the guide shoe supports to obtain a gap of 0.5 ± 0.5 mm between the guide shoe and rail (see Fig. 57).



17) FITTING THE OVER-RUN DEVICE CAMS

- Set the stairlift in the stop position (Fig. 58/a - 59/a) and mark the position of the stairlift's centre-line on the rails (Fig. 58/b - 59/b).

- Move the stairlift.

- Fix the cam (Fig. 58/e - 59/e), on the rail 50 mm from the stairlift's centre-line marked earlier.

- Tighten all screws when done.

FIG. 58

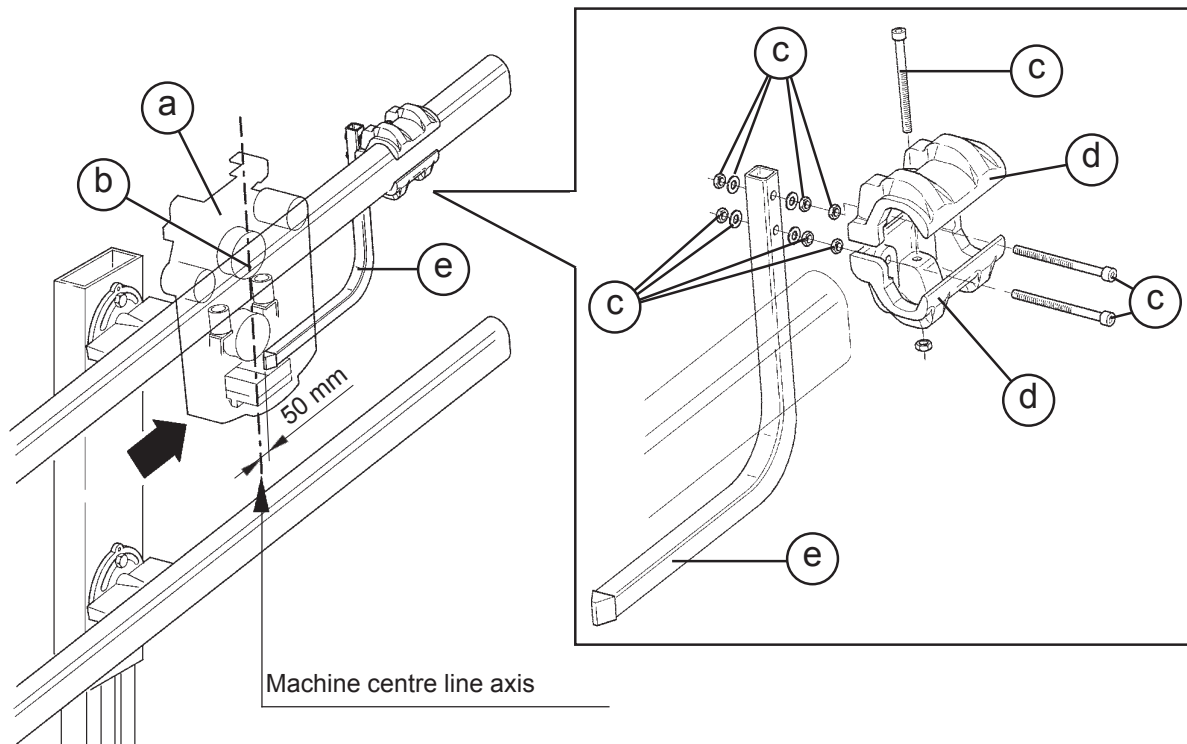
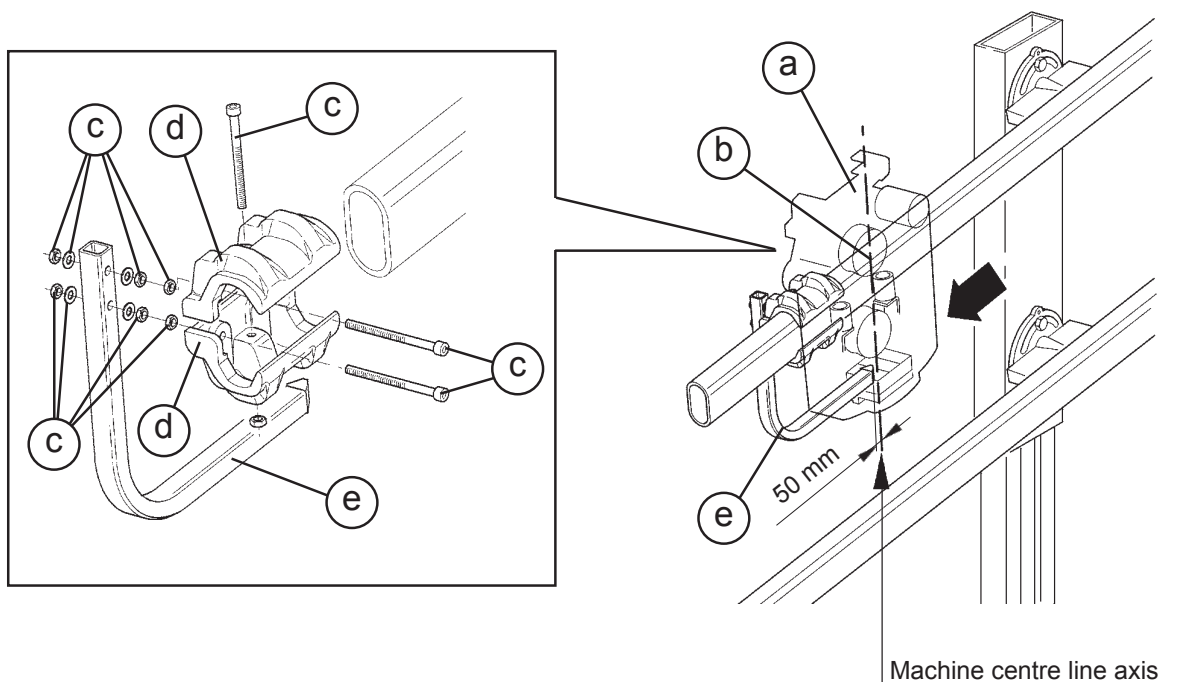


FIG. 59



18) CHECKING THE POSITION OF THE OVER-RUN DEVICE CAM AND PLATES

Before final testing of the stairlift, check that the limit stop (Fig. 60/a-61/a) is correctly positioned.

This position is correct if the dimensions are as shown in the drawings in Fig. 60 and 61.

19) STRETCHING THE CHAIN

Stretch the chain (Fig. 62/b) by undoing the nuts (Fig. 62/e) and screwing down the hexagon (Fig. 62/a).

Take care not to apply excessive tension, as this will mean too much strain on the drive shafts (Fig. 62/c and Fig. 62/d). Tighten the nuts (Fig. 62/e) firmly when done.

20) FINAL TESTING

Supply power to the system and perform the following functional checks:

- Load test:

- Load the stairlift with 1.1 times the rated load stated on the nameplate.

- Send the stairlift up and down several times, checking its stability on the rail.

- Final testing for stairlifts with sections of rail having gradient of less than 20°:

- Move the stairlift to the area with gradient of more than 25° and check that the cam drive roller is 0.5÷1.5 mm from the cam (see Fig. 64).

- If the roller has to be moved towards or away from the cam, remove the bracket (Fig. 67/a) and turn the clutch wheel hub (Fig. 67/b) using the spanner provided (Fig. 67/c). After adjustment (30 daN/m) fit the bracket (Fig. 65/a) and fix the two screws (Fig. 67/d) with 243 loctite.

- Then move the stairlift to the area with gradient of less than 20°, and place a weight of 250 kg on it with its centre of gravity 150 mm from the edge (see Fig. 63).

- Check that the stairlift does not tilt by more than 2°.

- Preliminary checks

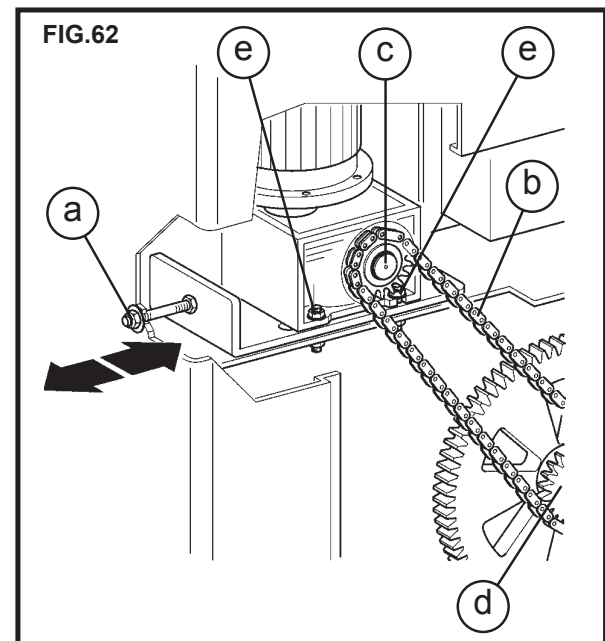
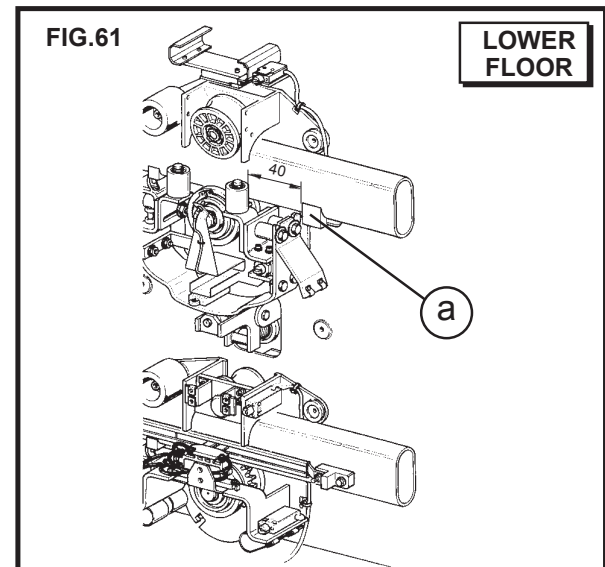
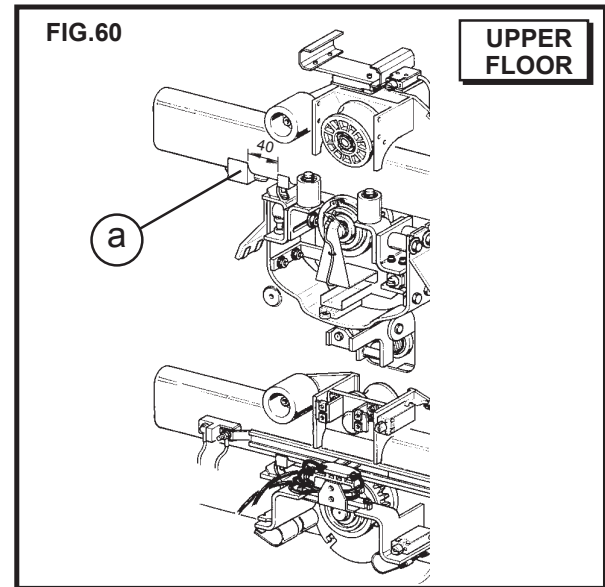
Perform the checks described in point 6.1 on page 8 of the Use and Maintenance Manual.

- Safety gear test

Test the safety gear as described in Section 10.1, point "d". (This test must be carried out with no load on the stairlift).

- Checking the interlocking of the platform with independent or retractable arms (manual platform)

- Check that as long as the down side bar is in the rest position the platform remains locked, whether in the working or the rest position.



- Check on fixing of the rail

- Check that the rail is positioned in accordance with the dimensions stated in the installation drawing (or system layout) supplied with the stairlift.

- Check that all the fixing screws of the connections to the mounts or any expansion plugs are stable and firmly tightened.

21) FITTING THE CASING (Fig. 65-66)

Fit the upper casing (Fig. 66/a) on the stairlift, connecting the connector (Fig. 66/b) and using the screws provided.

Fit all the stairlift casing sections as shown in the overall drawing supplied with the stairlift, taking care not to crush any electrical wires or moving parts.

FIG.65

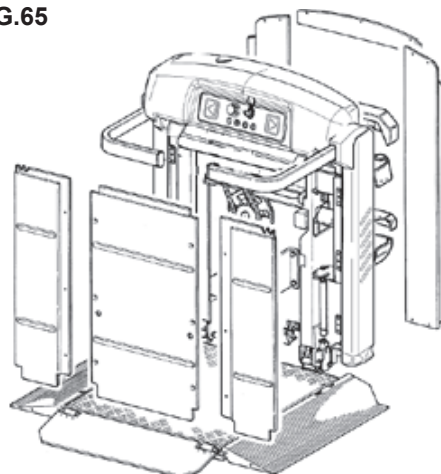


FIG.66

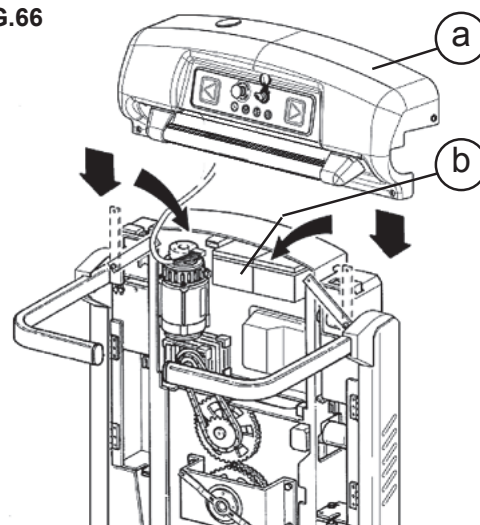


FIG.63

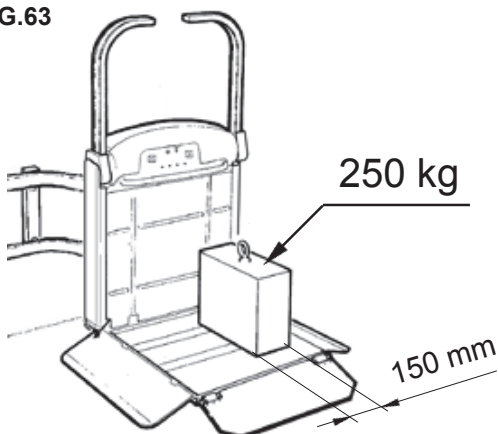


FIG.64

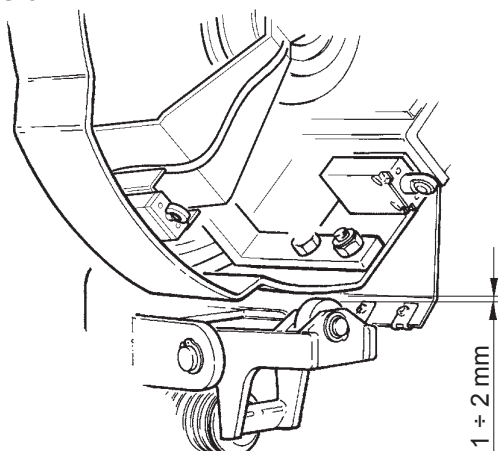
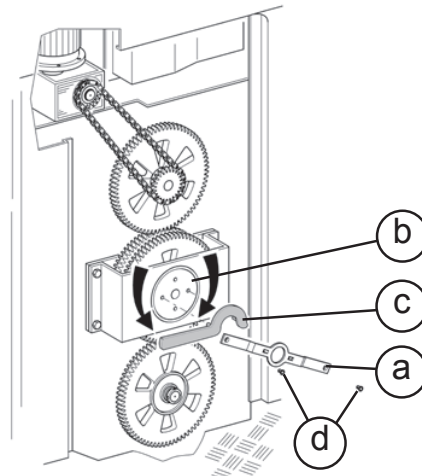
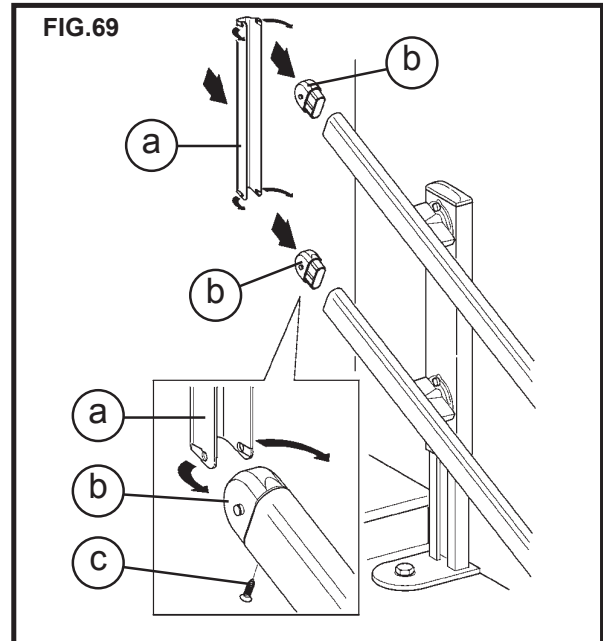
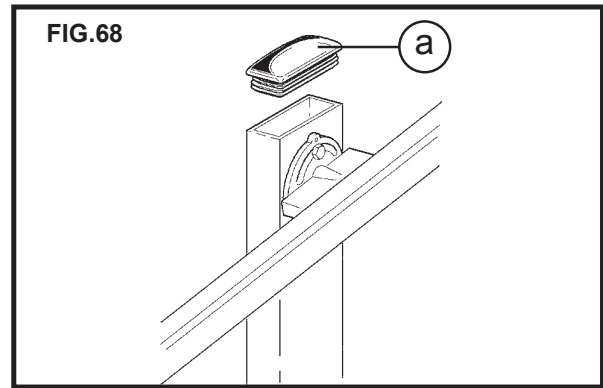


FIG.67



22) FITTING CAPS AND END COVERS

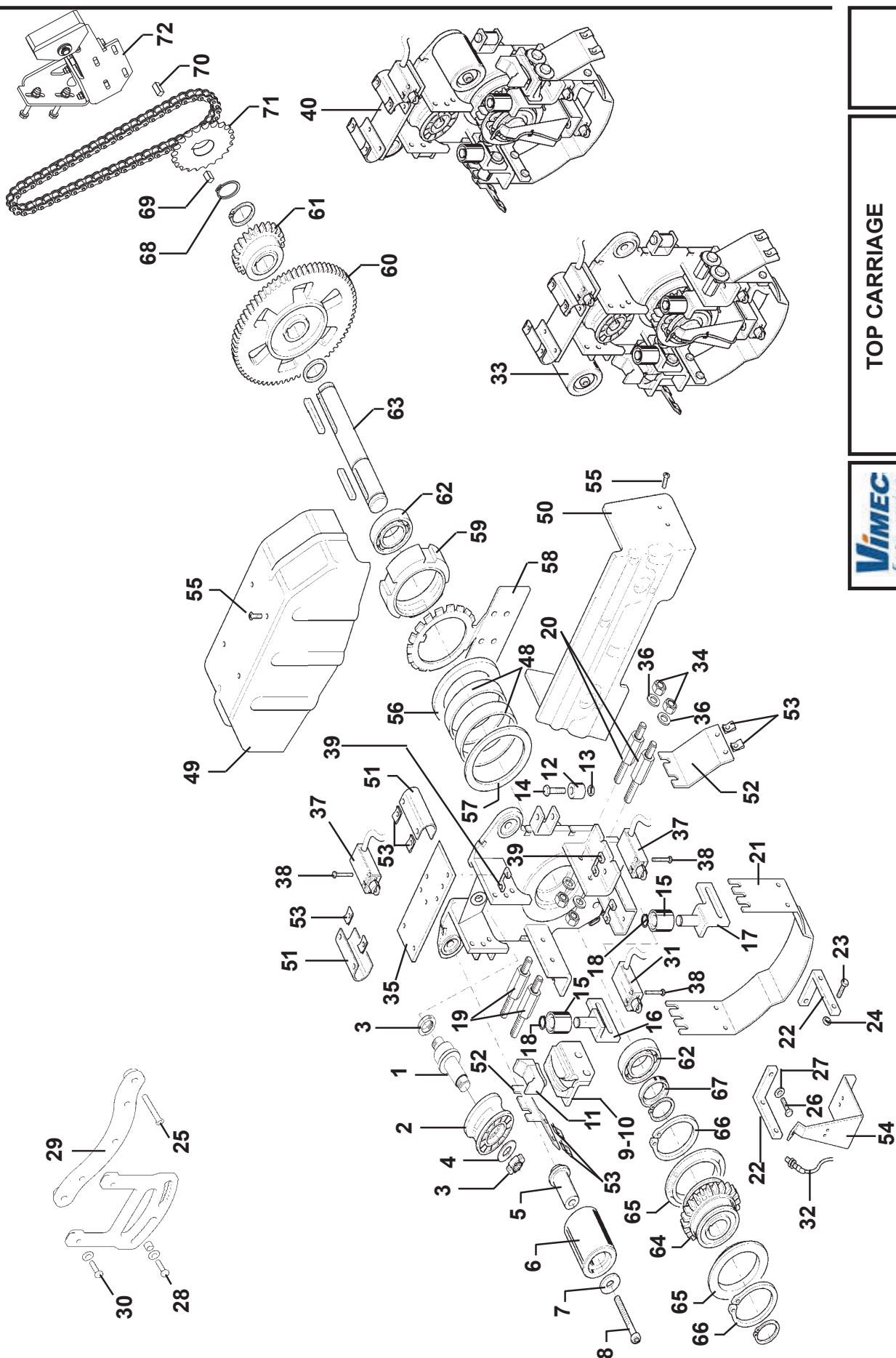
- Press the caps (Fig. 68/a) supplied onto each rail connection.
- Fit the connecting strips (Fig. 69/a) onto the top and bottom ends of the rails. To do this, simply fit the end caps (Fig. 69/b) onto the rails and fix using the screws (Fig. 69/c) supplied.
- To complete, snap on the connecting strip (Fig. 69/a) as shown in Fig. 69.



PARTS CATALOGUE

CATALOGUE INDEX

1. Top carriage	Page 44
2. Bottom carriage	Page 47
3. Frame	Page 50
4. Platform	Page 58 Page 62
5. Safety bars	Page 66
6. Retractable safety bars	Page 69
7. Guards	Page 72
8. Connectors	Page 75
9. Rail	Page 76
10. Control circuit board	Page 81
11. Platform/guard board drive cables	Page 82
12. V65 rail joints	Page 84
13. Control boards	Page 86



TOP CARRIAGE

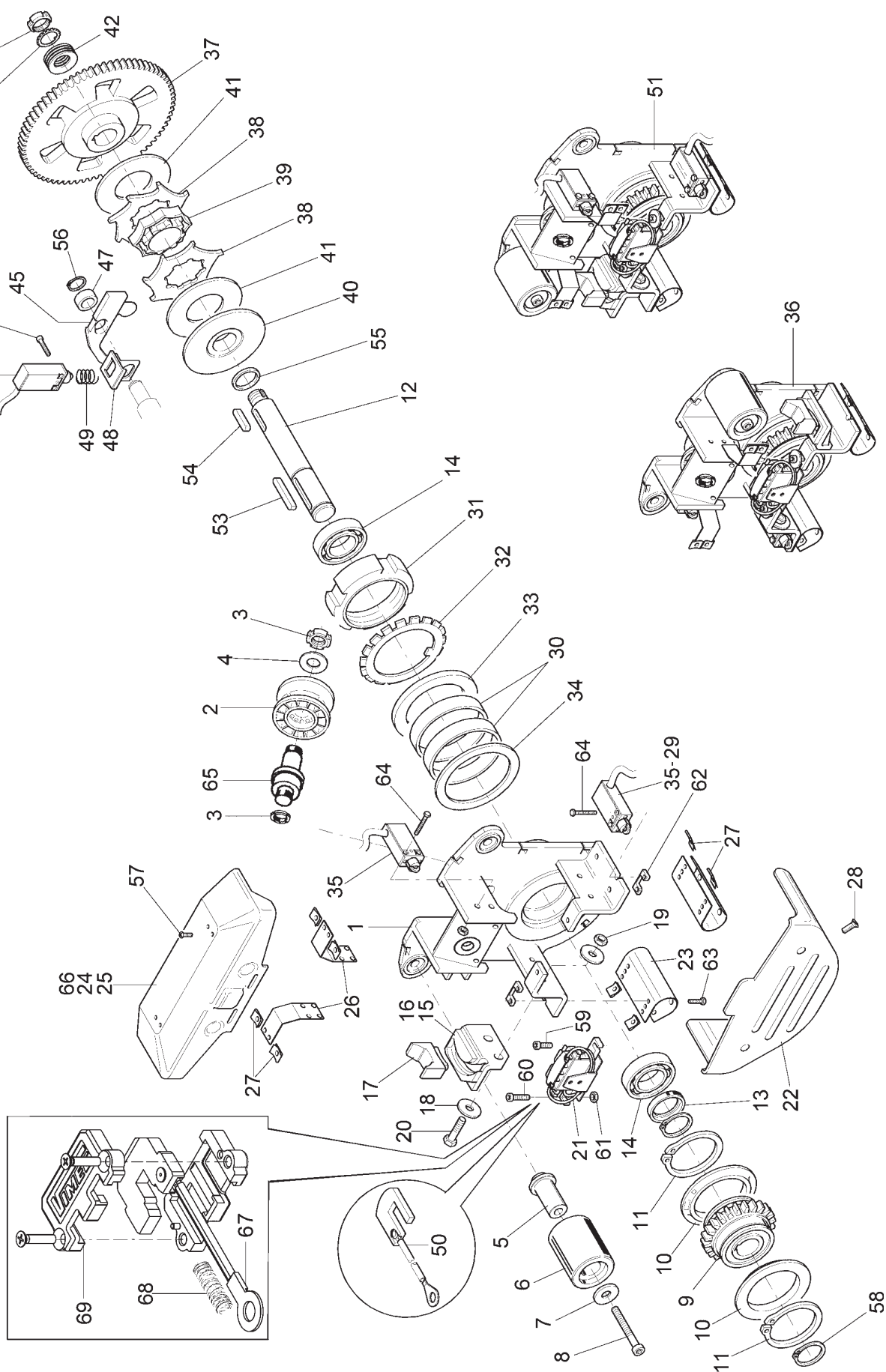


TOP CARRIAGE

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2384060	1	ALBERO RUOTE V64	V64 WHEEL SHAFT
2	1044080	1	RUOTA	WHEEL
3	6554013.6	2	GHIERA DI SICUREZZA	SAFETY RING-NUT
4	0904085	1	DISTANZIALE	SPACER
5	1334080	1	BOCCOLA	BUSH
6	1044091	1	RUOTA SUPERIORE CARRELLO	TOP CARRIAGE WHEEL
7	0012382	1	ROSETTA	WASHER
8	0011026	1	VITE	SCREW
9	2894875	1	SUPPORTO PATT. CARRELLO DX	RH CARRIAGE GUIDE SHOE SUPPORT
10	2894874	1	SUPPORTO PATT. CARRELLO SX	LH CARRIAGE GUIDE SHOE SUPPORT
11	4664036	1	PATTINO	GUIDE SHOE
12	1044074	2	RUOTAÆ22	WHEELÆ22
12	1044125	2	RUOTAÆ24	WHEELÆ24
12	1044126	2	RUOTAÆ25	WHEELÆ25
13	0010027	2	DADO	NUT
14	0010937	2	VITE	SCREW
15	1044075	2	RUOTA	WHEEL
16	2894822	1	SUPPORTO SX.	LH SUPPORT
17	2894823	1	SUPPORTO DX.	RH SUPPORT
18	0012980	2	ANELLO	RING
19	0904239	2	DISTANZIALE	SPACER
20	0904240	2	DISTANZIALE	SPACER
21	2504131	1	CAMMA	CAM
22	2864985	2	STAFFA	BRACKET
23	0010205	4	VITE	SCREW
24	0010023	8	DADO	NUT
25	0010573	2	VITE	SCREW
26	0010202	2	VITE	SCREW
27	0012375	2	ROSETTA	WASHER
28	0012380	2	VITE	SCREW
29	2864180	1	STAFFA PENDENZA COSTANTE	CONSTANT GRADIENT BRACKET
30	0010207	2	VITE	SCREW
31	2255507	1	GUAINA EXTRACORSA SQ4	SQ4 OVER-RUN DEVICE SHEATH
32	2255070	1	SENSORE "0" SQ16	SQ16 HOME SENSOR
33	2354176	1	CARRELLO COMPLETO SUP. SN	COMPLETE TOP CARRIAGE SN
33	2354190	1	CARRELLO COMPLETO SUP.SX EN	COMPLETE LH TOP CARRIAGE EN
34	0010027	4	DADO	NUT

CARRELLO SUPERIORE

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
35	2894004	1	SUPPORTO MICRO CARRELLO V65	V65 CARRIAGE MICRO. SUPPORT
36	0010316	1	ROSETTA	WASHER
37	2255064	1	GUAINA CARTER	CASING SHEATH
38	0010383	8	VITE	SCREW
39	5214099	4	PIASTRINA	PLATE
40	2354175	1	CARRELLO COMPLETO SUP. DX	COMPLETE RH TOP CARRIAGE
40	2354189	1	CARRELLO COMPLETO DX EN	COMPLETE RH CARRIAGE EN
48	1334072	2	BOCCOLA	BUSH
49	2824362	1	COFANO SUPERIORE	UPPER CASING
49	2824014	1	COFANO SUP. EN	UPPER CASING EN
50	2824436	1	COFANO INFERIORE	LOWER CASING
50	2824036	1	COFANO INF. EN	LOWER CASING EN
51	0714098	2	MOLLA COFANO SUPERIORE	UPPER CASING SPRING
52	0714097	2	MOLLA COFANO INFERIORE	LOWER CASING SPRING
53	0010901	8	CLIP	CLIP
54	2864880	1	STAFFA SUPPORTO SENSORE V65	V65 SENSOR SUPPORT BRACKET
55	0010636	8	VITE	SCREW
56	4944057.3	1	ROSETTA DI SICUREZZA	SAFETY WASHER
57	0994001	1	RALLA	RING GEAR
58	2864162	1	STAFFA	BRACKET
59	6552020.3	2	GHIERA	RING-NUT
60	1044077.3	1	RUOTA DENTATA	GEAR WHEEL
61	3494201	1	PIGNONE	SPROCKET
62	1022071	2	CUSCINETTO	BEARING
63	2384128	1	ALBERO SUPERIORE	UPPER SHAFT
64	1044072	1	RUOTA DENTATA	GEAR WHEEL
65	1074005	2	ANELLO DI GUIDA	GUIDE RING
66	0012179	2	ANELLO	RING
67	0904160	1	DISTANZIALE	SPACER
68	0012908	2	ANELLO SEEGER	SNAP RING
69	0012778	2	LINGUETTA	TANG
70	0012779	2	LINGUETTA	TANG
71	3494246	1	PIGNONE	SPROCKET
72	2894150	1	SUPPORTO MICRO	MICRO SUPPORT

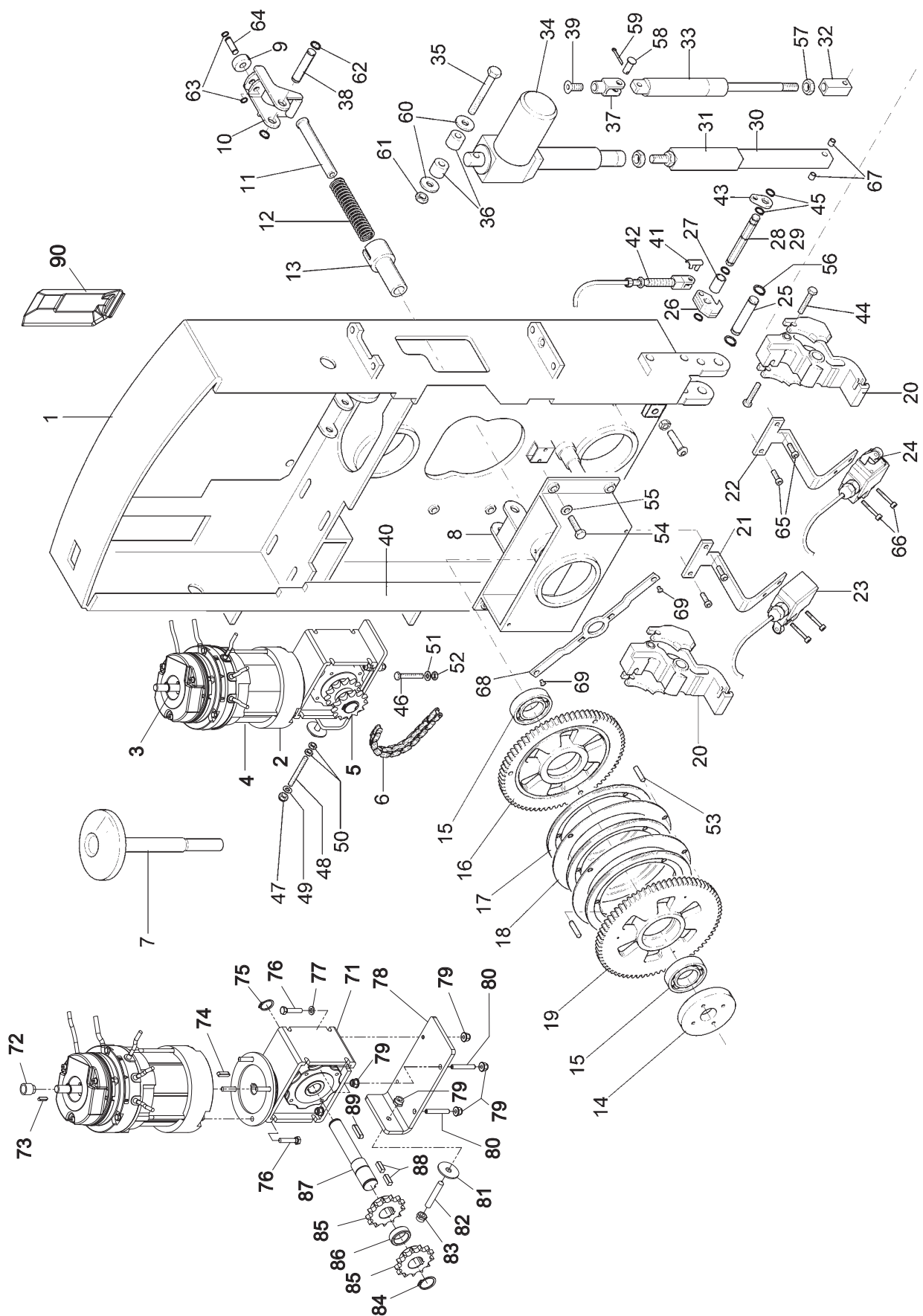


BOTTOM CARRIAGE

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2354173	1	CARRELLO INFERIORE	BOTTOM CARRIAGE
2	1044080	1	RUOTA	WHEEL
3	6554013	2	GHIERA DI SICUREZZA	SAFETY RING-NUT
4	0904085	1	DISTANZIALE	SPACER
5	1334080	1	BOCCOLA	BUSH
6	1044091	1	RUOTA SUPERIORE CARRELLO	CARRIAGE TOP WHEEL
7	0012382	1	ROSETTA	WASHER
8	0011026	1	VITE	SCREW
9	1044072	1	RUOTA DENTATA	GEAR WHEEL
10	1074005	2	ANELLO DI GUIDA	GUIDE RING
11	0012179	2	ANELLO	RING
12	2384083.3	1	ALBERO INFERIORE	BOTTOM SHAFT
13	0904162	1	DISTANZIALE	SPACER
14	1022071	2	CUSCINETTO	BEARING
15	2894875.3	1	SUPPORTO PATTINO CARRELLO DX	RH CARRIAGE GUIDE SHOE SUPPORT
16	2894874.3	1	SUPPORTO PATTINO CARRELLO SX	LH CARRIAGE GUIDE SHOE SUPPORT
17	4664036	1	PATTINO	GUIDE SHOE
18	0012375	4	ROSETTA	WASHER
19	0010026	2	DADO	NUT
20	0010208	2	VITE	SCREW
21	2894003	1	PORTASPAZZOLE	BRUSH HOLDER
22	2824363	1	COFANO INFERIORE	LOWER CASING
23	0714100	2	MOLLA COFANO INFERIORE	LOWER CASING SPRING
24	2824401	1	COFANO SUPERIORE DX	RH UPPER CASING
24	2824415	1	COFANO SUP. EN	UPPER CASING EN
25	2824402	1	COFANO SUPERIORE	UPPER CASING
26	0714099	2	MOLLA COFANO SUPERIORE	UPPER CASING SPRING
27	0010901	8	CLIP	CLIP
28	0010636	8	VITE	SCREW
28	2824015	1	COFANO INF. EN	LOWER CASING EN
29	2355379	1	GUAINA CARTER SUP. + PROL. V65	UPPER CASING SHEATH + EXTENSION V65
30	1334072	2	BOCCOLA	BUSH
31	6552020.3	1	GHIERA	RING-NUT
32	0012496.3	1	ROSETTA DI SICUREZZA	SAFETY WASHER
33	4944057.3	1	SPESSORE	SHIM
34	0994001	1	RALLA	RING GEAR

BOTTOM CARRIAGE

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
35	2355378	1	GUAINA INFERIORE	LOWER SHEATH
36	2354163	1	CARRELLO COMPLETO INF. DX	COMPLETE RH BOTTOM CARRIAGE
36	2354191	1	CARRELLO COMPL. INF. DX EN	COMPLETE RH BOTTOM CARRIAGE EN
37	1044079.3	1	RUOTA DENTATA	GEAR WHEEL
38	1044057	2	RUOTA DENTATA	GEAR WHEEL
39	1044056	1	RUOTA INTERNA	INNER WHEEL
40	0934013	1	DISCO FRIZIONE	CLUTCH PLATE
41	0934009	2	DISCO FRIZIONE	CLUTCH PLATE
42	0712046	4	MOLLA TAZZA	BELLEVILLE WASHER
43	6552056	1	GHIERA	RING-NUT
44	0012471	1	ROSETTA DI SICUREZZA	SAFETY WASHER
45	2564021.3	1	GANCIO	HOOK
46	2255506	1	GUAINA MICRO PARACADUTE SQ2	SAFETY GEAR MICROSWITCH SHEATH SQ2
47	0904011	1	DISTANZIALE GANCIO	HOOK SPACER
48	2864146	1	STAFFA AZIONAM. MICRO	MICROSWITCH DRIVE BRACKET
49	0714076	1	MOLLA PARACADUTE DOPPIO	DOUBLE SAFETY GEAR SPRING
50	3514018	1	SPAZZOLA	BRUSH
51	2354164	1	CARRELLO COMPLETO INF. SX	COMPLETE LH BOTTOM CARRIAGE
51	2354192	1	CARRELLO COMPL. INF. SX EN	COMPLETE LH BOTTOM CARRIAGE EN
52	0010381	2	VITE TCCE UNI5931-M4x16-8	SCREW TCCE UNI5931-M4x16-8
53	0012939	1	LINGUETTA UNI6604-A 8x7x56	TANG UNI6604-A 8x7x56
54	0012782	1	LINGUETTA UNI6604 8x7x40	TANG UNI6604 8x7x40
55	0904160	1	DISTANZIALE 30x38x3	SPACER 30x38x3
56	0012049	1	ANELLO UNI7434 - 15	RING UNI7434 - 15
57	0010636	4	VITE UNI-ISO 7380-M5x16-INOX	SCREW UNI-ISO 7380-M5x16-ST.ST.
58	0012908.3	1	ANELLO UNI 7435 - 30	RING UNI 7435 - 30
59	0010119	2	VITE ISO 4017-M6X14 INOX	SCREW ISO 4017-M6X14 ST.ST.
60	0010512	2	VITE TSPCE UNI 5933 M3X14 INOX	SCREW TSPCE UNI 5933 M3X14 ST.ST.
61	0010015	1	DADO AUT.UNI 7473-M6-8	LOCK-NUT UNI 7473-M6-8
62	5214099	4	PIASTRINA FISSAGGIO MICRO	MICROSWITCH FIXING PLATE
63	0010381	10	VITE TCCE UNI 5931 -M4x16-8	SCREW TCCE UNI 5931 -M4x16-8
64	0010387	4	VITE TCCE UNI 5931 -M4x25-8	SCREW TCCE UNI 5931 -M4x25-8
65	2384060	1	ALBERO RUOTE V64	V64 WHEEL SHAFT
66	2824402	1	COFANO SUP.BASCUANTE INF. <20° SN V65	LOWER TILTING DEV. UPPER CASING <20° SN V65
67	3514017	2	SPAZZOLA	BRUSH
68	0714133	2	MOLLA	SPRING
69	3554006	2	SCATOLA	BOX



FRAME

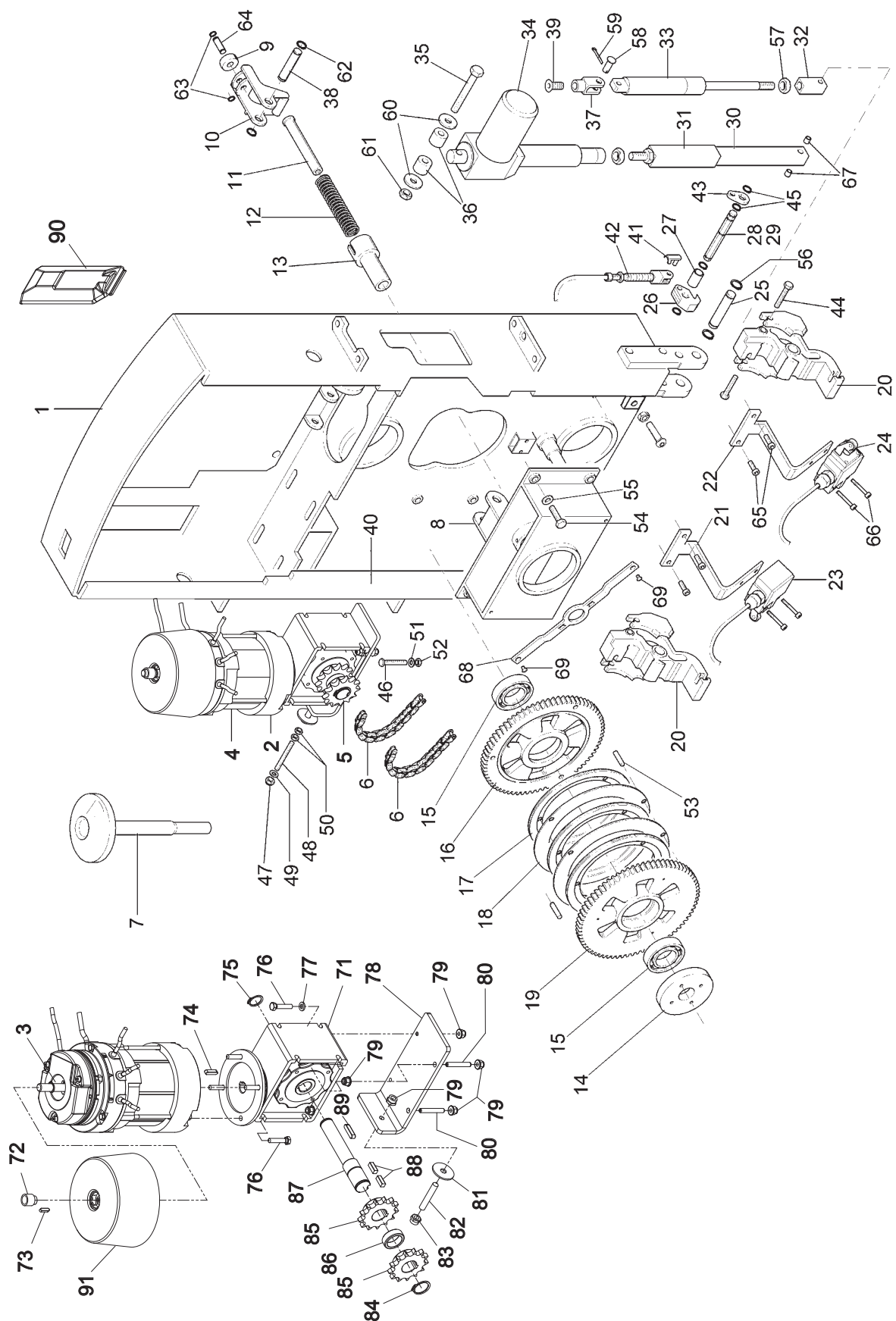
RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2874017	1	TELAIO	FRAME
2	1714088	1	MOTORIDUTTORE	MOTOR REDUCER
3	4502019	1	FRENO	BRAKE
4	1714083	1	MOTORE	MOTOR
5	3494247	1	PIGNONE PER CATENA	CHAIN SPROCKET
6	6734031	1	CATENA	CHAIN
7	4514008	1	VOLANTINO DI MANOVRA	OPERATING HANDWHEEL
8	0874118.3	1	SCATOLA FRIZIONE	CLUTCH CASING
9	1044076	1	RUOTA LEVA	LEVER WHEEL
10	2904125.3	1	LEVA FRIZIONE	CLUTCH LEVER
11	0184019	1	STELO PORTA MOLLE	SPRING ROD
12	0712019	25	MOLLA TAZZA	BELLEVILLE WASHER
13	2384073.3	1	ALBERO RUOTE FRIZIONE	CLUTCH WHEEL SHAFT
14	6554024	1	GHIERA RUOTE FRIZIONE	CLUTCH WHEEL RING-NUT
15	1022071	2	CUSCINETTO	BEARING
16	0934017.3	1	DISCO FRIZ. DENT.	TOOTHED CLUTCH PLATE
17	1074004	3	ANELLO FRIZIONE	CLUTCH RING
18	1074003	2	ANELLO FRIZIONE	CLUTCH RING
19	0934018.3	1	DISCO FRIZ. DENT. CONDUT.	DRIVE TOOTHED CLUTCH PLATE
20	2894784.2	2	SUPPORTO PEDANA	PLATFORM SUPPORT
21	2894171	1	SUPPORTO SX. MICRO PEDANA	LH PLATFORM MICRO. SUPPORT
22	2894177	1	SUPPORTO DX. MICRO PEDANA	RH PLATFORM MICRO. SUPPORT
23	2255424	1	MICRO PEDANA LAVORO SQ8	SQ8 PLATFORM WORKING POSITION MICRO.
24	2255425	1	MICRO PEDANA RIPOSO SQ11	SQ11 PLATFORM REST POSITION MICRO.
25	1304170	2	PERNO	PIN
26	2564035	1	GANCIO	HOOK
27	0904139	1	DISTANZIALE	SPACER
28	3084053	1	ASTA INTERBLOCCO	INTERLOCK ROD
29	3084054	1	ASTA INTERBLOCCO	INTERLOCK ROD
30	3084071	1	ASTA COMPLETA	COMPLETE ROD
31	3124332.3	1	TUBO COLLEGAMENTO	CONNECTION TUBE
32	3774014	1	BLOCCETTO	BLOCK
33	0714085	1	MOLLA A GAS	AIR SPRING
33	0714141	1	MOLLA A GAS (PED.1250X800)	AIR SPRING (1250X800)
34	6102032	1	ATTUATORE	ACTUATOR
35	0011036	1	VITE TE M10X90	SCREW TE M10X90
36	1332011	2	BOCCOLA PER ATTUATORE	ACTUATOR BUSH
37	2752010	1	FORCELLA	FORK

FRAME

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
38	2894004	1	PERNO LEVA	LEVER PIN
39	0010473	1	VITE TSPEI M10X20	SCREW TSPEI M10X20
40	2894936	1	FLANGIA SUPPORTO MOTORE	MOTOR SUPPORT FLANGE
41	1302013	1	PERNO A SCATTO	SNAP PIN
42	0712055	1	MOLLA	SPRING
43	2904130	1	LEVA INTERBLOCCO	INTERLOCK LEVER
44	0010937	1	VITE TE M8X50	SCREW TE M8X50
45	0012930	1	ANELLO UNI 7934	RING UNI 7934
46	0010193	1	VITE TE M6X30	SCREW TE M6X30
47	0012972	1	DADO AUT. UNI 7474-M8-8	LOCK-NUT UNI 7474-M8-8
48	0012973	1	GRANO UNI 5927 M8X50 - 8	DOWEL UNI 5927 M8X50 - 8
49	0012314	1	ROSETTA UNI 6592 - 6	WASHER UNI 6592 - 6
50	0010073	2	DADO ES. ISO 4035-M8-8	HEXAGONAL NUT ISO 4035-M8-8
51	0012392	4	ROSETTA UNI 6593 - 6x18	WASHER UNI 6593 - 6x18
52	0010171	6	DADO ES.AUT.FL.EN 1663 M6-8	HEXAGONAL LOCKNUT FL. EN 1663 M6-8
53	1304288	4	PERNO PER FRIZIONE	CLUTCH PIN
54	0010212	4	VITE TE ISO 4017-M10x30-8	SCREW TE ISO 4017-M10x30-8
55	0012376	4	ROSETTA UNI 6592 - 10	WASHER UNI 6592 - 10
56	0012132	4	ANELLO UNI 7435 - 16	RING UNI 7435 - 16
57	0010048	1	DADO ES. ISO 4035-M12-8	HEXAGONAL NUT ISO 4035-M12-8
58	1302014	1	PERNO UNI 1710 X FORCELLA M10	PIN UNI 1710 FOR FORK M10
59	0012600	1	COPIGLIA 3x20 UNI1336	SPLIT PIN 3x20 UNI1336
60	0012476	2	ROSETTA UNI 6593 - 10x40	WASHER UNI 6593 - 10x40
61	0010043	1	DADO AUT. UNI 7473-M10-8	LOCK-NUT UNI 7473-M10-8
62	0012131	2	ANELLO UNI 7435 - 15	RING UNI 7435 - 15
63	0012164	2	ANELLO UNI 7435 - 10	RING UNI 7435 - 10
64	1304196	1	PERNO RUOTA LEVA	LEVER WHEEL PIN
65	0010924	4	VITE UNI 7380-M5x10-INOX	SCREW UNI 7380-M5x10-ST.ST.
66	0010391	4	VITE TCCE UNI 5931-M4x35-8	SCREW TCCE UNI 5931-M4x35-8
67	1332011	2	BOCCOLA AUT. 8x10x10	SELF-THREADING BUSH 8x10x10
68	2864920	1	STAFFA	BRACKET
69	0010542	2	VITE TSPCE M6X10	SCREW TSPCE M6X10
70	0474000	1	CALOTTA PROT. MOT. V65	V65 MOTOR GUARD COVER
71	6012001	1	RIDUTTORE	REDUCER

FRAME

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
72	0904222	1	DISTANZIALE	SPACER
73	0012920	1	LINGUETTA	TANG
74	0012943	1	LINGUETTA	TANG
75	0012187	1	SEEGER	SNAP RING
76	0012974	1	VITE	SCREW
77	0010314	1	ROSETTA	WASHER
78	2894936	1	FLANGIA	FLANGE
79	0012975	6	DADO	NUT
80	0012976	2	GRANO	DOWEL
81	0010318	1	ROSETTA	WASHER
82	0012973	1	GRANO	DOWEL
83	0012972	2	DADO	NUT
84	0012172	1	ANELLO	RING
85	3494247	1	PIGNONE	SPROCKET
86	0904335	1	DISTANZIALE	SPACER
87	2384127	1	ALBERO	SHAFT
88	0012783	1	LINGUETTA	TANG
89	0012806	1	LINGUETTA	TANG
90	2874016	1	COPERCHIO POSTERIORE	REAR COVER



FRAME EN 81 40

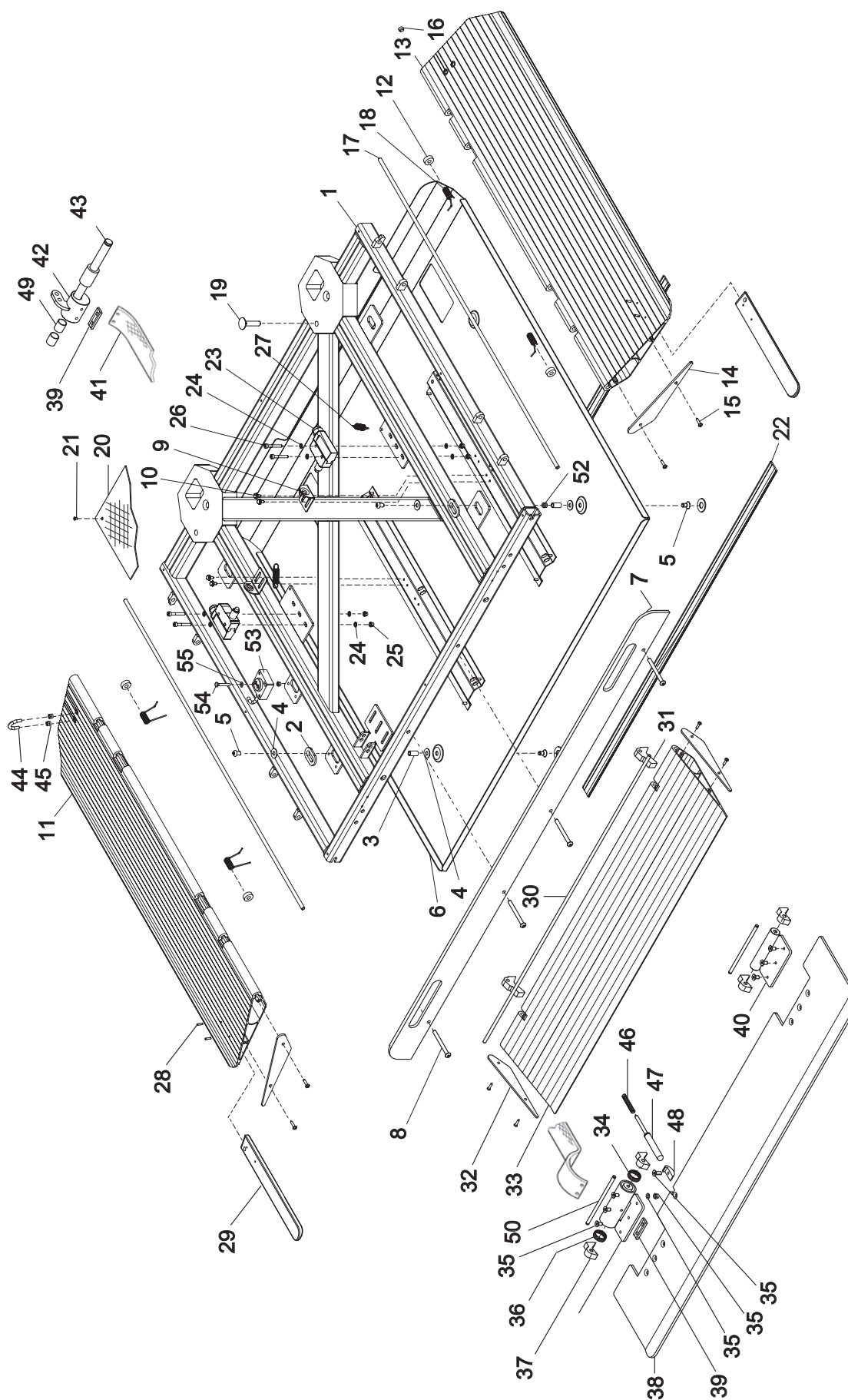
RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2874017	1	TELAIO	FRAME
2	1714099EN	1	MOTORIDUTTORE EN	MOTOR REDUCER EN
3	4502019	1	FRENO	BRAKE
4	1714083	1	MOTORE	MOTOR
5	3494247	1	PIGNONE PER CATENA	CHAIN SPROCKET
6	6734031	1	CATENA	CHAIN
7	4514008	1	VOLANTINO DI MANOVRA	OPERATING HANDWHEEL
8	0874118.3	1	SCATOLA FRIZIONE	CLUTCH HOUSING
9	1044076	1	RUOTA LEVA	LEVER WHEEL
10	2904125.3	1	LEVA FRIZIONE	CLUTCH LEVER
11	0184019	1	STELO PORTA MOLLE	SPRING ROD
12	0712019	25	MOLLA TAZZA	BELLEVILLE WASHER
13	2384073.3	1	ALBERO RUOTE FRIZIONE	CLUTCH WHEEL SHAFT
14	6554024	1	GHIERA RUOTE FRIZIONE	CLUTCH WHEEL RING-NUT
15	1022071	2	CUSCINETTO	BEARING
16	0934017.3	1	DISCO FRIZ. DENT.	TOOTHED CLUTCH PLATE
17	1074004	3	ANELLO FRIZIONE	CLUTCH RING
18	1074003	2	ANELLO FRIZIONE	CLUTCH RING
19	0934018.3	1	DISCO FRIZ. DENT. CONDUT.	DRIVE TOOTHED CLUTCH PLATE
20	2894784.2	2	SUPPORTO PEDANA	PLATFORM SUPPORT
21	2894171	1	SUPPORTO SX. MICRO PEDANA	LH PLATFORM MICRO. SUPPORT
22	2894177	1	SUPPORTO DX. MICRO PEDANA	RH PLATFORM MICRO. SUPPORT
23	2255424	1	MICRO PEDANA LAVORO SQ8	SQ8 PLATFORM WORKING POSITION MICRO.
24	2255425	1	MICRO PEDANA RIPOSO SQ11	SQ11 PLATFORM REST POSITION MICRO.
25	1304170	2	PERNO	PIN
26	2564035	1	GANCIO	HOOK
27	0904139	1	DISTANZIALE	SPACER
28	3084053	1	ASTA INTERBLOCCO	INTERLOCK ROD
29	3084054	1	ASTA INTERBLOCCO	INTERLOCK ROD
30	3084071	1	ASTA COMPLETA	COMPLETE ROD
31	3124332.3	1	TUBO COLLEGAMENTO	CONNECTION TUBE
32	3774014	1	BLOCCHETTO	BLOCK
33	0714085	1	MOLLA A GAS	AIR SPRING
33	0714141	1	MOLLA A GAS (PED.1250X800)	AIR SPRING (1250X800)
34	6102032	1	ATTUATORE	ACTUATOR
35	0011036	1	VITE TE M10X90	SCREW TE M10X90
36	1332011	2	BOCCOLA PER ATTUATORE	ACTUATOR BUSH
37	2752010	1	FORCELLA	FORK

FRAME EN 81 40

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
38	2894004	1	PERNO LEVA	LEVER PIN
39	0010473	1	VITE TSPEI M10X20	SCREW TSPEI M10X20
40	2894936	1	FLANGIA SUPPORTO MOTORE	MOTOR SUPPORT FLANGE
41	1302013	1	PERNO A SCATTO	SNAP PIN
42	0712055	1	MOLLA	SPRING
43	2904130	1	LEVA INTERBLOCCO	INTERLOCK LEVER
44	0010937	1	VITE TE M8X50	SCREW TE M8X50
45	0012930	1	ANELLO UNI 7934	RING UNI 7934
46	0010193	1	VITE TE M6X30	SCREW TE M6X30
47	0012972	1	DADO AUT. UNI 7474-M8-8	LOCK-NUT UNI 7474-M8-8
48	0012973	1	GRANO UNI 5927 M8x50 - 8	DOWEL UNI 5927 M8x50 - 8
49	0012314	1	ROSETTA UNI 6592 - 6	WASHER UNI 6592 - 6
50	0010073	2	DADO ES. ISO 4035-M8-8	HEXAGONAL NUT ISO 4035-M8-8
51	0012392	4	ROSETTA UNI 6593 - 6x18	WASHER UNI 6593 - 6x18
52	0010171	6	DADO ES.AUT.FL.EN 1663 M6-8	HEXAGONAL LOCKNUT FL. EN 1663 M6-8
53	1304288	4	PERNO PER FRIZIONE	CLUTCH PIN
54	0010212	4	VITE TE ISO 4017-M10x30-8	SCREW TE ISO 4017-M10x30-8
55	0012376	4	ROSETTA UNI 6592 - 10	WASHER UNI 6592 - 10
56	0012132	4	ANELLO UNI 7435 - 16	RING UNI 7435 - 16
57	0010048	1	DADO ES. ISO 4035-M12-8	HEXAGONAL NUT ISO 4035-M12-8
58	1302014	1	PERNO UNI 1710 X FORCELLA M10	PIN UNI 1710 FOR FORK M10
59	0012600	1	COPIGLIA 3x20 UNI1336	SPLIT PIN 3x20 UNI1336
60	0012476	2	ROSETTA UNI 6593 - 10x40	WASHER UNI 6593 - 10x40
61	0010043	1	DADO AUT. UNI 7473-M10-8	LOCK-NUT UNI 7473-M10-8
62	0012131	2	ANELLO UNI 7435 - 15	RING UNI 7435 - 15
63	0012164	2	ANELLO UNI 7435 - 10	RING UNI 7435 - 10
64	1304196	1	PERNO RUOTA LEVA	LEVER WHEEL PIN
65	0010924	4	VITE UNI 7380-M5x10-INOX	SCREW UNI 7380-M5x10-ST.ST.
66	0010391	4	VITE TCCE UNI 5931-M4x35-8	SCREW TCCE UNI 5931-M4x35-8
67	1332011	2	BOCCOLA AUT. 8x10x10	SELF-THREADING BUSH 8x10x10
68	2864920	1	STAFFA	BRACKET
69	0010542	2	VITE TSPCE M6X10	SCREW TSPE M6X10
70	0474000	1	CALOTTA PROT. MOT. V65	V65 MOTOR GUARD COVER
71	6012001	1	RIDUTTORE	REDUCER

FRAME EN 81 40

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
71	6012001	1	RIDUTTORE	REDUCER
72	0904222	1	DISTANZIALE	SPACER
73	0012920	1	LINGUETTA	TANG
74	0012943	1	LINGUETTA	TANG
75	0012187	1	SEEGER	SNAP RING
76	0012974	1	VITE	SCREW
77	0010314	1	ROSETTA	WASHER
78	2894936	1	FLANGIA	FLANGE
79	0012975	6	DADO	NUT
80	0012976	2	GRANO	DOWEL
81	0010318	1	ROSETTA	WASHER
82	0012973	1	GRANO	DOWEL
83	0012972	2	DADO	NUT
84	0012172	1	ANELLO	RING
85	3494247	1	PIGNONE	SPROCKET
86	0904335	1	DISTANZIALE	SPACER
87	2384127	1	ALBERO	SHAFT
88	0012783	1	LINGUETTA	TANG
89	0012806	1	LINGUETTA	TANG
90	2874016	1	COPERCHIO POSTERIORE	REAR COVER
91	0474000JL	1	CALOTTA PROTEZIONE	REAR GUARD COVER



PLATFORM

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2804540	1	TELAIO 830X700	FRAME 830X700
1	2804539	1	TELAIO 830X770	FRAME 830X770
1	2804541	1	TELAIO 830X650	FRAME 830X650
1	2804542	1	TELAIO 830X600	FRAME 830X600
2	1334033	4	BOCCOLA	BUSH
3	0904321	4	DISTANZIALE	SPACER
4	0012492	8	ROSETTA	WASHER
5	0010896	4	VITE	SCREW
6	2874271	1	DOPPIO FONDO 830X700	BOTTOM SAFE EDGE 830x700
6	2874270	1	DOPPIO FONDO 830X770	BOTTOM SAFE EDGE 830x770
6	2874272	1	DOPPIO FONDO 830X650	BOTTOM SAFE EDGE 830x650
6	2874273	1	DOPPIO FONDO 830X600	BOTTOM SAFE EDGE 830x650
7	2594284	1	PROTEZIONE V65 L=830	GUARD V65 L=830
8	0010948	4	VITE	SCREW
9	2304113	2	LAMIERA MICRO	MICRO SHEET PLATE
10	0010999	4	VITE	SCREW
11	2594390	1	PROTEZIONE SX P=700	LH PROTECTION P=700
11	2594392	1	PROTEZIONE SX P=770	LH PROTECTION P=770
11	2594627	1	PROTEZIONE SX P=650	LH PROTECTION P=650
11	2594625	1	PROTEZIONE SX P=600	LH PROTECTION P=600
12	0094047	1	DISTANZIALE	SPACER
13	2594391	1	PROTEZIONE DX P=700	RH PROTECTION P=700
13	2594343	1	PROTEZIONE DX P=770	RH PROTECTION P=770
13	2594626	1	PROTEZIONE DX P=650	RH PROTECTION P=650
13	2594624	1	PROTEZIONE DX P=600	RH PROTECTION P=600
14	2874167	2	COPERCHIO BANDELLA	GUARD BOARD COVER
15	0010668	6	VITE	SCREW
16	0010928	2	GRANO	DOWEL
17	1304148	2	PERNO BANDELLA L=700/770	GUARD BOARD PIN L=700/770
17	1304185	2	PERNO BANDELLA L=650	GUARD BOARD PIN L=650
17	1304248	2	PERNO BANDELLA L=600	GUARD BOARD PIN L=600
18	0714145	4	MOLLA	SPRING
19	0011024	1	VITE	SCREW
20	2804550	1	PEDANA 830X700	PLATFORM 830x700
20	2804549	1	PEDANA 830X770	PLATFORM 830x770
20	2804551	1	PEDANA 830X650	PLATFORM 830x650
20	2804552	1	PEDANA 830X600	PLATFORM 830x600

PLATFORM

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
21	0010887	8	VITE	SCREW
22	28941389	2	PROF. IN GOMMA L=780	RUBBER PROF. L=780
23	2255681	1	GUAINA MICRO	MICROSWITCH SHEATH
24	0012371	8	ROSETTA	WASHER
25	0010005	4	DADO	NUT
26	0010386	4	VITE	SCREW
27	0714144	2	MOLLA	SPRING
28	0012268	4	SPINA DIRITTA ELASTICA	STRAIGHT ELASTIC PIN
29	2594396	2	PROTEZIONE	PROTECTION
30	1304330	1	PERNO BAND. ACC. FRONT.	FRONT ACC. GUARD BOARD PIN
31	3714079	2	SUPP. BANDELLA ACC. FRON.	FRONT ACC. GUARD BOARD SUPP.
32	2874167	4	COPERCHIO BANDELLA	GUARD BOARD COVER
33	4354019.1	1	ACCESSO FRONTALE L=830	FRONT ACCESS L=830
34	0714155	4	MOLLA PER DOPPIO FONDO SX	SPRING FOR LEFT BOTTOM SAFE EDGE
35	0010334	7	VITE TCEI M3	SCREW TCEI M3
35	0010098	6	DADO	NUT
35	0010313	8	ROSETTA	WASHER
36	0714154	4	MOLLA PER DOPPIO FONDO DX	SPRING FOR RIGHT BOTTOM SAFE EDGE
37	2894832	4	SUPP. BANDELLA ACC. FRONT.	FRONT ACC. GUARD BOARD SUPP.
38	4354058.1	1	ACCESSO FRONTALE MOBILE	MOVABLE FRONTAL ACCESS
39	3334023	2	BLOCCO CINGHIA ACCESS. FRON.	FRONT ACCESS BELT LOCK
40	4404039	1	CERNIERA LATO FOLLE	IDLE SIDE HINGE
41	0784016	1	FASCIA DI SOLLEV. BANDELLA L=600	GUARD BOARD LIFTING BAND L=600
41	0784012	1	FASCIA DI SOLLEV. BANDELLA L=650	GUARD BOARD LIFTING BAND L=650
41	0784013	1	FASCIA DI SOLLEV. BANDELLA L=700	GUARD BOARD LIFTING BAND L=700
41	0784014	1	FASCIA DI SOLLEV. BANDELLA L=770	GUARD BOARD LIFTING BAND L=770
42	2904129.3	1	LEVA RINVIO CINGHIA ACC. FR. V	FRONT ACCESS BELT TRANSMISSION LEVER
43	1304209	1	PERNO ROTAZIONE PEDANA	FOOTBOARD ROTATION PIN
44	4254272	2	ATTACCO	CONNECTION
45	0010165	4	DADO	NUT
46	0714050	1	MOLLA	SPRING
47	1304390	1	PERNO AZIONAM. MICRO BANDELLA	GUARD BOARD MICROSWITCH DRIVE PIN
48	2504194	1	SUPP. BANDELLA ACC. FRONT.	FRONT ACC. GUARD BOARD SUPP.
49	1332005	2	BOCCOLA	BUSH
50	1304211	2	PERNO BANDELLA ACC. FRON.	FRONT ACC. GUARD BOARD PIN
51	4404038	1	CERNIERA BANDELLA	GUARD BOARD HINGE
52	0714143	8	MOLLA INOX	STAINLESS STEEL SPRING

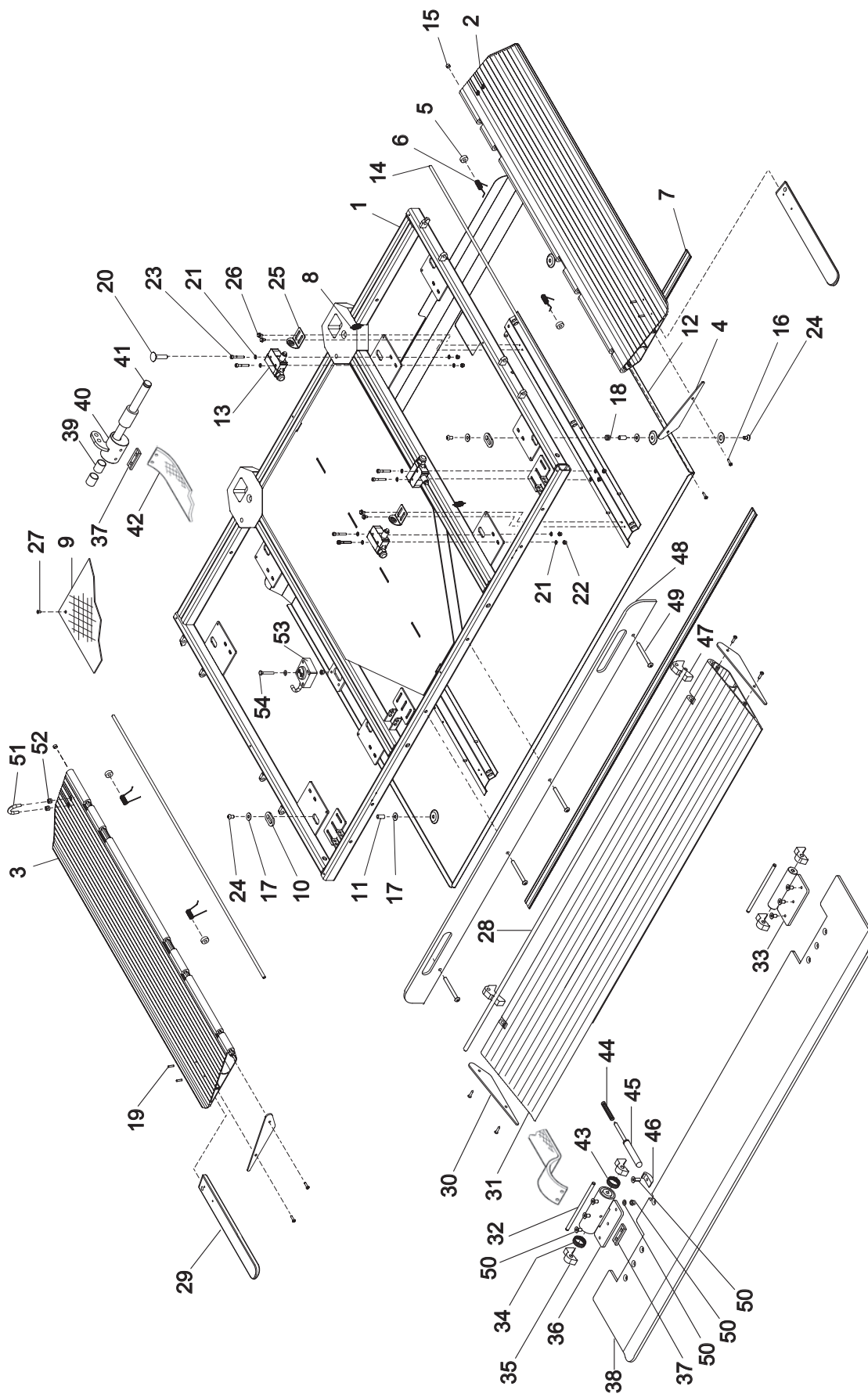


PLATFORM



RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
-----	--------	------	-------------	-------------

53	6074063	1	INCLINOMETRO	CLINOMETER
54	0010206	2	VITE	SCREW
55	0010313	4	ROSETTA	WASHER



PLATFORM

PLATFORM

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2804533	1	TELAIO 1250X800	TFRAME 1250X800
1	2804534	1	TELAIO 1050X900	FRAME 1050X900
1	2804538	1	TELAIO 1050X700	FRAME 1050X700
1	2804537	1	TELAIO 1050X770	FRAME 1050X770
2	2594621	1	PROTEZIONE DX L= 800	RH PROTECTION L=800
2	2594393	1	BANDELLA LAT. DX L= 770	RH GUARD BOARD L=770
2	2594391	1	BANDELLA LAT. DX L= 700	RH GUARD BOARD L=700
2	2594616	1	BANDELLA LAT. DX L= 900	RH GUARD BOARD L=900
3	2594620	1	BANDELLA LAT. SX L= 800	LH GUARD BOARD L=800
3	2594392	1	BANDELLA LAT. SX L= 770	LH GUARD BOARD L= 770
3	2594390	1	BANDELLA LAT. SX L= 700	LH GUARD BOARD L=700
3	2594617	1	BANDELLA LAT. SX L= 900	LH GUARD BOARD L=900
4	2874167	2	COPERCHIO BANDELLA	GUARD BOARD COVER
5	0094047	4	DISTANZIALE	SPACER
6	0714145	4	MOLLA INOX BANDELLE	GUARD BOARD STAINLESS STEEL SPRING
7	28941299	2	PROF. IN GOMMA L= 1200	RUBBER PROF. L=1200
7	28941388	2	PROF. IN GOMMA L= 980	RUBBER PROF. L=980
8	0714144	4	MOLLA INNESTO MICRO	MICROSWITCH CLUTCH SPRING
9	2804553	1	PEDANA CALP. 1250X800	PLATFORM 1250x800
9	2804529	1	PEDANA CALP. 1050X900	PLATFORM 1050x900
9	2804548	1	PEDANA CALP. 1050X700	PLATFORM 1050x700
9	2804547	1	PEDANA CALP. 1050X770	PLATFORM 1050x770
10	1334033	4	BOCCOLA	BUSH
11	0904331	4	DISTANZIALE	SPACER
12	2874260	1	DOPPIO FONDO 1250X800	BOTTOM SAFE EDGE 1250x800
12	2874261	1	DOPPIO FONDO 1050X900	BOTTOM SAFE EDGE 1050x900
12	2874269	1	DOPPIO FONDO 1050X700	BOTTOM SAFE EDGE 1050x700
12	2874268	1	DOPPIO FONDO 1050X770	BOTTOM SAFE EDGE 1050x770
13	2255683	1	GUAINA MICRO AMERICA	AMERICA MICROSWITCH SHEATH
13	2255682	1	GUAINA MICRO CROAZIA	CROATIA MICROSWITCH SHEATH
13	2255982	1	GUAINA MICRO CROAZIA	CROATIA MICROSWITCH SHEATH
14	1304381	2	PERNO BANDELLA L = 900	GUARD BOARD PIN L=900
14	1304330	2	PERNO BANDELLA L = 800	GUARD BOARD PIN L=800
14	1304148	2	PERNO BANDELLA L = 700/770	GUARD BOARD PIN L=700/770
15	0010928	2	GRANO	DOWEL
16	0010668	4	VITE	SCREW
17	0012492	8	ROSETTA	WASHER

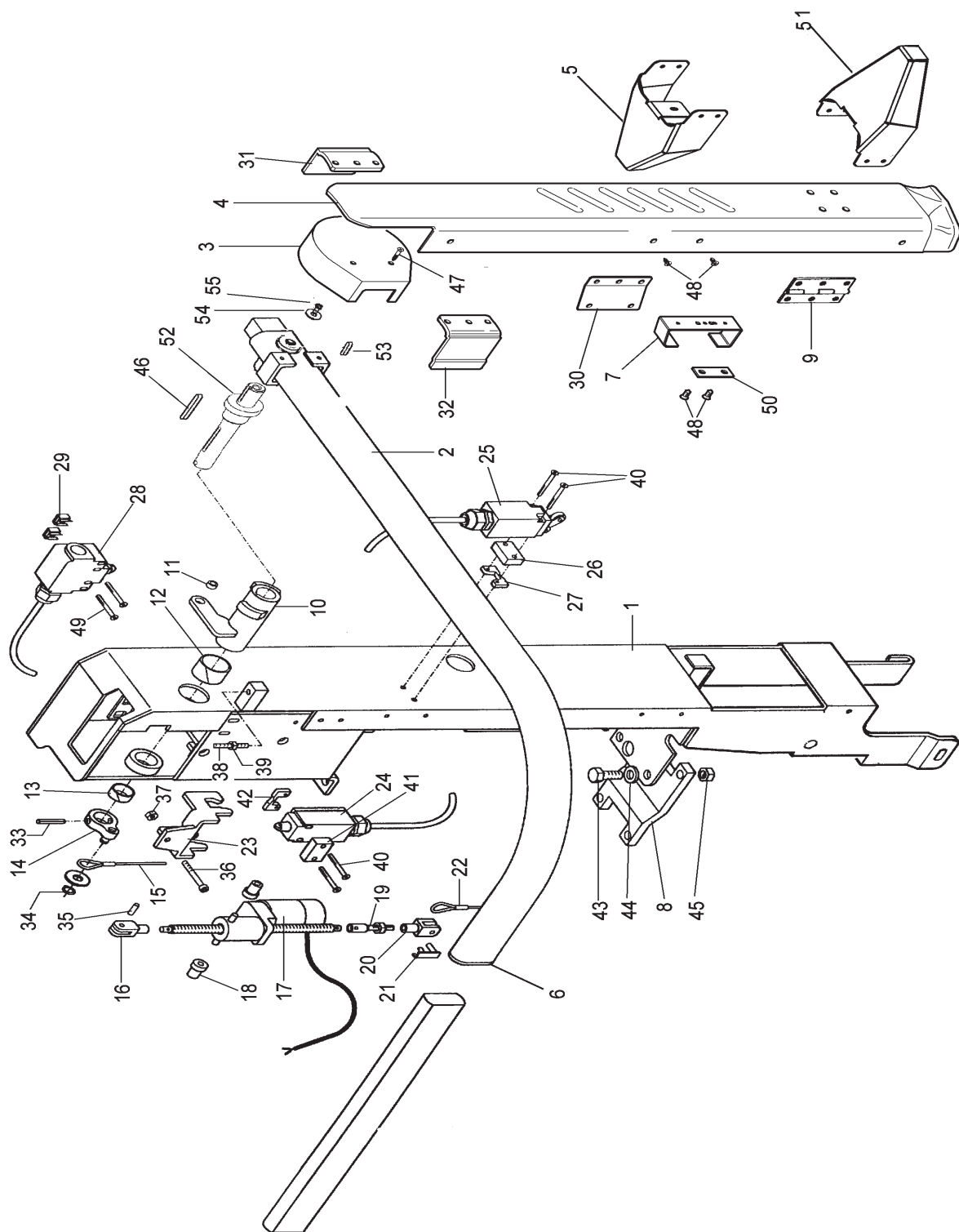
PLATFORM

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
18	0714143	4	MOLLA INOX	STAINLESS STEEL SPRING
19	0012268	4	SPINA DIRITTA ELASTICA	STRAIGHT ELASTIC PIN
20	0011024	1	VITE	SCREW
21	0012371	24	ROSETTA	WASHER
22	0010005	12	DADO	NUT
23	0010386	12	VITE	SCREW
24	0010896	4	VITE	SCREW
25	2304113	4	LAMIERA MICRO	MICROSWITCH SHEET PLATE
26	0010999	8	VITE	SCREW
27	0010887	8	VITE	SCREW
28	1304130	1	PERNO B. ACC. FRONT. L= 1050	FRONT ACC. GUARD BOARD PIN L=1050
29	2594396	2	PROTEZIONE	PROTECTION
30	2874167	4	COPERCHIO BANDELLA	GUARD BOARD COVER
31	4354020.1	1	ACC. FRONTALE L= 1050	FRONT ACCESS L=1050
32	1304211	2	PERNO BANDELLA ACC. FRON.	FRONT ACC. GUARD BOARD PIN
33	4404039	1	CERNIERA LATO FOLLE	IDLE SIDE HINGE
34	0714154	4	MOLLA PER DOPPIO FONDO DX	SPRING FOR RIGHT BOTTOM SAFE EDGE
35	2894832	4	SUPP. BANDELLA ACC. FRONT.	FRONT ACC. GUARD BOARD SUPP.
36	4404038	1	CERNIERA BANDELLA	GUARD BOARD HINGE
37	3334023	2	BLOCCO CINGHIA ACCESS. FRON.	FRONT ACCESS BELT LOCK
38	4354057.1	1	ACC. FRONT. MOBILE L=1050	MOVABLE FRONTAL ACCESS L=1050
38	4354056.1	1	ACC. FRONT. MOBILE L=1250	MOVABLE FRONTAL ACCESS L=1250
39	1332005	2	BOCCOLA	BUSH
40	2904129.3	1	LEVA RINVIO CINGHIA ACC. FR. V	FRONT ACCESS BELT TRANSMISSION LEVER
41	1304209	1	PERNO ROTAZIONE PEDANA	FOOTBOARD ROTATION PIN
41	1304212	1	PERNO ROTAZIONE PEDANA	FOOTBOARD ROTATION PIN
42	0784032	1	FASCIA DI SOLLEV. BANDELLA L=900	GUARD BOARD LIFTING BAND L=900
42	0784029	1	FASCIA DI SOLLEV. BANDELLA L=800	GUARD BOARD LIFTING BAND L=800
42	0784014	1	FASCIA DI SOLLEV. BANDELLA L=770	GUARD BOARD LIFTING BAND L=770
42	0784013	1	FASCIA DI SOLLEV. BANDELLA L=700	GUARD BOARD LIFTING BAND L=700
43	0714155	1	MOLLA PER DOPPIO FONDO SX	SPRING FOR LEFT BOTTOM SAFE EDGE
44	0714050	1	MOLLA	SPRING
45	1304390	1	PERNO AZIONAM. MICRO BANDELLA	GUARD BOARD MICROSWITCH DRIVE PIN
46	2504194	1	SUPP. BANDELLA ACC. FRONT.	FRONT ACC. GUARD BOARD SUPP.
47	3714079	1	SUPP. BANDELLA ACC. FRONT.	FRONT ACC. GUARD BOARD SUPP.
48	2594622	1	PROTEZIONE	PROTECTION
49	0010948	4	VITE	SCREW



PLATFORM

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
50	0010034	7	VITE	SCREW
50	0010098	6	DADO	NUT
50	0010313	6	ROSETTA	WASHER
51	4254272	2	ATTACCO	CONNECTION
52	0010165	4	DADO	NUT
53	6074063	1	INCLINOMETRO	CLINOMETER
54	0010206	2	VITE	SCREW



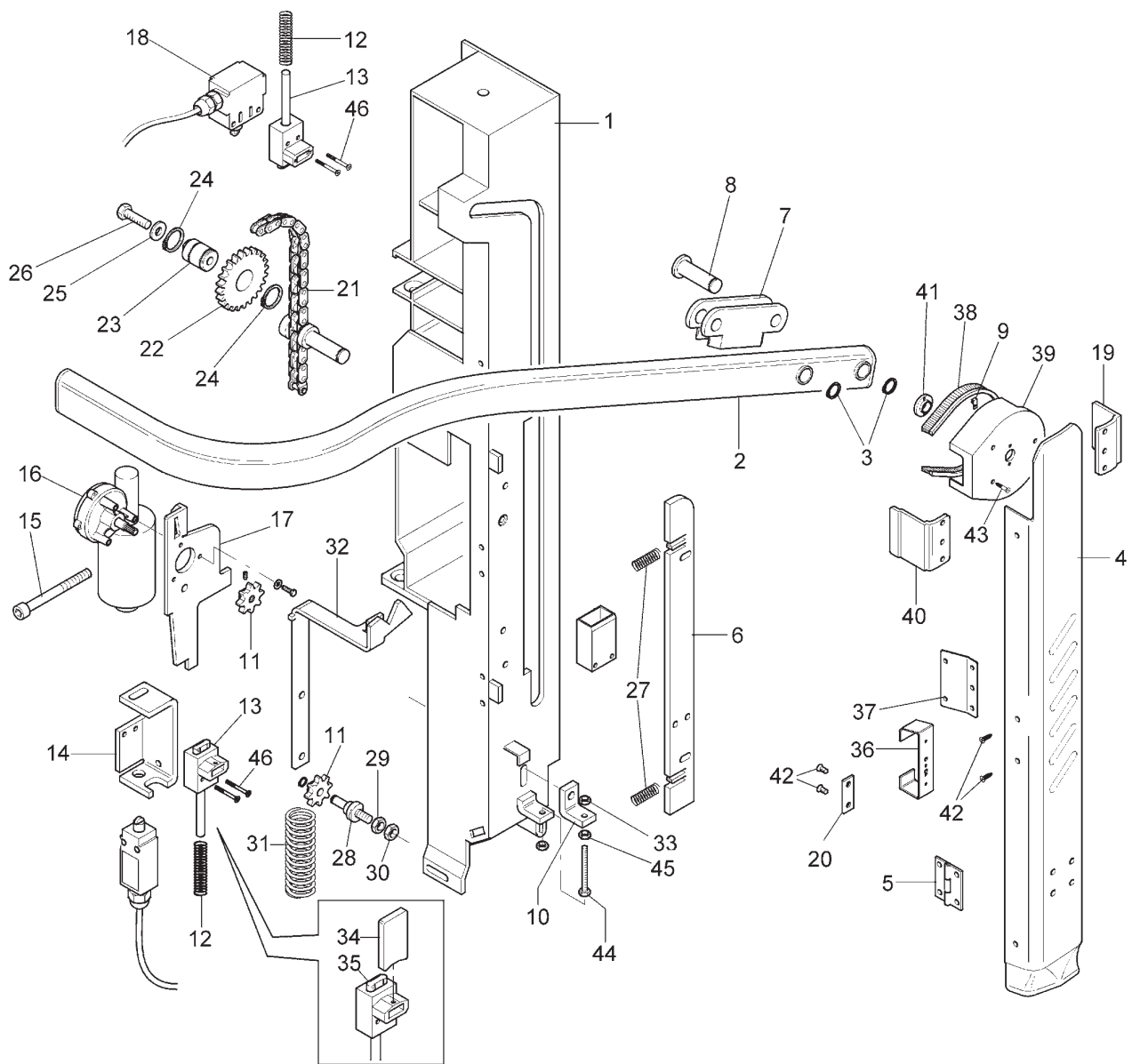


SAFETY BARS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2894952	1	TELAIO DX	RH FRAME
1	2894951	1	TELAIO SX	LH FRAME
2	4204641	1	BARRE (PED. 830x600)	BARS (830x600)
2	4204642	1	BARRE (PED. 830x650)	BARS (830x650)
2	4204643	1	BARRE (PED. 830x700)	BARS (830x700)
2	4204644	1	BARRE (PED. 830x770)	BARS (830x770)
2	4204645	1	BARRE (PED. 1050x700)	BARS (1050x700)
2	4204646	1	BARRE (PED. 1050x770)	BARS (1050x770)
2	4204647	1	BARRE (PED. 1050x900)	BARS (1050x900)
2	4204648	1	BARRE (PED. 1250x800)	BARS (1250x800)
3	2824027	2	CARTER DI CERNIERA EN	HINGE CASING EN
3	2824460	2	CARTER DI CERN. (PED. 1250x800)	HINGE CASING (1250X800)
3	2824414	2	CARTER CERNIERA	HINGE CASING
4	2824478	2	COFANO FIANC EN	SIDE CASING EN
4	2824452	2	COFANO FIANC (PED. 1250x800)	SIDE CASING (PLATFORM 1250X800)
4	2824411	2	COFANO FIANCO V65	SIDE CASING V65
5	2504172	1	CAMMA COF. SX	LH CASING CAM
6	0482064	1	TAPPO	CAP
7	2504158	1	CAMMA E FERMO ANTIVANDALO	TAMPER-PROOF STOP AND CAM
8	3424294	2	PIASTRINA	PLATE
9	4404243	3	CERNIERA	HINGE
10	3334017	1	BLOCCO CAMME DX	RH CAM BLOCK
10	3334016.3	1	BLOCCO CAMME SX	LH CAM BLOCK
11	1334048	1	BUSSOLA	BUSH
12	1334059	1	BUSSOLA GLY 28	BUSH GLY 28
13	1334060	1	BUSSOLA GLY 20	BUSH GLY 20
14	2564029	1	GANCIO PER CAVO	CABLE HOOK
15	2254635	1	CAVO	CABLE
16	2754019	1	FORCELLA	FORK
17	6102008	1	MOTORE	MOTOR
18	1334052	2	BOCCOLA	BUSH
19	3774016	1	REGISTRO	REGISTER
20	2752009	1	FORCELLA	FORK
21	1302013	1	BLOCCO	BLOCK
22	22540001	1	CAVO BANDELLA	GUARD BOARD CABLE
23	2304361	1	LAMIERA DI SBLOCCO	RELEASE SHEET PLATE
24	1902027	1	MICRO LAVORO	WORKING POSITION MICRO.
25	1902030	1	MICRO ANT.COLL.	ANTI COLL. MICROSWITCH
26	0904144	2	DISTANZIALE	SPACER
27	5214099	2	PIASTRA	PLATE

SAFETY BARS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
28	1902024	1	MICRO RIPOSO	REST POSITION MICROSWITCH
29	0010166	2	DADO INGABBIATO	CAGE NUT
30	0714127	2	MOLLA INCERN. FIANCHETTO	SENSITIVE EDGE HINGE SPRING
31	2824412	1	CARTER ANTERIORE	FRONT CASING
32	2824413	1	CARTER POSTERIORE	REAR CASING
33	0012293	1	SPINA UNI-ISO 8748-6x30-St	PIN UNI-ISO 8748-6x30-St
34	0012124	1	ANELLO ELASTICO EST.DIN 471-8	EXTERNAL SNAP RING DIN 471-8
35	0012288	1	SPINA UNI-ISO 8748-3x10-St	PIN UNI-ISO 8748-3x10-St
36	0010421	1	VITE UNI5931-M6x35-8 T.FIL.	SCREW UNI5931-M6x35-8 T.FIL.
37	0010072	1	DADO AUT. UNI 7474-M6-8	LOCK-NUT UNI 7474-M6-8
38	0010766	1	GRANO UNI 5923 M6x20 - 8	DOWEL UNI 5923 M6x20 - 8
39	0010013	1	DADO ES.tipo1 ISO 4032-M6-8	HEXAGONAL NUT type1 ISO 4032-M6-8
40	0010492	2	VITE TCCE UNI 5931-M4x50-8	SCREW TCCE UNI 5931-M4x50-8
41	0904144	4	DISTANZIALE MICRO L10	MICROSWITCH SPACER L10
42	5214099	1	PIASTRINA FISSAGGIO MICRO	MICROSWITCH FIXING PLATE
43	0010212	1	VITE TE ISO 4017-M10x30-8	SCREW TE ISO 4017-M10x30-8
44	0012376	1	ROSETTA UNI 6592 - 10	WASHER UNI 6592 - 10
45	0010028	1	DADO AUT. UNI 7473-M10-8	LOCK-NUT UNI 7473-M10-8
46	0012800.3	1	LINGUETTA UNI 6604-A 5x5x50	TANG UNI 6604-A 5x5x50
47	0010882	1	VITE ISO7049-ST4.2x9.5-8-C-HZN	SCREW ISO7049-ST4.2x9.5-8-C-HZN
48	0010636	6	VITE UNI-ISO 7380-M5x16-INOX	SCREW UNI-ISO 7380-M5x16-ST.ST.
49	0010391	2	VITE TCCE UNI 5931-M4x35-8	SCREW TCCE UNI 5931-M4x35-8
50	2864910	1	STAFFA FISS. CAMMA ANTIVAN.	ANTI-TAMPER CAM FIXING BRACKET
51	2504173	1	CAMMA COF. DX	RH CASING CAM
52	2384032	1	ALBERO PER BARRE V64-V65	SHAFT FOR BARS V64-V65
53	0012773	1	LINGUETTA UNI 6604-A 5x5x25	TAB UNI 6604-A 5x5x25
54	0010123	1	VITE TE ISO 4017-M8x20-INOX	SCREW TE ISO 4017-M8x20-ST. ST.
55	0010318	1	ROSETTA 8x32x2 F.L. INOX	WASHER 8x32x2 F.L. ST. ST.

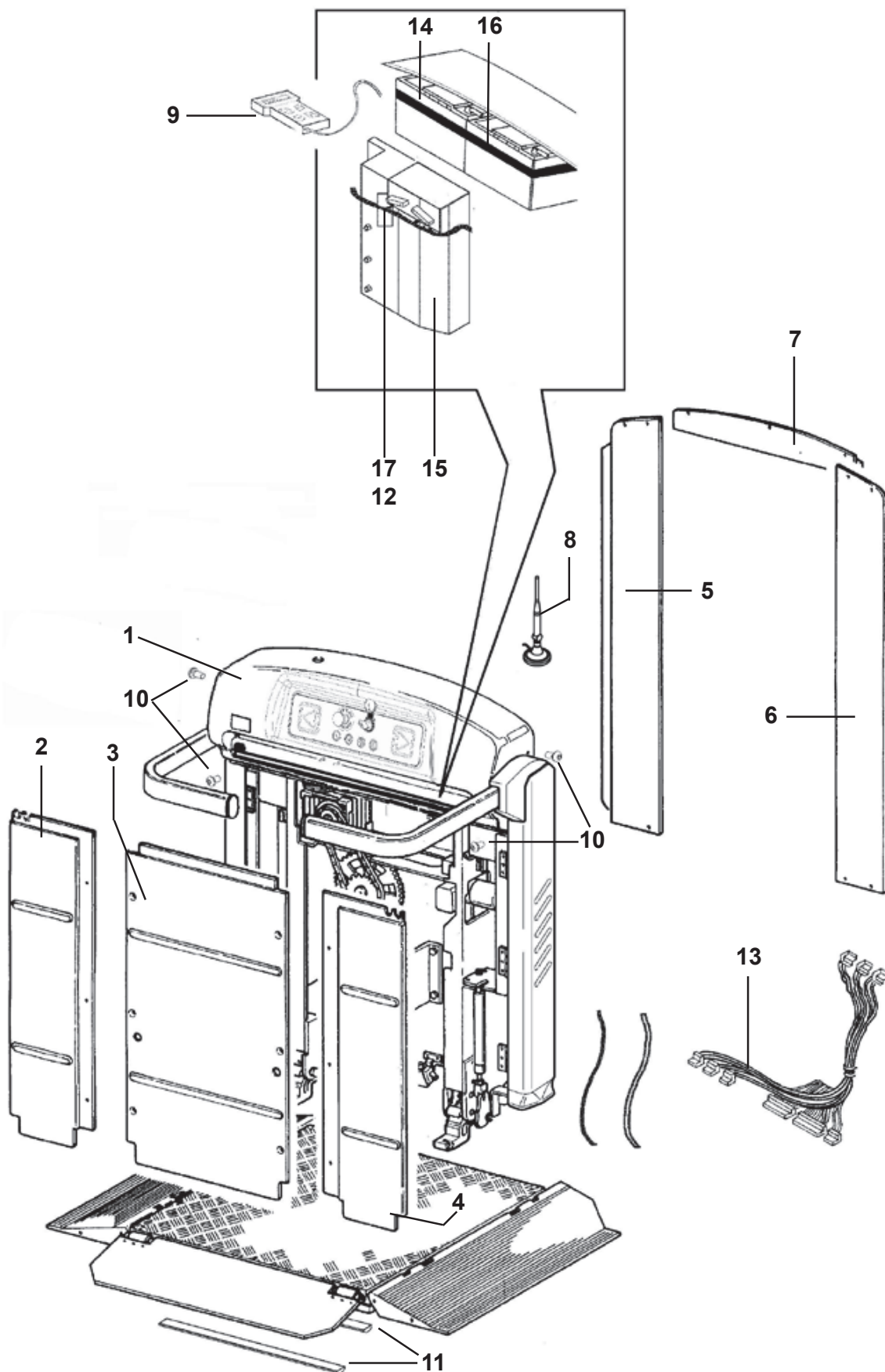


RETRACTABLE SAFETY BARS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2894814	1	SUPPORTO BARRA DX	RH BAR SUPPORT
1	2894815	1	SUPPORTO BARRA SX	LH BAR SUPPORT
2	4204141	1	BARRA RETRAT. DX "650" V64/65	RH RETRACTABLE BAR "650" V64/65
2	4204143	1	BARRA RETRAT. DX "700"	RH RETRACTABLE BAR "700"
2	4204145	1	BARRA RETRAT. DX "770"	RH RETRACTABLE BAR "770"
2	4204142	1	BARRA RETRAT. SX "650" V64/65	LH RETRACTABLE BAR "650" V64/65
2	4204144	1	BARRA RETRAT. SX "700"	LH RETRACTABLE BAR "700"
2	4204146	1	BARRA RETRAT. SX "770"	LH RETRACTABLE BAR "770"
2	4204234	1	BARRA RETRAT. DX "600"	RH RETRACTABLE BAR "600"
2	4204235	1	BARRA RETRAT. SX "600"	LH RETRACTABLE BAR "600"
2	4204579	1	BARRA RETRAT. DX "900" V64/65	RH RETRACTABLE BAR "900" V64/65
3	0012131	2	ANELLO	RING
4	2824411	2	COFANO	CASING
5	4404033	2	CERNIERA	HINGE
6	3084052	1	ASTA ANTISC.	ANTISLIP ROD
7	4664035	2	PATTINO	GUIDE SHOE
8	1304201	1	PERNO	PIN
9	2894868	2	SUPPORTO SPAZZOLA	BRUSH SUPPORT
10	2304469	1	LAMIERA	SHEET PLATE
11	3494214	1	PIGNONE	SPROCKET
11	3494213	1	PIGNONE	SPROCKET
12	0714094	1	MOLLA	SPRING
13	2894816	1	SUPPORTO MICRO	MICROSWITCH SUPPORT
14	2304457	1	LAMIERA SUPPORTO DX	RH SUPPORT SHEET PLATE
14	2304477	1	LAMIERA SUPPORTO SX	LH SUPPORT SHEET PLATE
15	0010393	1	VITE	SCREW
16	1714039	1	MOTORE	MOTOR
17	2304456	1	LAMIERA MOT. DX V65	V65 RH MOTOR SHEET PLATE
17	2304480	1	LAMIERA MOT. SX V65	V65 LH MOTOR SHEET PLATE
18	2255539	1	GUAINA MICRO DX SQ17-SQ001	SQ17-SQ001 RH MICROSWITCH SHEATH
18	2255486	1	GUAINA MICRO SX SQ10-SQ13	SQ10-SQ13 LH MICROSWITCH SHEATH
19	2824413	1	CARTER POSTERIORE	REAR CASING
20	2864910	1	STAFFA FISS. CAMMA ANTIVAN	ANTI-TAMPER CAM FIXING BRACKET
21	6734030	1	CATENA COMPL. DX PER BAR. RETR.	COMPLETE RH CHAIN FOR RETRACTABLE BARS
21	6734032	1	CATENA COMPL. SX PER BAR. RETR.	COMPLETE LH CHAIN FOR RETRACTABLE BARS
22	3494337	1	PIGNONE	SPROCKET
23	1304198	1	PERNO	PIN
24	0012933	2	ANELLO	RING
25	0012380	1	ROSETTA	WASHER

RETRACTABLE SAFETY BARS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
26	0010212	1	VITE	SCREW
27	0714166	1	MOLLA ANTISC.	ANTISLIP SPRING
28	1304199	1	PERNO	PIN
29	0010013	1	DADO	NUT
30	0010015	1	DADO	NUT
31	0714165	2	MOLLA	SPRING
32	2904044	1	LEVA RINVIO SBLOCCO SX	LH RELEASE TRANSMISSION LEVER
32	2904043	1	LEVA RINVIO SBLOCCO DX	RH RELEASE TRANSMISSION LEVER
33	0010015	1	DADO AUT. UNI 7473-M6-8	LOCK-NUT UNI 7473-M6-8
34	4304028	1	CAMMA FINECORS A VERS. 600	600 VERSION LIMIT SWITCH CAM
35	2894816	1	SUPP. MICRO VERSIONE 600	600 VERSION MICROSWITCH SUPPORT
36	2504158	1	CAMMA E FERMO ANTIVANDALO	TAMPER-PROOF STOP AND CAM
37	0714119	2	MOLLA INCERN. FIANCHETTO	SENSITIVE EDGE HINGE SPRING
38	3514006	1	SPAZZOLA DX	RH BRUSH
38	3514007	1	SPAZZOLA SX	LH BRUSH
39	2824417	1	CARTER PER CERNIERA DX EN	RH HINGE CASING EN
39	2824416	1	CARTER PER CERNIERA SX EN	LH HINGE CASING EN
40	2824412	1	CARTER ANTERIORE	FRONT CASING
41	0164197	2	BUSSOLA	BUSH
42	0010636	6	VITE UNI-ISO 7380-M5x16-INOX	SCREW UNI-ISO 7380-M5x16-ST.ST.
43	0014045	3	RIVETTO A 3,2x10 UNI9200 AL/A2	RIVET A 3,2x10 UNI9200 AL/A2
44	0010210	1	VITE TE ISO 4014-M6x50	SCREW TE ISO 4014-M6x50
45	0010013	1	DADO ES. tipo 1 ISO 4032-M6-8	HEXAGONAL NUT type 1 ISO 4032-M6-8
46	0010537	4	VITE TSPCE UNI 5933-M5x10-INOX	SCREW TSPCE UNI 5933-M5x10-ST.ST.



GUARDS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2824071	1	COFANO SUPERIORE "1050"	UPPER CASING "1050"
1	2824070	1	COFANO SUPERIORE "830"	UPPER CASING "830"
2	2824404	1	COFANO LATERALE "1050" SX	LH SIDE CASING "1050"
2	2824404UL	1	COFANO LATERALE "1050" EN	SIDE CASING "1050" EN
3	2824406	1	COFANO FRONTALE 1050	FRONT CASING 1050
3	2824406UL	1	COFANO FRONTALE "1050" EN	FRONT CASING "1050" EN
3	2824009	1	COFANO FRONTALE SX "830"	LH FRONT CASING "830"
3	2824409UL	1	COFANO FRONTALE SX "830" EN	LH FRONT CASING "830" EN
3	2824410	1	COFANO FRONTALE DX "830" EN	RH FRONT CASING "830" EN
3	2824410UL	1	COFANO FRONTALE DX "830"	RH FRONT CASING "830"
4	2824405	1	COFANO LATERALE "1050" DX	RH SIDE CASING "1050"
5	2824370	1	COFANO POST. SX "1050"	LH REAR CASING "1050"
5	2824656	1	COFANO POST. SX "830"	LH REAR CASING "830"
5	2824370UL	1	COFANO POSTERIORE SX "1050" EN	LH REAR CASING "1050" EN
5	2824656UL	1	COFANO POSTERIORE SX "830" EN	LH REAR CASING "830" EN
6	2824369	1	COFANO POST. DX "1050"	RH REAR CASING "1050"
6	2824657	1	COFANO POST. DX "830"	RH REAR CASING "830"
6	2824369UL	1	COFANO POSTERIORE DX "1050" EN	RH REAR CASING "1050" EN
6	2824657UL	1	COFANO POSTERIORE DX "830" EN	RH REAR CASING "830" EN
7	2824366	1	COFANO POST. SUP. "1050"	UPPER REAR CASING "1050"
7	2824371	1	COFANO POST. SUP. "830"	UPPER REAR CASING "830"
7	2824030	1	COFANO POSTERIORE SUPERIORE DX "830" EN	RH UPPER REAR CASING "830" EN
7	2824039	1	COFANO POSTERIORE SUPERIORE DX "1050" EN	RH UPPER REAR CASING "1050" EN
8	5292014	1	ANTENNA	ANTENNA
9	2064123	1	CONSOLE PER TESTER	TESTER CONSOLE
10	0010636	4	VITI	SCREWS
11	2894719	2	PROFILO IN GOMMA L=780	RUBBER STRIP L=780
11	2894722	2	PROFILO IN GOMMA L=980	RUBBER STRIP L=980
11	28940005	2	PROFILO IN GOMMA L=1180	RUBBER STRIP L=1180
12	2064127	1	SCHEDE RELE' GEN. V65 ELETT.	V65 GEN. RELAY ELECTR. CARD
13	2256005	1	GUAINA V65 ELETT.	ELECTRONIC V65 SHEATH
14	0782012	1	GINGHIETTA ELASTICA X BAT.	ELASTIC BELT FOR BATTERY
15	2064113	1	CONTR. POT. BR. + SIC.	BRUSHLESS MOTOR POWER CONTROL + CUTOUT
16	1704015	1	BATT. FIAMM 24V 18AH FGC21803	BATTERY, FIAMM 24V 18AH FGC21803



GUARDS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
-----	--------	------	-------------	-------------

17	2255106	1	GUAINA INCLINOMETRI V65 ELET.	ELECTRONIC V65 INCLINOMETERS SHEATH
----	---------	---	-------------------------------	-------------------------------------



1



2



3



4



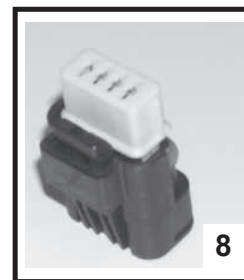
5



6



7



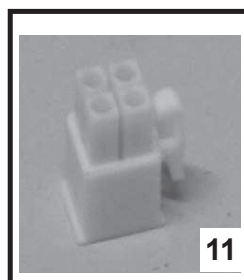
8



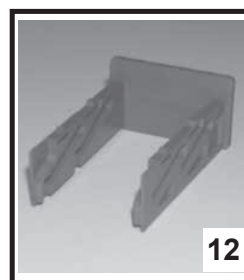
9



10



11



12



13



14



15



16

CONNECTORS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2412012	1	FASTON	"FASTON" CONNECTION UNIT
2	2412029	1	FASTON	"FASTON" CONNECTION UNIT
3	2412045	1	FASTON	"FASTON" CONNECTION UNIT
4	2412028	1	FASTON	"FASTON" CONNECTION UNIT
5	1892013	1	CONNETTORE GRIGIO	GREY CONNECTOR
6	2412035	1	FASTON	"FASTON" CONNECTION UNIT
7	1892052	1	CONNETTORE	CONNECTOR
8	1892041	1	CONNETTORE	CONNECTOR
9	1892033	1	CONNETTORE	CONNECTOR
10	1892012	1	CONNETTORE NERO	BLACK CONNECTOR
11	1892068	1	CONTATTO	CONTACT
12	1892005	1	SLITTA	SLIDE
13	1892026	1	CLIP FISSAGGIO	FIXING CLIP
14	1892034	1	CONNETTORE	CONNECTOR
15	1892034	1	CONNETTORE	CONNECTOR
16	1892027	1	CONNETTORE	CONNECTOR

RAIL

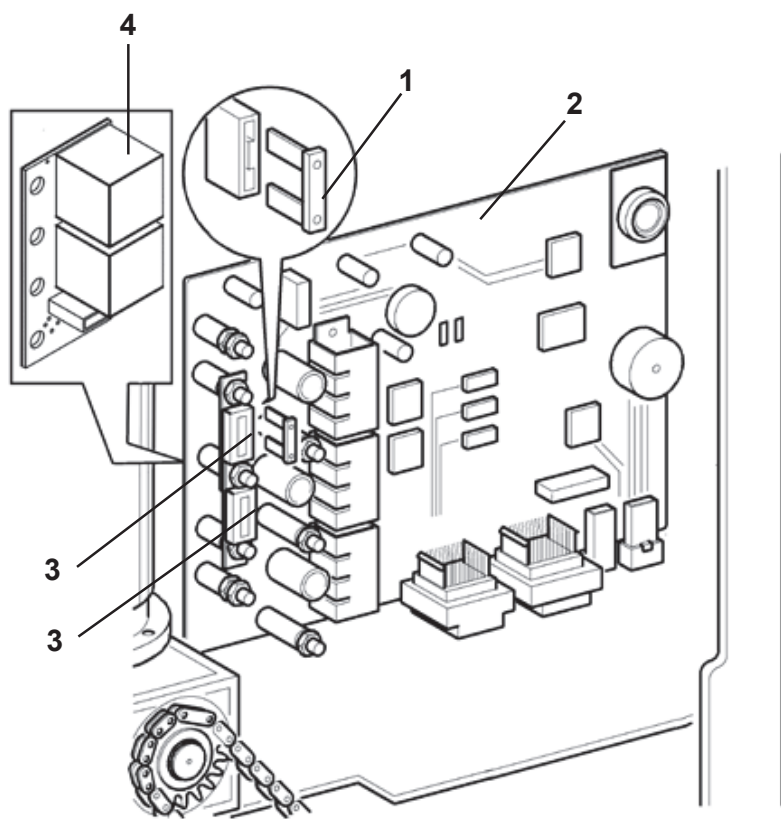
RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	4294092	2	GIUNZIONE BLINDOSBARRA	BUSBAR JOINT
2	5214372	1	PIATTO GIUNZ. BLINDO	BUSBAR JOINT PLATE
3	2864179.1	1	STAFFA FISSAGGIO ULTIMO PIEDE	LAST FOOT FIXING BRACKET
4	0484017	-	TAPPO PER TUBO	TUBULAR RAIL CAP
5	4204258	1	BARRA FILETTATA	THREADED BAR
6	2864393.3	1	STAFFA ATTACCO VELA	CONNECTION BRACKET
7	2864178.1	1	STAFFA FISSAGGIO PIEDE	FOOT FIXING BRACKET
8	5214386.1	1	PIEDE GUIDA	RAIL FOOT
9	4342011	3	TASSELLO	EXPANSION PLUG
10	5214402.1	1	COLLEGAMENTO GUIDA	RAIL CONNECTION
11	8884923	1	ALIMENTATORE STAGNO	AIRTIGHT POWER SUPPLY UNIT
12	0484016	4	TAPPO DI TESTA GUIDA	RAIL END CAP
13	5214398	2	PIEDE DI TESTA GUIDA	RAIL END FOOT
14	2504164.3	2	CAMMA FINECORSO	LIMIT SWITCH CAM
15	2864399.2	2	STAFFA SUPPORTO CAMMA	CAM SUPPORT BRACKET
16	0010509	1	VTCCE UNI5931 M6X60 INOX T.F	SCREW TCCE UNI5931 M6X60 ST.ST. T.F
17	0010025	1	DADO M6 UNI5588 INOX	NUT M6 UNI5588 ST.ST.
18	0010510	2	VTCCE UNI5931 M8X60 INOX T.F	SCREW UNI5931 M8X60 ST.ST. T.F
19	0012375	4	ROSETTA UNI6592-8	WASHER UNI6592-8
20	0010024	4	DADO ES. tipo 1 ISO4032-M8-INOX	HEXAGONAL NUT type 1 ISO4032-M8-ST.ST.
21	0010093	3	DADO ES. tipo 1 ISO4032-M4-8 ZB	HEXAGONAL NUT type 1 ISO4032-M4-8 ZB
22	0010380	3	VITE TCCE UNI 5931-M4X16-8 ZB	SCREW TCCE UNI 5931-M4X16-8 ZB
23	2894803	1	PROFILO	PROFILE
24	2892151.3	1	CAVO PIATTO IN RAME	COPPER FLAT CABLE
25	2594416	1	PROTEZIONE PIEDE	FOOT GUARD
26	3424348.3	1	CONTROPIASTRA V65	V65 COUNTER-PLATE
27	6024014	1	ANGOLARE ANTIFLESSIONE M250	ANTI-FLEXURE ANGLE BRACKET M250
28	6024015	1	ANGOLARE ANTIFLESSIONE	ANTI-FLEXURE ANGLE BRACKET
29	4944017	1	RONDELLA	WASHER
30	7004854	1	KIT PIEDE 500	FOOT KIT 500
31	7004856	1	KIT PIEDE 750	FOOT KIT 750
32	7004858	1	KIT PIEDE 1000	FOOT KIT 1000
33	4344401	1	KIT TASSELLI	EXPANSION PLUG KIT
34	1294003	1	ATTREZZATURA	EQUIPMENT



RAIL



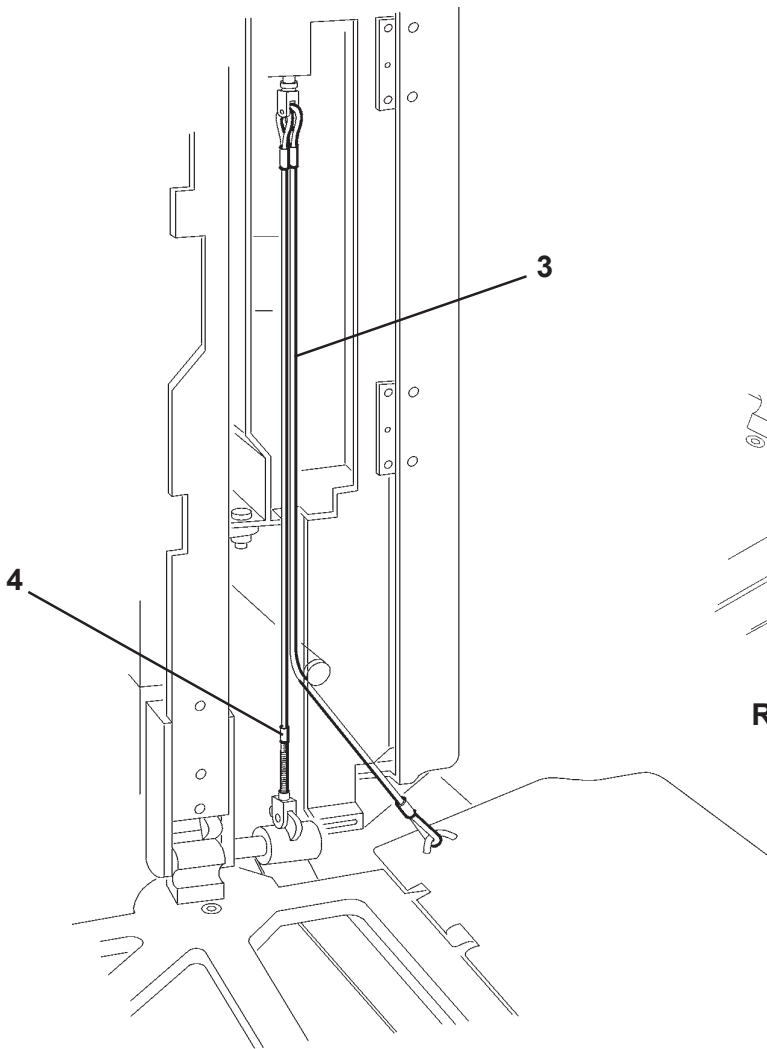
RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
50	001034	7	VITE	SCREW
50	0010098	6	DADO	NUT
50	0010313	6	ROSETTA	WASHER
51	4254272	2	ATTACCO	CONNECTION
52	0010165	4	DADO	NUT
53	6074053	1	INCLINOMETRO	CLINOMETER
54	0010206	2	VITE	SCREW



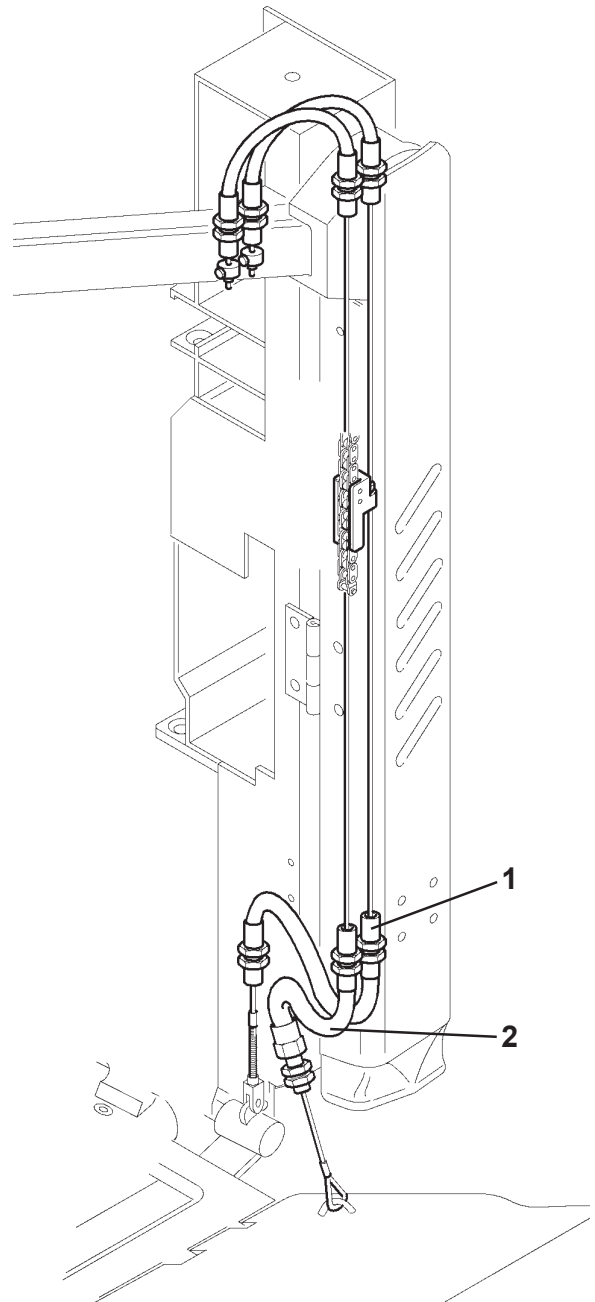


CONTROL CIRCUIT BOARD

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	1872008	1	FUSIBILE 10A 32V AUTOMOT. AL LAMIA	FUSE 10A 32V, AUTOMATIC RESET
2	2064113	1	CONTR. POT. BR. + SIC. ISKRA V65	V65 BRUSHLESS MOTOR POWER CONTROL + CUTOUT, ISKRA
3	1872003	2	FUSIB. 70A 80V PAS.30mm PROTETTO	PROTECTED FUSE 70A 80V PAS.30mm
4	2064127	1	SCHEDA RELE'	RELAY CIRCUIT BOARD



**CONNECTED BARS
INDEPENDENT BARS**

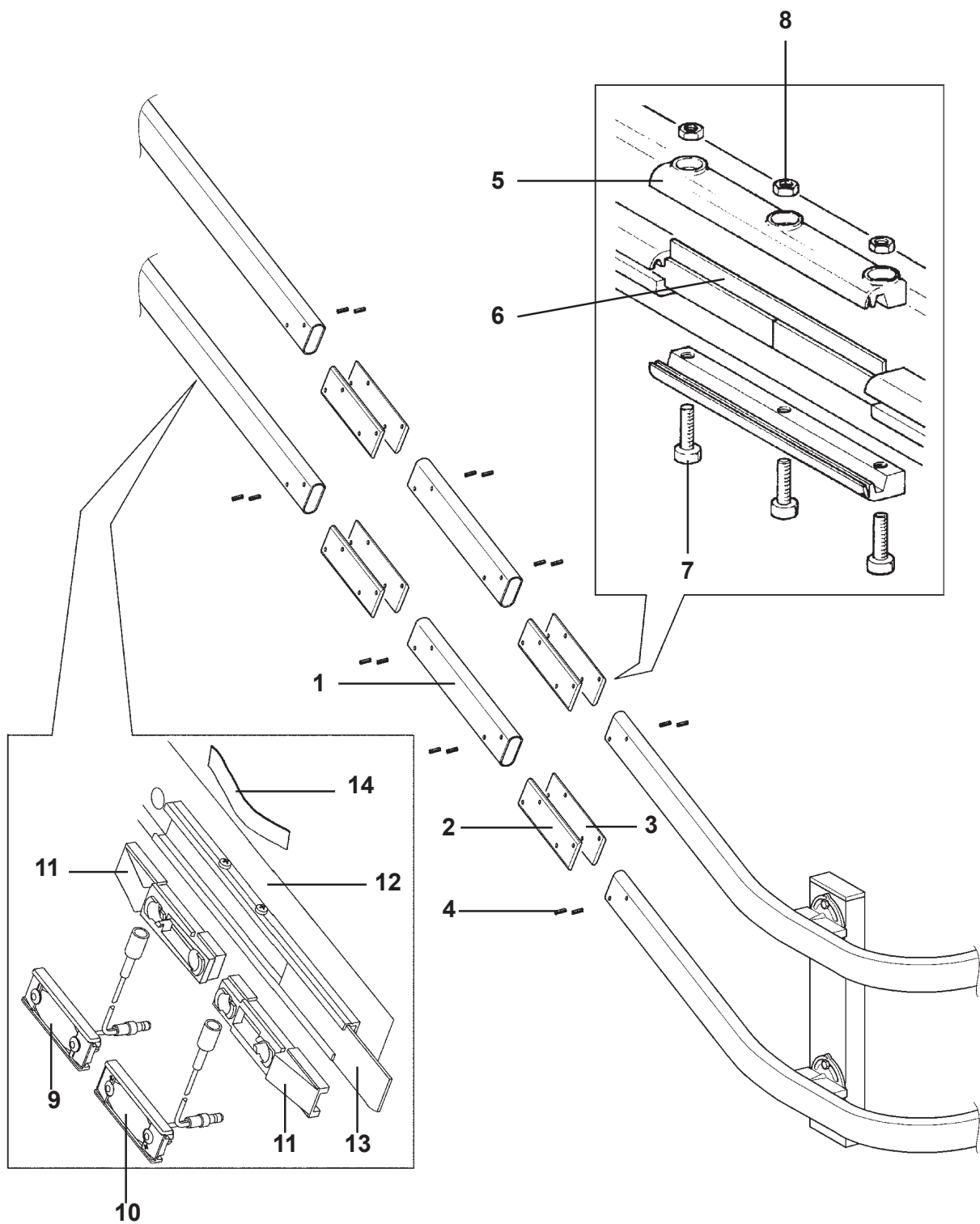


RETRACTABLE BARS



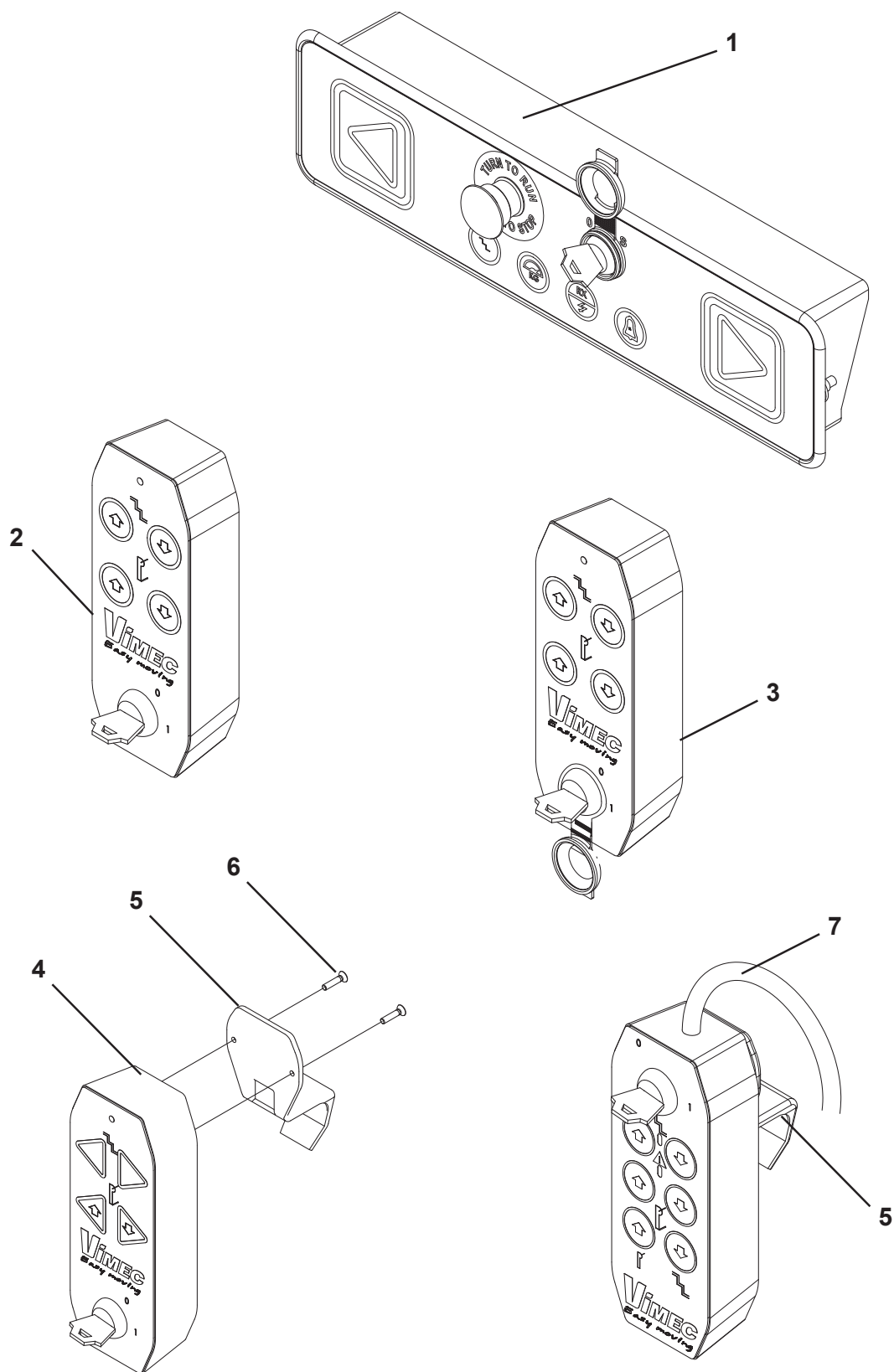
PLATFORM/GUARD BOARD DRIVE CABLES

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	2734021	1	TIRANTE SOLL. BAND. ACC. FRON. V65	FRONT ACCESS GUARD BOARD LIFTING TIE-ROD V65
2	2734020	2	TIRANTE SOLLEVAM. BAND. COMP. V65	COMP. GUARD BOARD LIFTING TIE-ROD V65
3	2254603	2	CAVO PER BANDELLA	GUARD BOARD CABLE
3	2255272	2	CAVO SOL. BANDELLA "PED.1250X800"	GUARD BOARD LIFTING CABLE, PLATFORM 1250X800
4	2734019	1	TIRANTE SOLL. BAND. ACC. FRON.	FRONT ACCESS GUARD BOARD LIFTING TIE-ROD



V65 RAIL JOINTS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	3124613	1	GUIDA V65 x ESTL=70.7 N°5 PASS	V65 RAIL for OUTDOORS L=70.7 No. 5 PASS
1	3124614	1	GUIDA V65 x ESTL=141.4 N°10 PASS	V65 RAIL for OUTDOORS L=141.4 No. 10 PASS
1	3124615	1	GUIDA V65 x ESTL=212.1 N°14 PASS	V65 RAIL for OUTDOORS L=212.1 No. 14 PASS
2	4254546	2	ATTACCO GIUNZIONE FILETTATO	THREADED JOINT CONNECTION
3	4254547	2	ATTACCO GIUNZIONE SVASATO	TAPERED JOINT CONNECTION
4	0010797	8	GRANO UNI 5927 M14x30 DACROMET	DOWEL UNI 5927 M14x30 DACROMET
5	4294092	2	GIUNZIONE BLINDOSBARRA	BUSBAR JOINT
6	5214372	1	PIATTO GIUNZ. BLINDO	BUSBAR JOINT PLATE
7	0010381	3	VITE TCCE UNI 5931-M4x16-8 ZB	SCREW TCCE UNI 5931-M4x16-8 ZB
8	0010004	3	DADO ES. tipo 1 ISO4032-M4-8 ZB	HEXAGONAL NUT type 1 ISO4032-M4-8 ZB
9	2004013	1	BASETTA -	CHARGING SHOE -
10	2004014	1	BASETTA +	CHARGING SHOE +
11	28940002	2	SUPPORTO CONTATTO	CONTACT SUPPORT
12	28941078	1	SUPPORTO	SUPPORT
13	5214018	1	PIATTO PVC NERO	BLACK PVC PLATE
14	0272028	1	NASTRO BIADESIVO	BIADHESIVE TAPE



CONTROL BOARDS

RIF	CODICE	QTA'	DESCRIZIONE	DESCRIPTION
1	1854689	1	PULS. RADIO BORDO V64/V65<15M	ON BOARD RADIO CONTROLS V64/V65<15M
1	1854690	1	PULS.RADIO BORDO V65>15M	ON BOARD RADIO CONTROLS V65>15M
2	6754149	1	TRASMETTITORE 2.4 GHZ PER INTERNI	TRANSMITTER 2.4 GHZ FOR INDOORS
3	6754150	1	TRASMETTITORE 2.4 GHZ PER ESTERNI	TRANSMITTER 2.4 GHZ FOR OUTDOORS
4	6754170	1	TRASMETTITORE PER ACCOMPAGNATORE	TRANSMITTER FOR ATTENDANT
5	2894684	1	SUPPORTO PULSANTIERA ACCOMPAGNATORE	PUSH-BUTTONS HOLDER FOR ATTENDANT
6	0010512	2	VITE	SCREW
7	1854220	1	PULS. AS. 6P2LEDSET V6465EL	CONTROL BOARD AS. 6P2LEDSET V6465EL