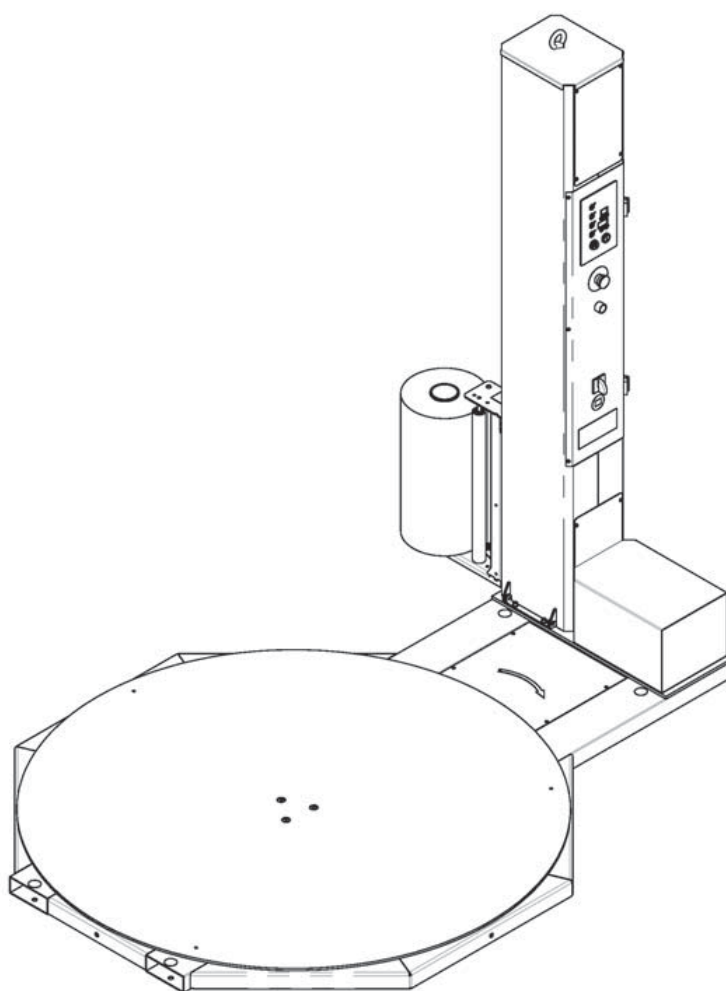
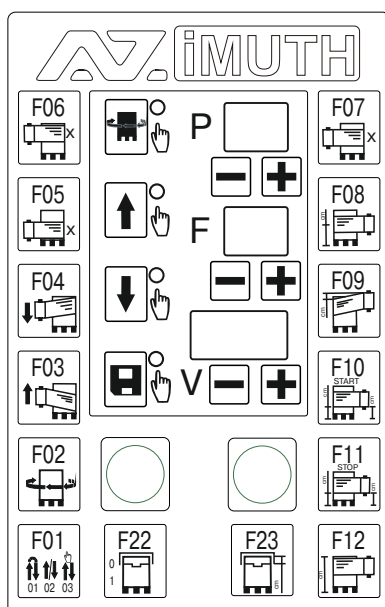


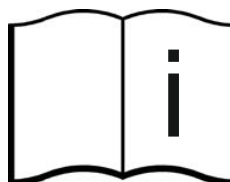
INSTALLATION, USE AND MAINTENANCE MANUAL

AZIMUTH 3000 SERIES

ATHIMUTH



Code	
Revisione	
Edition	



Please, read this user's manual carefully and keep it for future reference.

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0. FOREWORD

0.1 HOW TO READ AND USE THE INSTRUCTIONS MANUAL

0.1.1 THE IMPORTANCE OF THE MANUAL

The instruction manual is to be considered as an integral part of the product; keep it and look after it throughout the lifetime of the machine and hand it on to any other users or subsequent owners.

All the instructions contained in the manual must be followed by both operators and qualified staff in order to correctly and safely install, start, use and service the machine.

In the event of doubts or problems, contact the technical service centres.

0.1.2 SAFE KEEPING THE MANUAL

Use the manual in such a way as not to damage all or part of the contents. On no account should any parts of this manual be removed, torn out or rewritten.

Keep the manual in places protected from humidity and heat.

Keep this manual and all the related publications in an accessible place known to all the operators.

All use and maintenance operations concerning commercial machine components that are not indicated in this manual are contained in the relative publications attached to it.

0.1.3 CONSULTING THE MANUAL

This instruction manual is made up of:

- COVER WITH MACHINE IDENTIFICATION
- INSTALLATION AND ASSEMBLAGE
- INSTRUCTIONS AND/OR NOTES ON SAFETY USE OF THE PRODUCT
- ATTACHMENTS

0.1.4 COPYRIGHT

This manual contains confidential industrial information belonging to Manufacturer. All rights are reserved and may be protected by copyright or other ownership laws and treaties.

No part of this manual may be reproduced in any form or by any means without explicit permission from Manufacturer.

0.1.5 INFORMATION ON THE IMAGES AND CONTENTS

The illustrations in this manual have been included solely by way of example for better understanding of what is described. This document may be subject to change by Manufacturer. Without prior notice, but the information on safe use is still guaranteed.

0.1.6 UPDATE OF THE INSTRUCTION MANUAL

The essential features of the type of machine described being understood, Manufacturer reserves the right to make any modifications to the devices, details and accessories as it sees fit for product improvement or for construction or commercial requirements.

0.1.7 SYMBOLS – MEANING AND USE

Typographic messages and symbols are used in this manual to refer to particular procedures which, if not observed, could cause damage to people, animals, things and the environment.



Danger

Indicates a hazard with the risk of mortal injury.
Failure to observe warnings marked by this symbol can lead to a situation of serious risk to the safety of the operator and/or exposed persons.



Warning

Indicates a hazard with the risk of danger to the machine or the product being processed.
Failure to observe warnings marked by this symbol can lead to malfunction or damage to the machine.



Information

Indicates notes and advice for practical machine use in the different operating modes.

0.2 WHO THE MANUAL IS FOR

MACHINE OPERATOR:

Trained operator who after an appropriate training course on use of the machine will be able to carry out the most simple machine adjustments.

MECHANICAL MAINTENANCE TECHNICIAN:

Qualified technician able to operate the machine like the machine operator and work on the mechanical devices for adjustment, maintenance and repair. The mechanical maintenance technician is not qualified to perform operations on live electrical systems.

MAINTENANCE ELECTRICIAN:

Qualified technician able to operate the machine like the machine operator, make adjustments and work on electrical systems for maintenance and repair.

SPECIALISED TECHNICIAN OF THE MANUFACTURER:

Qualified technician of the manufacturer or his distributor able to operate the machine like the machine operator, work on the mechanical devices and on the electrical system for adjustments, maintenance, repairs and complex operations when agreed with the user.

EXPOSED PERSON:

Any person partially or fully in a hazardous zone.

1. SAFETY AND ACCIDENT PREVENTION

1.1 GENERAL SAFETY INSTRUCTIONS

- Before starting work, the operator must be perfectly familiar with the position and functioning of all the controls and machine features. Daily check all the safety devices on the machine.
- Before starting the working cycle, the operator must ensure that there are no EXPOSED PERSONS in the HAZARDOUS ZONES.
- The employer must provide and instigate the use of personal protective equipment conforming to the prescriptions of Directive 89/391/EEC (and subsequent revisions). While using and carrying out maintenance on the machine the use of personal protective equipment (PPE) such as safety footwear and overalls, approved for accident prevention, is obligatory.
- The areas where the operator stands must always be kept clear and free of oily residues.
- It is forbidden to approach the machine moving parts, such as the carriage and turntable, while the machine is running.
- It is strictly prohibited to operate the machine in automatic mode with the fixed and/or mobile safety guards removed.
- It is strictly prohibited to disable the safety devices installed on the machine.
- Any adjustment operations that need to be carried out with some of the safety devices disabled must be performed by one person only, and unauthorised persons may not access the machine during this time.
- The room in which the machine is housed must not have any shadow areas, annoying bright lights or hazardous stroboscopic effects caused by the lighting supplied.
- The machine can operate in clear air conditions at ambient temperatures of +5°C to +40°C.
- The machine must be used exclusively by qualified personnel.



THE MACHINE MUST ONLY BE USED BY ONE OPERATOR AT A TIME, USE OF THE MACHINE BY 2 OR MORE OPERATORS AT THE SAME TIME

DURING ALL MAINTENANCE, REPAIR OR ADJUSTMENT OPERATIONS, IT IS OBLIGATORY TO TURN THE MAIN SWITCH TO (0).



IT IS ADVISABLE TO POST A WARNING SIGN ON THE CONTROL PANEL ON BOARD THE MACHINE OR ON THE MAIN POWER SWITCH (WHATEVER APPLICABLE); THIS SIGN SHOULD READ AS FOLLOWS:

WARNING!

DO NOT TOUCH - MAINTENANCE STAFF AT WORK.



DO NOT REMOVE THE FIXED GUARDS WHEN THE MACHINE IS RUNNING. ALWAYS REFIT THE FIXED GUARDS AFTER ANY MAINTENANCE OPERATION.

As soon as possible after an operation that required disabling of some safety devices, the machine must be restored to a safe state by re-enabling all the safety devices.

Do not for any reason modify parts of the machine (e.g. attachments, holes, finishes, etc.) in order to adapt it to other devices.

We therefore advise you to request any modifications directly from the Manufacturer.

1.2 SAFETY SIGNS

The safety signs (Fig. 1.1) described in this manual, are located on the machine structure at suitable points and warn of the likelihood of danger due to residual risks.

The adhesive stickers, distinguished by yellow and black bands, warn of areas of risk for operators and so maximum care must be taken where these signs are located.

The adhesive stickers applied to the machine must always be kept clean and legible.



High voltage hazard.



Cut off power to the machine before opening the electrical panel



It is obligatory to read the instruction manual carefully before operating the machine.



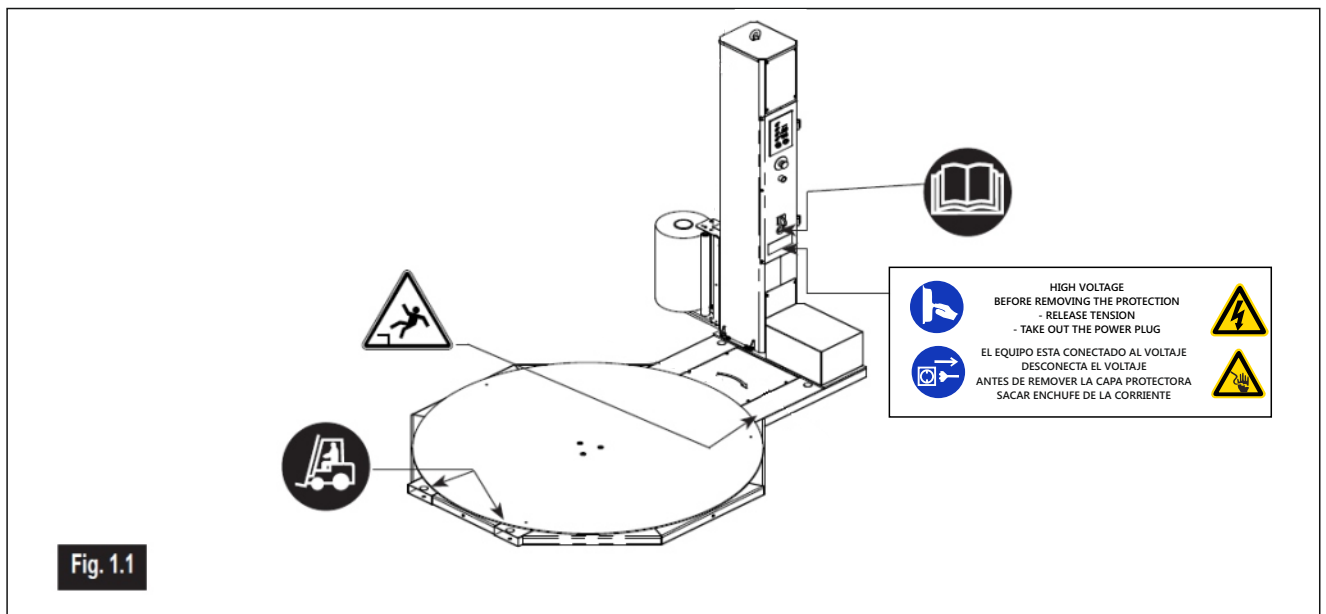
Pick-up point for lifting and handling with a fork lift truck.



It is obligatory to switch off the machine and remove the plug before starting any maintenance operations or repairs.



Danger of falling from the turntable.



1.2.1 WARNINGS OF RESIDUAL RISKS

The machine has been designed and constructed in such a way as to allow the operator to use it safely, eliminating or cutting down to the minimum the possible residual risks by the adoption of safety devices. It has not however been possible to eliminate some risks, listed below (Fig. 1.2), because these are inherent in the way the machine works.



Risk of getting trapped

Never climb onto the turntable (1) while it is moving as you may fall or get caught up in the film winding zone.



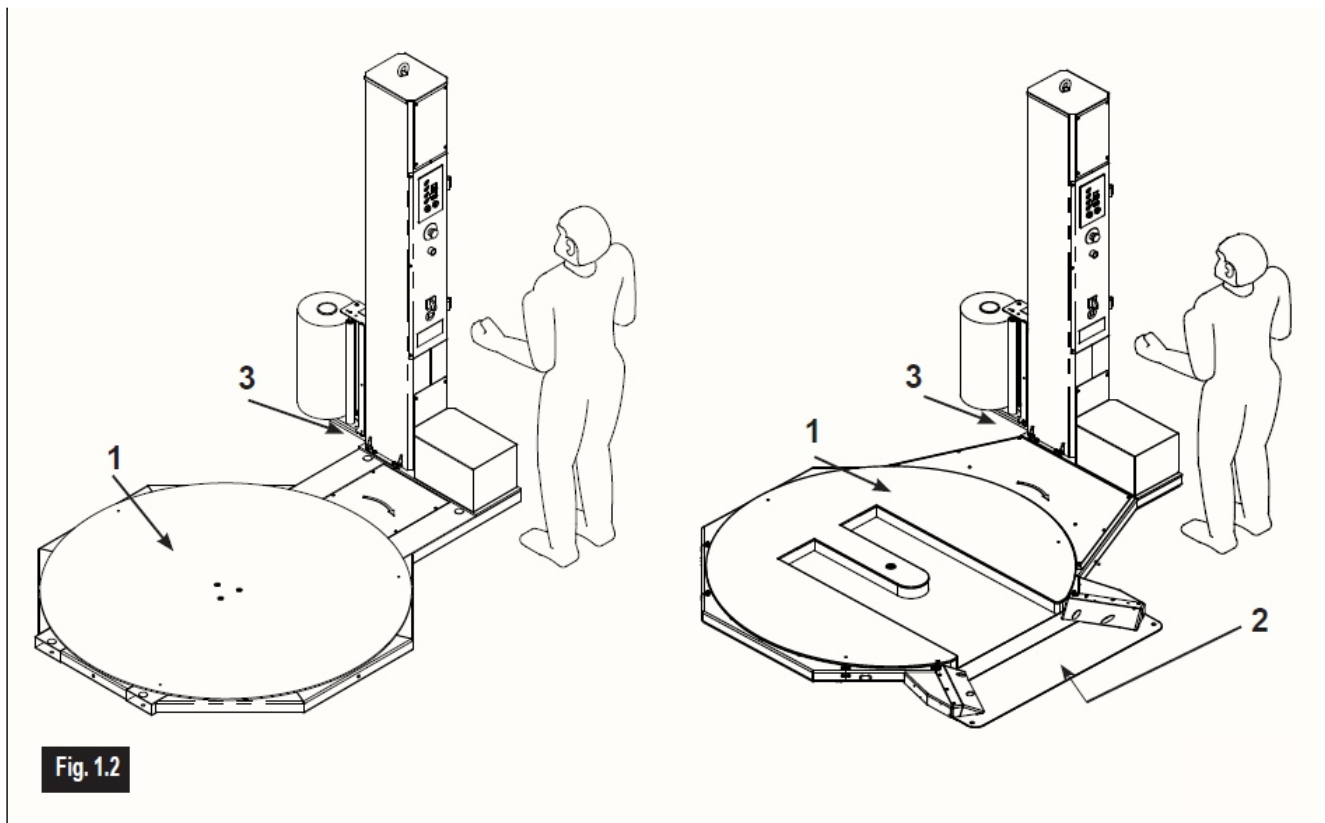
Risk of getting crushed

Do not stand in the area of rotation of the turntable with transpallet compartment as there is a risk of getting crushed. The operator would risk getting a foot caught between the turntable and the base at point (2).



Risk of getting crushed

Do not remain in or pass through the carriage movement area. In the lowering phase there is the risk of impact and being crushed between the carriage safety plate (3) and the ground.



1.3 SAFETY DEVICES



THE MACHINE HAS BEEN DESIGNED AND CONSTRUCTED TO ALLOW SAFE USE IN ALL THE CONDITIONS INTENDED BY THE MANUFACTURER, ISOLATING THE MOVING PARTS AND LIVE COMPONENTS BY THE USE OF SAFETY GUARDS AND SAFETY DEVICES TO STOP THE MACHINE. THE MANUFACTURER DECLINES ALL RESPONSIBILITY FOR DAMAGE OR INJURY TO PERSONS, ANIMALS OR OBJECTS CAUSED BY TAMPERING WITH THE SAFETY DEVICES.

- Emergency button **(A)** (fig.1.3) on the electrical panel.
- The top area of the carriage, where the drive transmission gears are, is protected by fixed guard **(B)**.
- The moving parts of the turntable are protected by fixed guard **(C)**.
- The electrical panel is protected by fixed guard **(D)**.
- Under the carriage there is a mobile plate **(E)** interlocked by a safety switch which, if the plate comes into contact with a foreign object it stops the machine and sends the carriage back up for 2 secs.

N.B: if the machine stops because devices **(E)** has been triggered, the carriage can be sent up to remove the foreign object that triggered it.

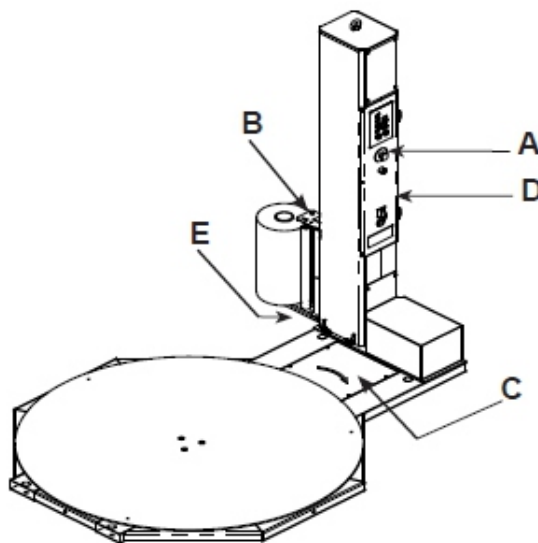


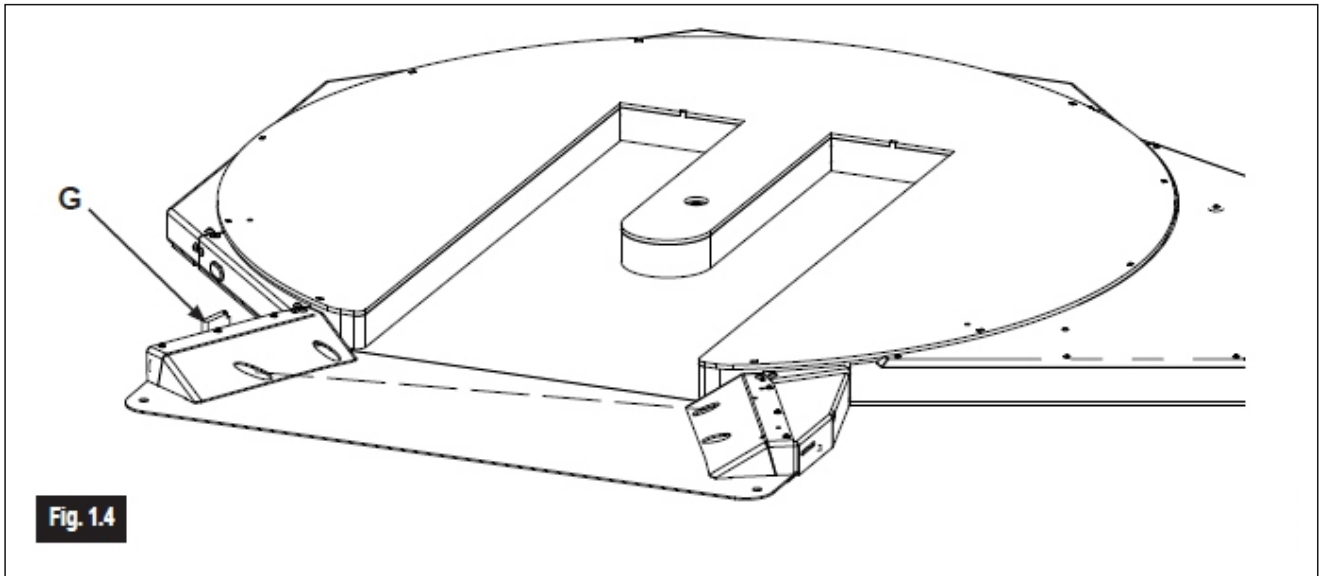
Fig. 1.3

TURNTABLE VERSION WITH TRANSPALLET ACCESS

A photocell (**G**) (Fig. 1.4) is located at the entrance to the transpallet access. If this is obscured it prevents the machine from starting or stops it immediately if it is working.



CHECK THE SAFETY PHOTOCELL BEFORE STARTING WORK.



1.4 TECHNICAL ASSISTANCE

For any orders, assistance or information, the user should contact the Manufacturer quoting the following details:

- Machine model
- Serial number
- Year of manufacture
- Purchase date
- Approximate number of service hours
- Detailed indications regarding a specific operation to be carried out or the fault found.

TECHNICAL ASSISTANCE

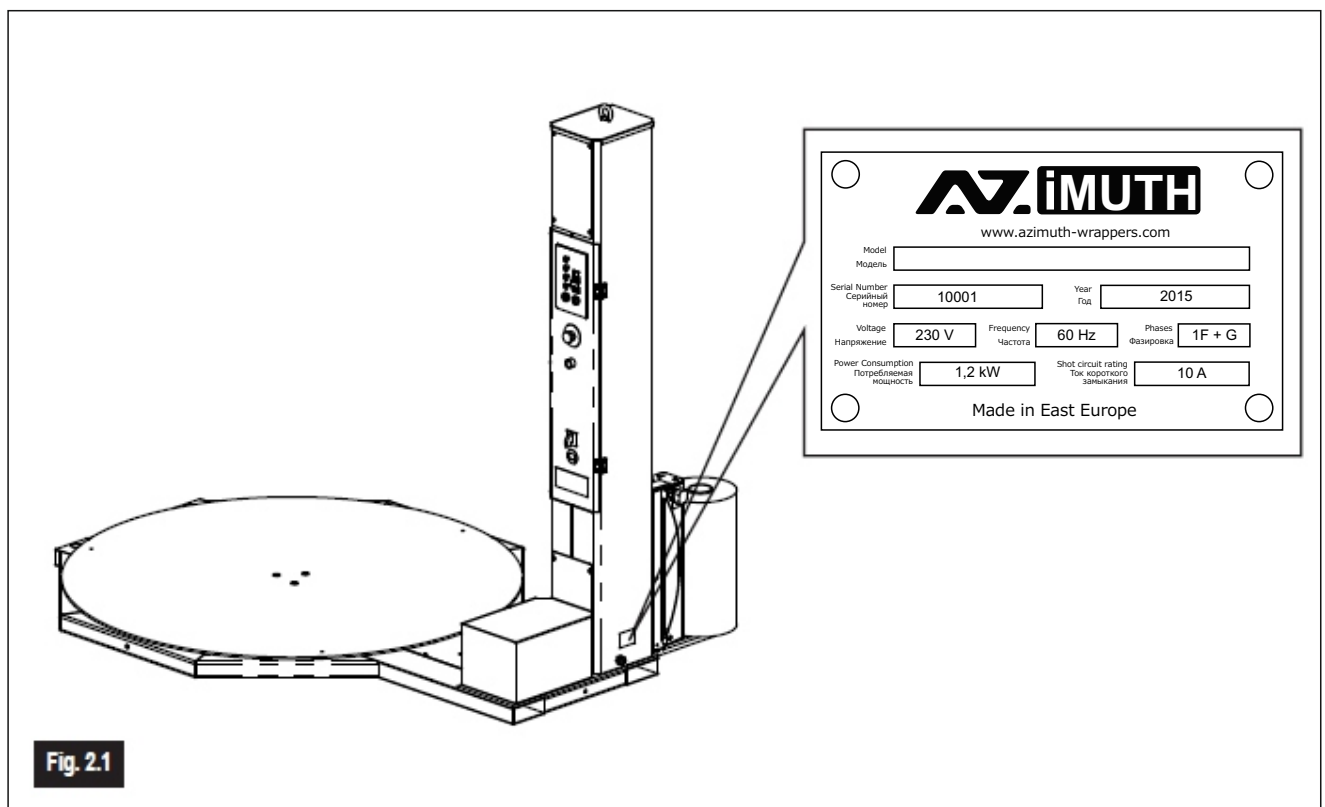
Best performance of our machines can only be maintained and guaranteed if original spare parts are used.

2 MACHINE DESCRIPTION

2.1 MANUFACTURER AND MACHINE

The Identification plate (Fig. 2.1), fixed to the machine chassis, shows the following information:

- Manufacturer's contacts
- Machine model
- Serial number
- Year of manufacture
- Nominal voltage (Un)
- Operating frequency (Hz)
- No. of phases
- Power consumption (kW)
- Short circuit rating (A).



2.2 GENERAL DESCRIPTION

The wrapping machine is a semiautomatic designed to wrap and stabilize palletizable products by means of a stretch film.

In its **standard version**, the machine comprises the following components (see Fig. 2.2):

- 1 Turntable:** table on which the palletised product to be wrapped is placed.
- 2 Column** along which a wrapping tool (wrapping carriage) moves vertically up and down; the vertical movement of the wrapping carriage combined with turntable rotation allows wrapping the product.
- 3 Electric panel**, structure containing the main switch, the control pushbutton panel and the electrical components.
- 4 Carriage:**
delivers film during winding and adjusts its application tension. Tension is governed by a roller fitted with a mechanical brake which can be manually adjusted with a knob located on the carriage.

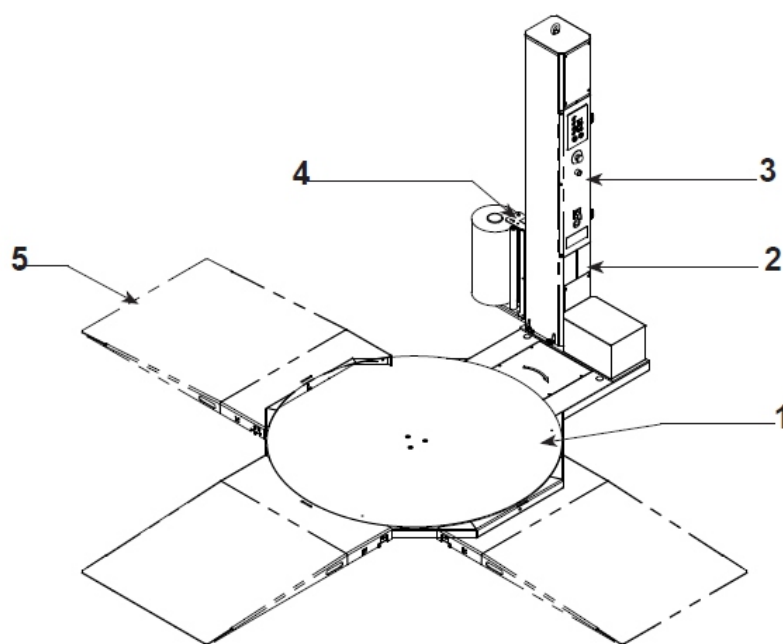


Fig. 2.2

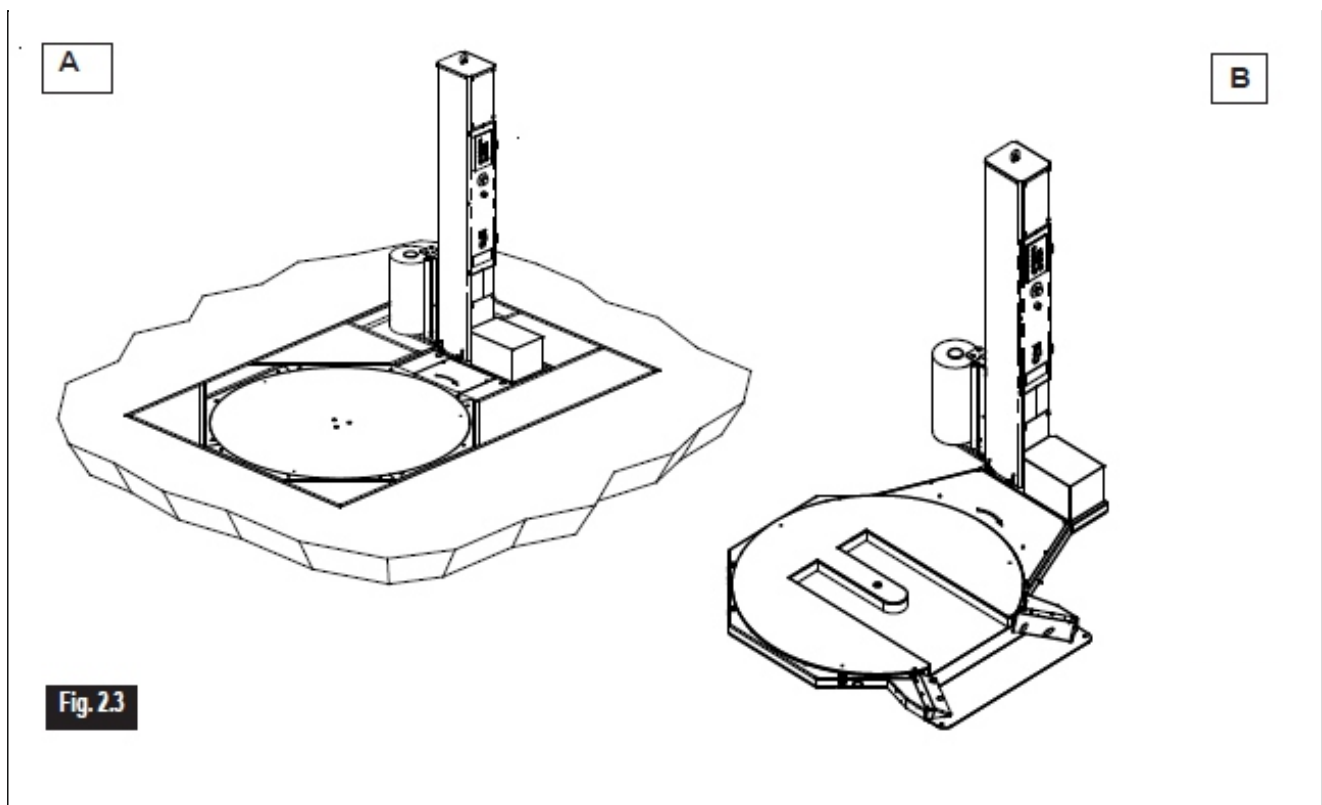
Optional units

The following optional units can be supplied on request:

5 Access ramp: to turntable (not for recessed version). This allows a forklift truck (manual or electric transpallet) to place pallets directly onto the turntable.

The machine may be supplied on request in the following versions:

- Open base with low ramp **B** (Fig. 2.3) to allow a forklift truck (manual or electric transpallet) to enter and place pallets directly onto the turntable
- recessed **A** (Fig. 2.3) for facilitating loading and unloading the pallets as the turntable lies flush with the floor. The customer must prepare a suitably sized hole in the floor for containing the machine in its recessed version.



The machine features four different operating programs, selectable from the operator panel.

2.3 INTENDED USE - PROPER USE - PURPOSE

The wrapping machine, designed to be anchored to the ground, has been designed and constructed for wrapping various types of products stacked on pallets with stretch film, in order to stabilise the package and to protect it from damp and dust during transport and storage.

Using a lifting apparatus, the pallet with the products to be wrapped is placed on the turntable; the stretch film is applied by means of a dedicated carriage which moves on the vertical axis according to the height of the product to be wrapped.

Working limitations

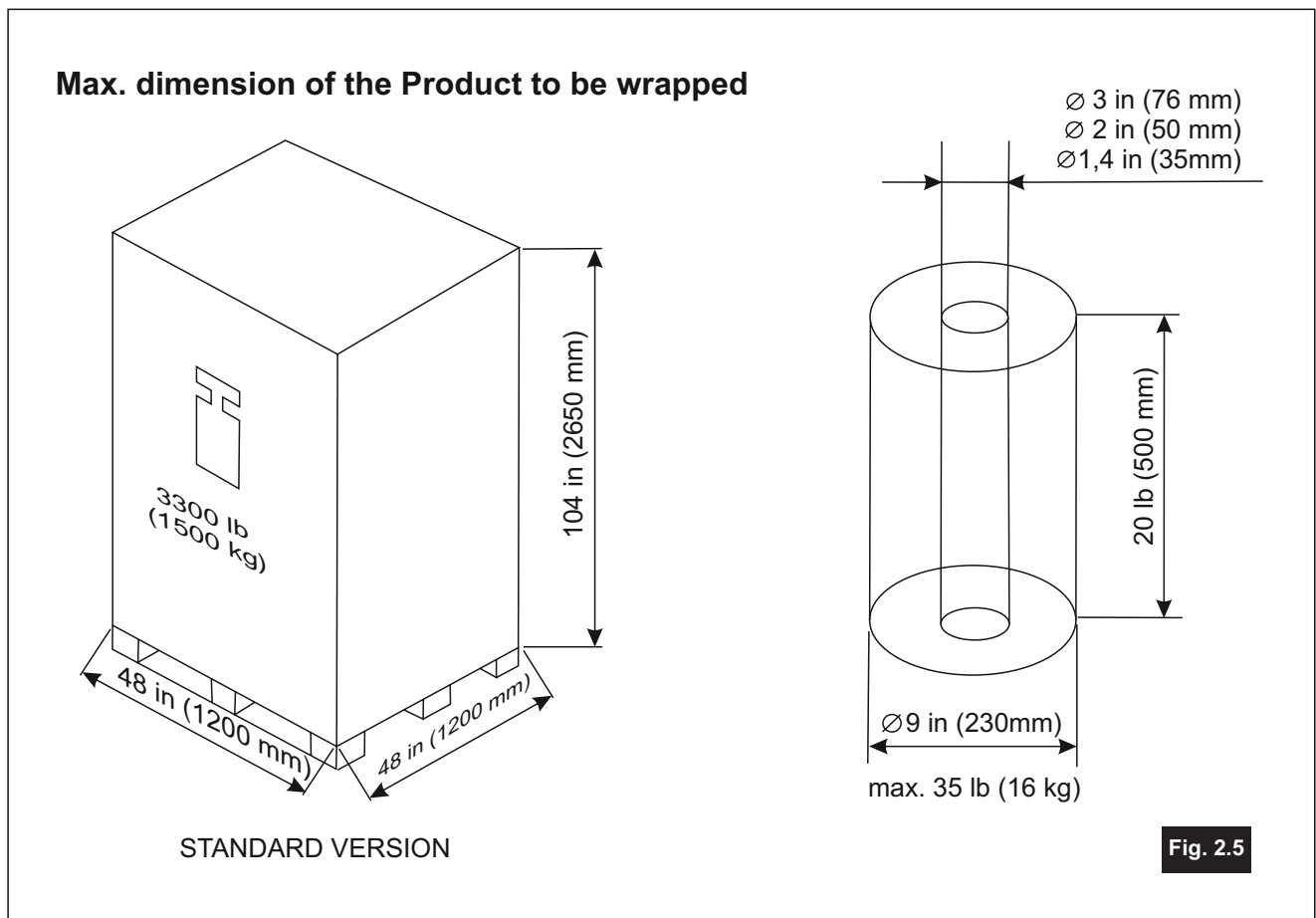
For safety reasons suitable working limitations have been imposed, in keeping with the size of the machine and the relative turntable. The products to be wrapped must be within the working limits of the machine in your possession, specified in terms of maximum load and maximum dimensions, on the basis of the turntable diameter (\varnothing), as illustrated in Fig. 2.5.

Stretch film

Use a film of specification suitable for the type of carriage available and for the type of packaging application for which the machine was intended; always evaluate the choice of film in relation to its safety sheet.

Use a perforated film if the wrapped products require ventilation otherwise they will generate condensation (fresh organic products: fruit, vegetables, plants, etc...).

Use a blackout film for the protection of light-sensitive products.



2.4 UNINTENDED AND UNAUTHORISED USE - FORESEEABLE AND UNFORESEEABLE IMPROPER USE

Use of the pallet wrapping machine for unauthorised purposes, its improper use and lack of maintenance can lead to the risk of serious danger to health and safety of operators and exposed persons, as well as affecting the working efficiency and safety of the machine. The following is a list of some possible, reasonably more foreseeable, examples of "bad usage" of the machine.

- NEVER allow anyone to climb onto the turntable.
- NEVER start the work cycle when there is anyone in the immediate vicinity of the machine.
- NEVER allow the machine to be used by unauthorised persons or by minors under the age of 16.
- NEVER leave the control station during the working process.
- NEVER load onto the machine containers that have toxic, corrosive, explosive or flammable products.
- NEVER start the work cycle if the load is not centred properly on the turntable.
- NEVER start the work cycle if the product loaded is tied outside the machine.
- NEVER use the machine outdoors or under not permitted environmental conditions.

2.5 TECHNICAL DATA AND NOISE

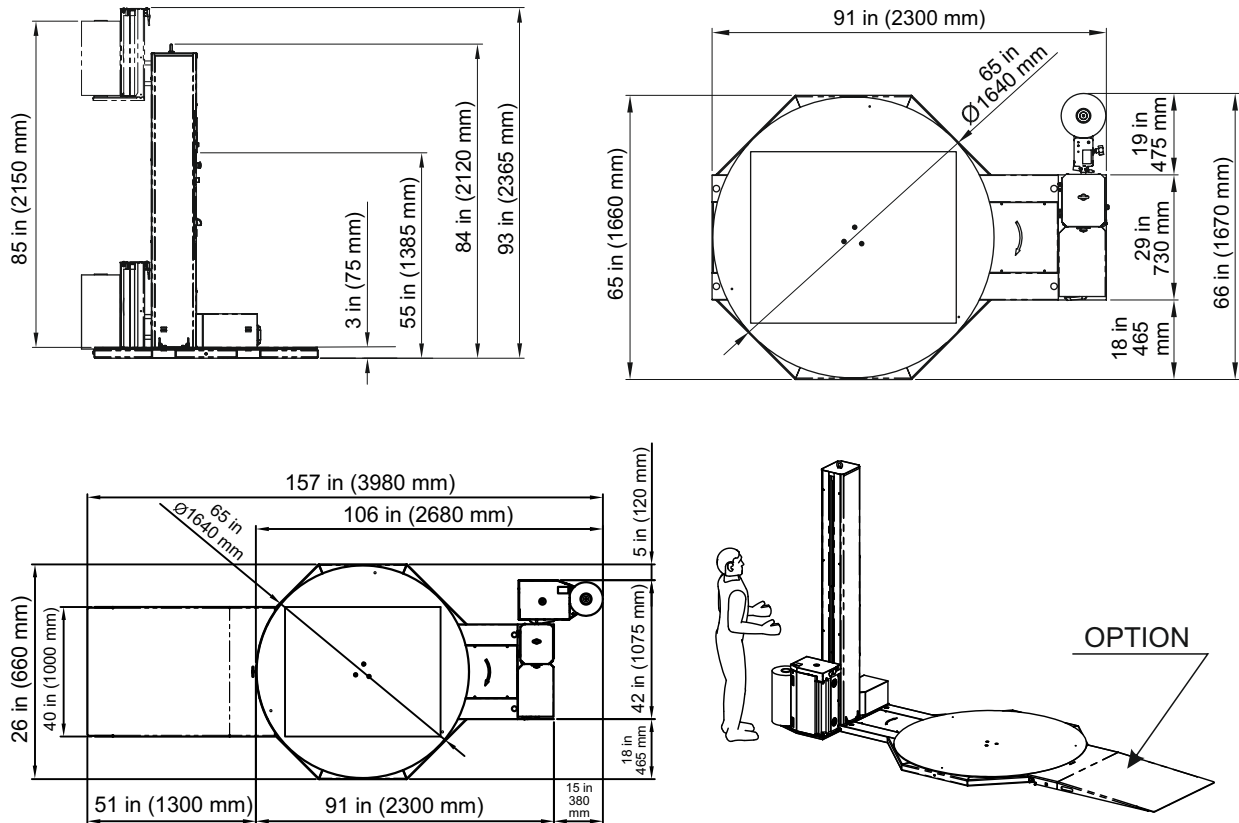
- Overall dimensions Fig. 2.6
- Net weight of machine body 350 kg
- Supply voltage 230 Volt
- Frequency 50/60 Hz
- Phases (single-phase + neutral + earth)
- Nominal current 5 A
- Power installed 1 kW
- Stretch film 17/30 μ m
- Roll-holder tube inside \varnothing 75 mm
- Roll height 500 mm
- Maximum roll weight 18 kg
- Carriage speed 1 ÷ 4 m/min
- Turntable speed min. ÷ max. 4 ÷ 12 rpm

Noise

In observance of annex 1 of machine directive **2006/42/EC**, the manufacturer declares that the noise emitted by the machine in question falls within the limits established by the above mentioned regulations 70 dB(A).

DIMENSIONS:

STANDARD VERSION



TRANSPALLET VERSION

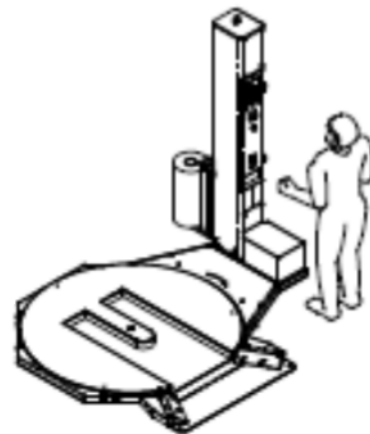
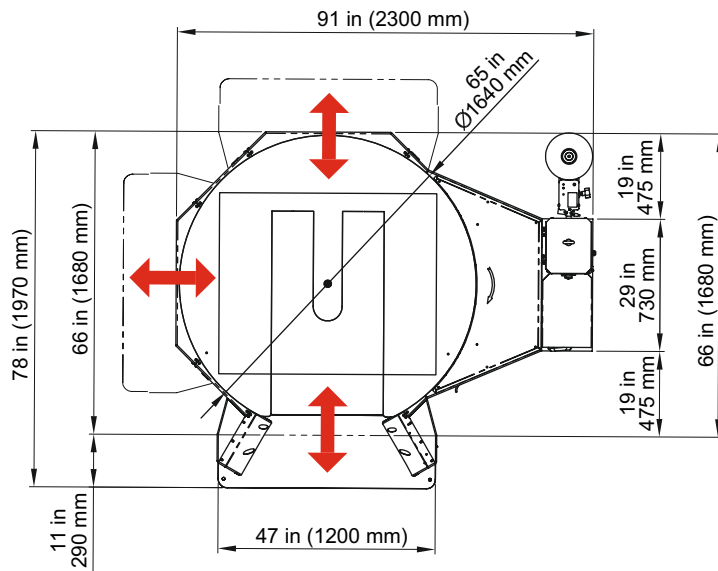


Fig. 2.6

2.6 WORK AND CONTROL STATIONS

STATION A - Control area - Fig. 2.7

The operator must be at this station when the machine is carrying out a wrapping cycle. It is the station from where the operator starts and stops the machine and changes the machine working modes. It also allows visual surveillance of the work cycle, so that the operator can activate the emergency stop device in the event of potentially dangerous situations.

STATION B - Work area - Fig. 2.7

In the work area the operator carries out the following operations:

- attaches the film to a corner of the pallet to start the work cycle;
- cuts the film at the end of the work cycle.



Attaching and cutting the film must be done with the machine cycle stopped and the turntable not moving.

STATION C - maintenance area - Fig. 2.7

In the maintenance area the operator carries out the following operations:

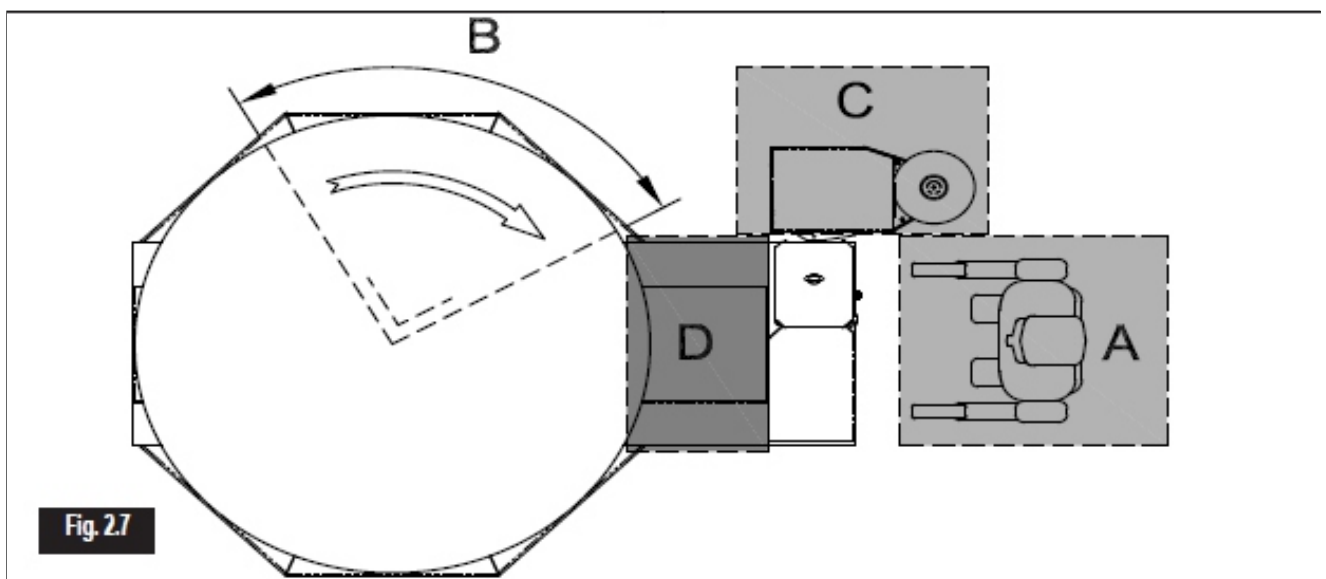
- changes the film roll;
- adjusts the film tension, if mounted on the carriage.



All operations that can be performed in station "C" must be carried out with the turntable fully down and the machine stopped (refer to point 5.3 in this manual).



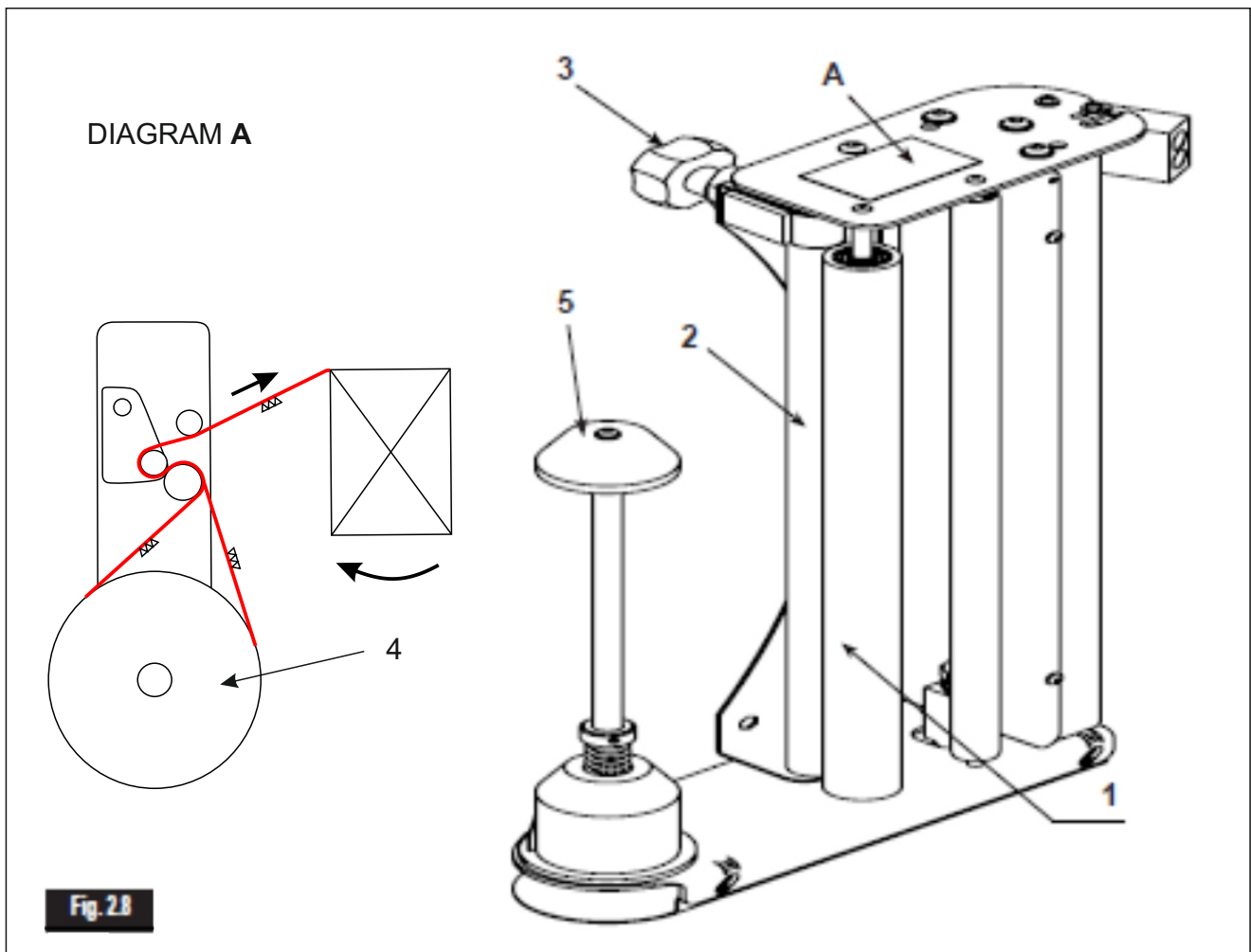
IT IS FORBIDDEN TO CROSS THE CENTRAL MACHINE AREA MARKED AS "D".



2.7 ROLL-HOLDER CARRIAGE

With this carriage, the tension with which the film is applied to the pallet can be adjusted. The carriage **MB** is composed of a rubber-coated roller **(1)** (fig. 2.8) and a roller **(2)** with mechanical brake. Operating the knob **(3)** the braking action is adjusted and, consequently, the film tension. Upon starting, the film must be loaded onto the carriage. Slide the roll **(4)** onto the centring pin **(5)**. Run the film between the rollers following the path shown in Figure **A**. The symbol with the triangles identifies the side of the film on which the adhesive (if present) is applied.

Diagram **A** is also shown on the carriage. The safety plate **(6)** immediately stops descent of the carriage if it comes into contact with an obstruction, in which case the carriage briefly goes back up before it stops.



3 TRANSPORT-HANDLING-STORAGE

3.1 PACKING AND UNPACKING

The machine may be shipped in different ways depending on the transport requirements:

- Unpacked machine protected by transparent plastic wrapping.
- Machine on a wooden pallet and protected by transparent plastic wrapping.
- Machine packed in a wooden crate of suitable dimensions.
- Machine on a wooden pallet and protected by a self-supporting cardboard box (**standard packaging**).

Upon receipt, check that the packaging has not been damaged during transport or that it has not been tampered with and parts removed. Move the packed machine as close as possible to the place of installation and start unpacking, carefully checking that the supply corresponds to the order specifications.



THE LIFTING AND TRANSPORT MEANS MUST BE CHOSEN BASED ON THE SIZE, WEIGHT AND SHAPE OF THE MACHINE AND ITS COMPONENTS. THE CAPACITY OF THE LIFTING EQUIPMENT MUST BE GREATER (WITH A SAFETY MARGIN) THAN THE WEIGHT OF THE COMPONENTS TO BE TRANSPORTED.

N.B.: If damaged or missing parts are found, immediately notify Customer Service and the carrier, providing photographic documentation.

Check that no small parts of the machine are left in the cardboard boxes.

Make a detailed examination of the general conditions of the machine.

The various packing materials must be disposed of in accordance with current environmental protection regulations.



DURING UNLOADING AND HANDLING OPERATIONS, AN ASSISTANT MUST BE ON HAND TO GIVE ANY NECESSARY DIRECTIONS DURING TRANSPORT.



THE MANUFACTURER DECLINES ALL RESPONSIBILITY FOR DAMAGE CAUSED BY INCORRECT OPERATIONS, UNQUALIFIED PERSONNEL OR THE USE OF UNSUITABLE MEANS.

3.2 TRANSPORTING AND HANDLING THE PACKED MACHINE



EXCLUSIVELY USE A FORKLIFT TRUCK OF ADEQUATE CAPACITY TO LIFT AND TRANSPORT THE PACKED MACHINE. USING ANY OTHER SYSTEM WILL NULLIFY THE WARRANTY FOR ANY DAMAGE CAUSED TO THE MACHINE.

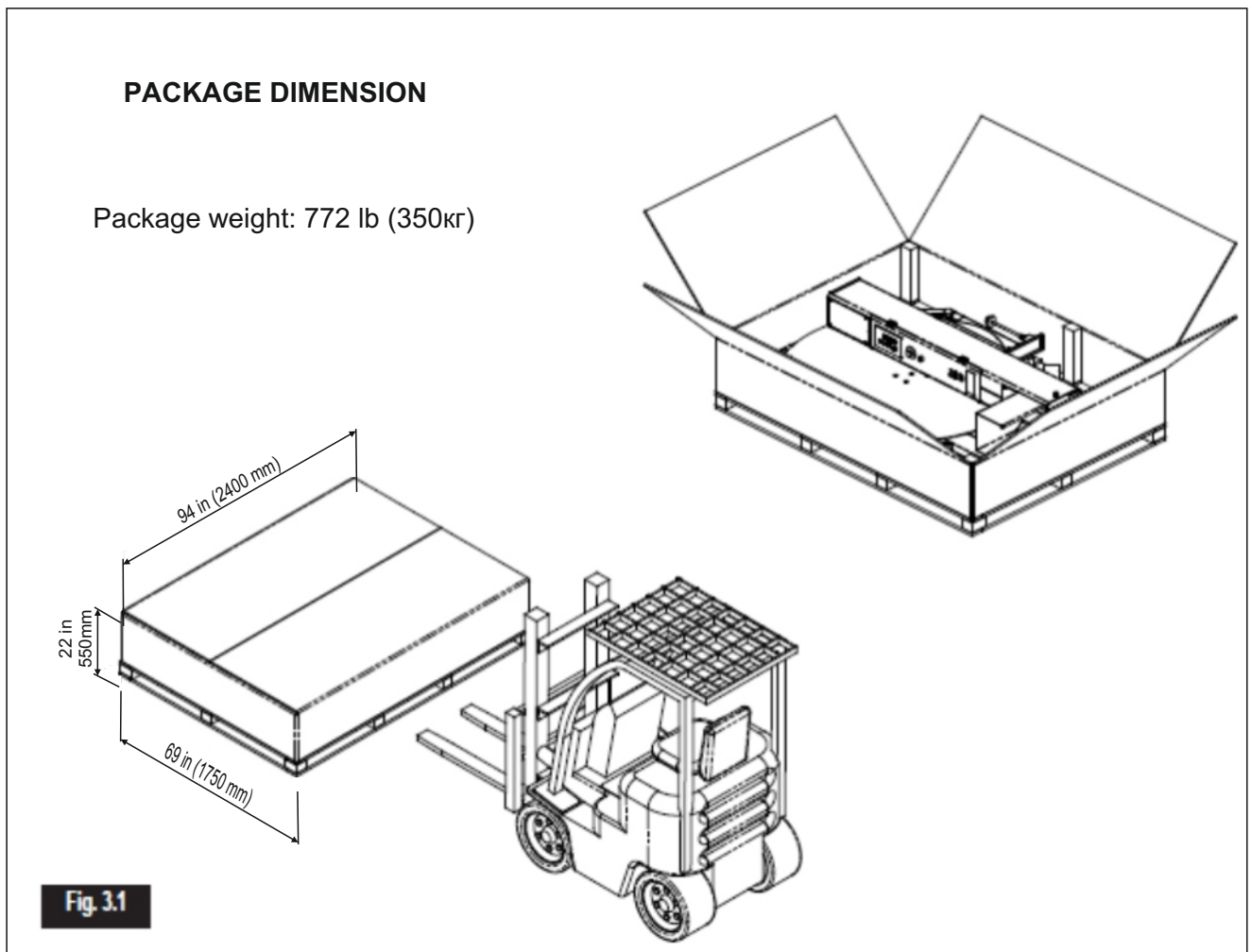


THE WEIGHT OF THE PACKAGING IS GENERALLY INDICATED ON THE OUTSIDE.



ALWAYS CHECK BEFORE ANY OPERATION THAT THERE ARE NO EXPOSED PERSONS IN HAZARDOUS ZONES (IN THIS CASE THE ENTIRE ZONE AROUND THE MACHINE PARTS IS TO BE CONSIDERED A HAZARDOUS ZONE).

Insert the forks of the lift truck where shown by the arrows in Fig. 3.1.



3.3 TRANSPORTING AND HANDLING THE UNPACKED MACHINE

Remove the cardboard wrapping from the machine as shown in Fig. 3.1.
Lift the machine **A** (Fig. 3.2) and move it to the installation area.



EXCLUSIVELY USE A FORKLIFT TRUCK OF ADEQUATE CAPACITY TO LIFT AND TRANSPORT THE MACHINE. USING ANY OTHER SYSTEM WILL NULLIFY THE WARRANTY FOR ANY DAMAGE CAUSED TO THE MACHINE.



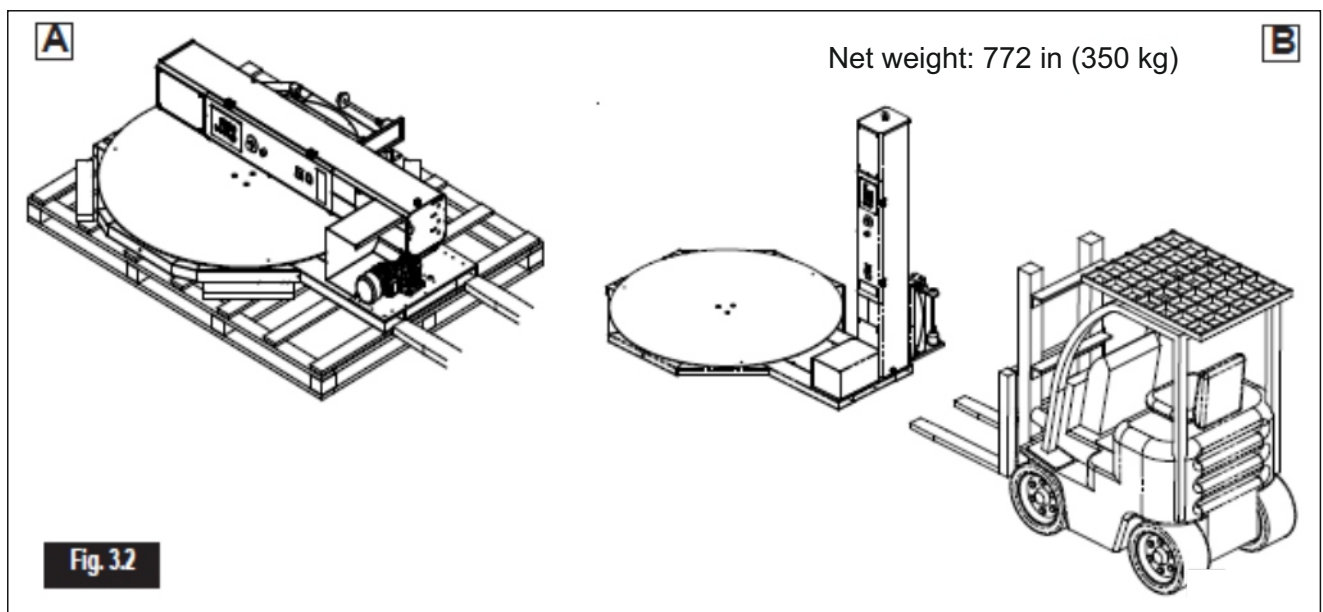
THE RISK OF IMPACT IN ANY CASE REMAINS, CAUSED BY SUDDEN MOVEMENT DUE TO UNBALANCING OF THE MACHINE PARTS IN THE EVENT THAT THE BELTS SAG OR SLIP. LIFT THE MACHINE SLOWLY AND SMOOTHLY (WITHOUT JERKING OR PULSES).



ALWAYS CHECK, BEFORE ANY OPERATION, THAT THERE ARE NO EXPOSED PERSONS IN HAZARDOUS ZONES (IN THIS CASE THE ENTIRE ZONE SURROUNDING THE PALLETS IS TO BE CONSIDERED AS A HAZARDOUS ZONE).

To lift the machine, proceed as follows:

Very carefully insert the forks of the lift truck as far as possible into the guides **B** (Fig. 3.2) underneath the machine body.



3.4 STORAGE OF PACKED AND UNPACKED MACHINE

In the event of long periods of inactivity, the customer must check the place where the machine is positioned and depending on the type of packaging (crate, container, etc.), ensure that the storage conditions are suitable.

If the machine is not used and stored in a place according to the technical specifications, the sliding parts must be greased. In case of doubt, contact Customer Service.

The manufacturer declines all responsibility if the user does not specify or request the above information.

4 INSTALLATION

4.1 PERMITTED AMBIENT CONDITIONS

- **Temperature:**

For regular operation of the machine, the ambient temperature must be between +5°C and +45°C with relative humidity not greater than 50% at a temperature of 40°C and 90% at a temperature up to 20°C (without condensation).

- **Atmospheric conditions:**

The electrical equipment is able to function correctly in atmospheric conditions with relative humidity not greater than 50% at a temperature of 40°C and 90% at a temperature not over 20°C (without condensation). If the atmospheric conditions are not suitable for machine operation, the Manufacturer can, on request, provide solutions to remedy the problem (e.g. air conditioners, thermostatic heating elements etc.).



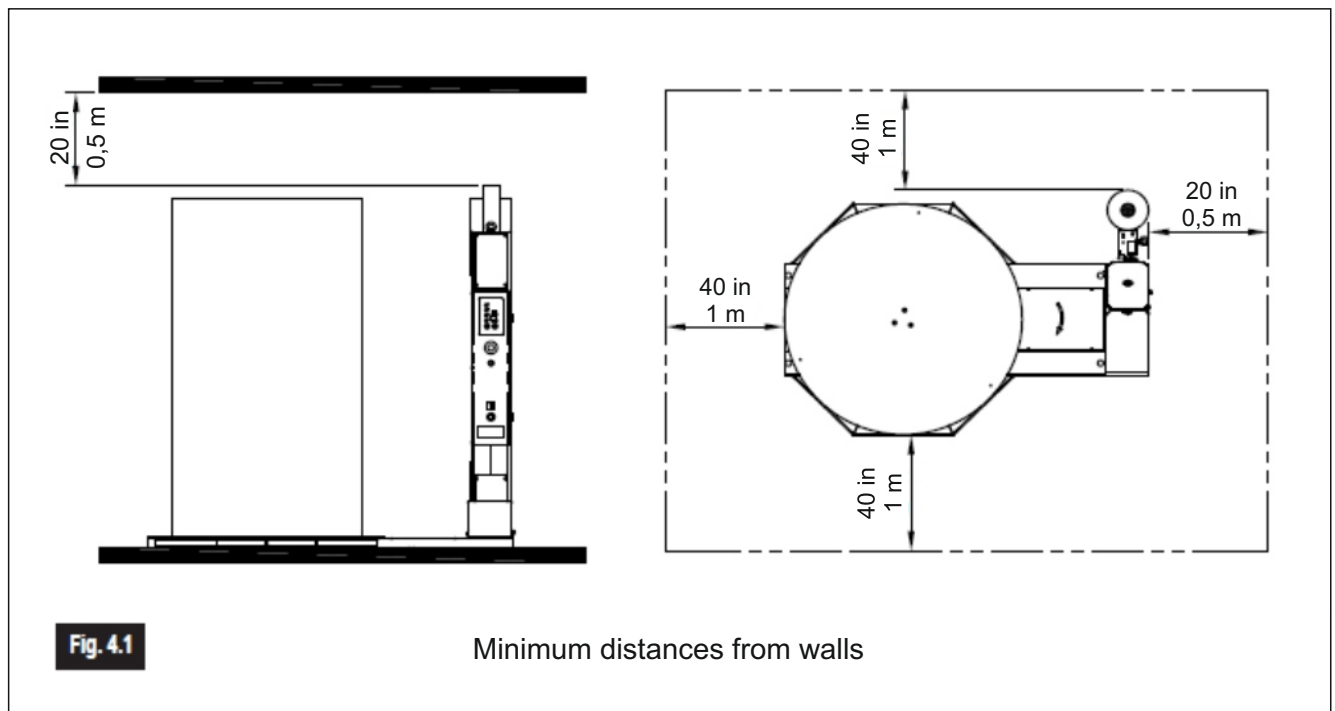
The standard machine is not designed or set up for operation in places with an explosive atmosphere or risk of fire.

4.2 USE AND MAINTENANCE CLEARANCES

The largest free space must be provided on the side of the turntable used for loading and unloading, there must also be sufficient space for movement of forklift trucks or other equipment necessary for maintenance work and for loading the rolls of film.

The remaining sides of the machine must be placed as far as possible up against side walls or fixed barriers, to prevent easy access (see the example in Fig. 4.1).

Reference should always be made to the layout agreed with the manufacturer upon ordering.



4.3 POSITIONING THE MACHINE

4.3.1 STANDARD MACHINE

In its standard version, the machine is dispatched as follows:

- base column tipped over the turntable;

No particular preparation is required for the surface on which the machine is to stand. The surface must be smooth and flat in all directions (maximum slope 1%) and solid enough to support the fully-laden weight of the machine.

Reposition the base column and assemble the parts removed.

Repositioning the base column (Fig. 4.2)

a) Identify the supplied screws for fixing the base column;

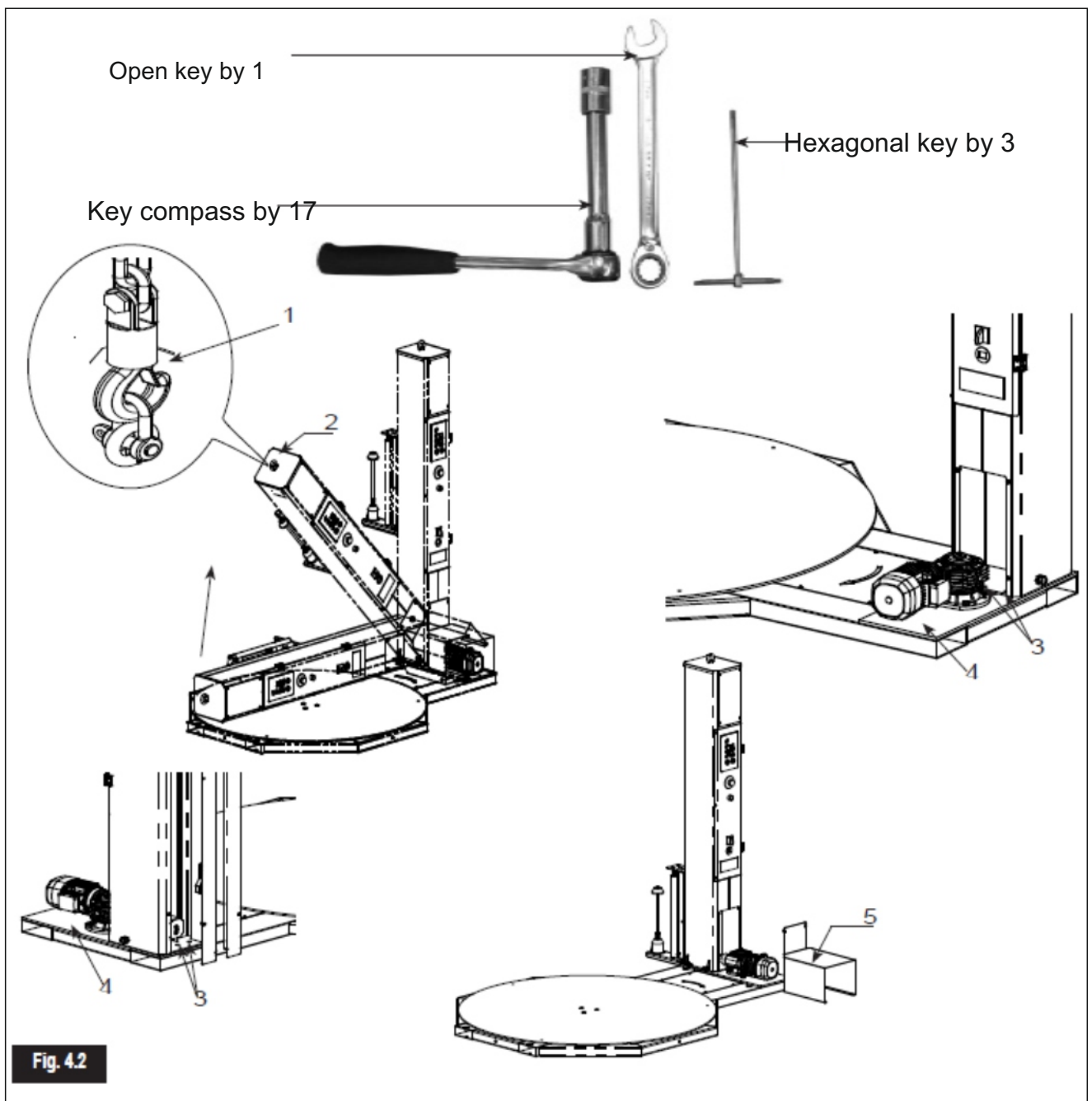


The lifting of the column should be carried out using a suitable lifting device (1), fixed to the eyebolt on the column.

b) lift the base column (2);

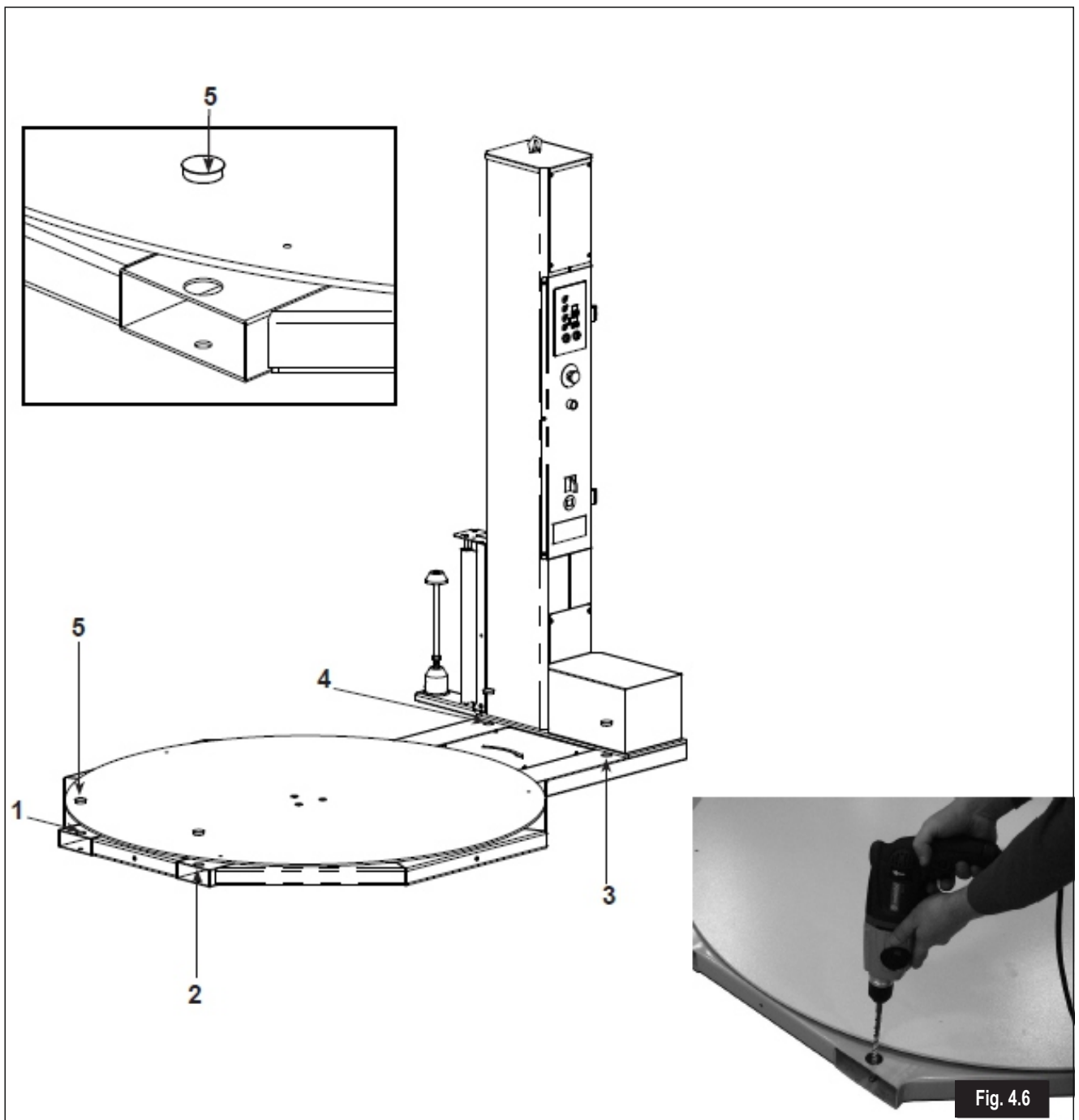
c) insert the screws (3) side and secure the base column of the machine (4);

d) fit the motor guard (5) and secure it with the screws.



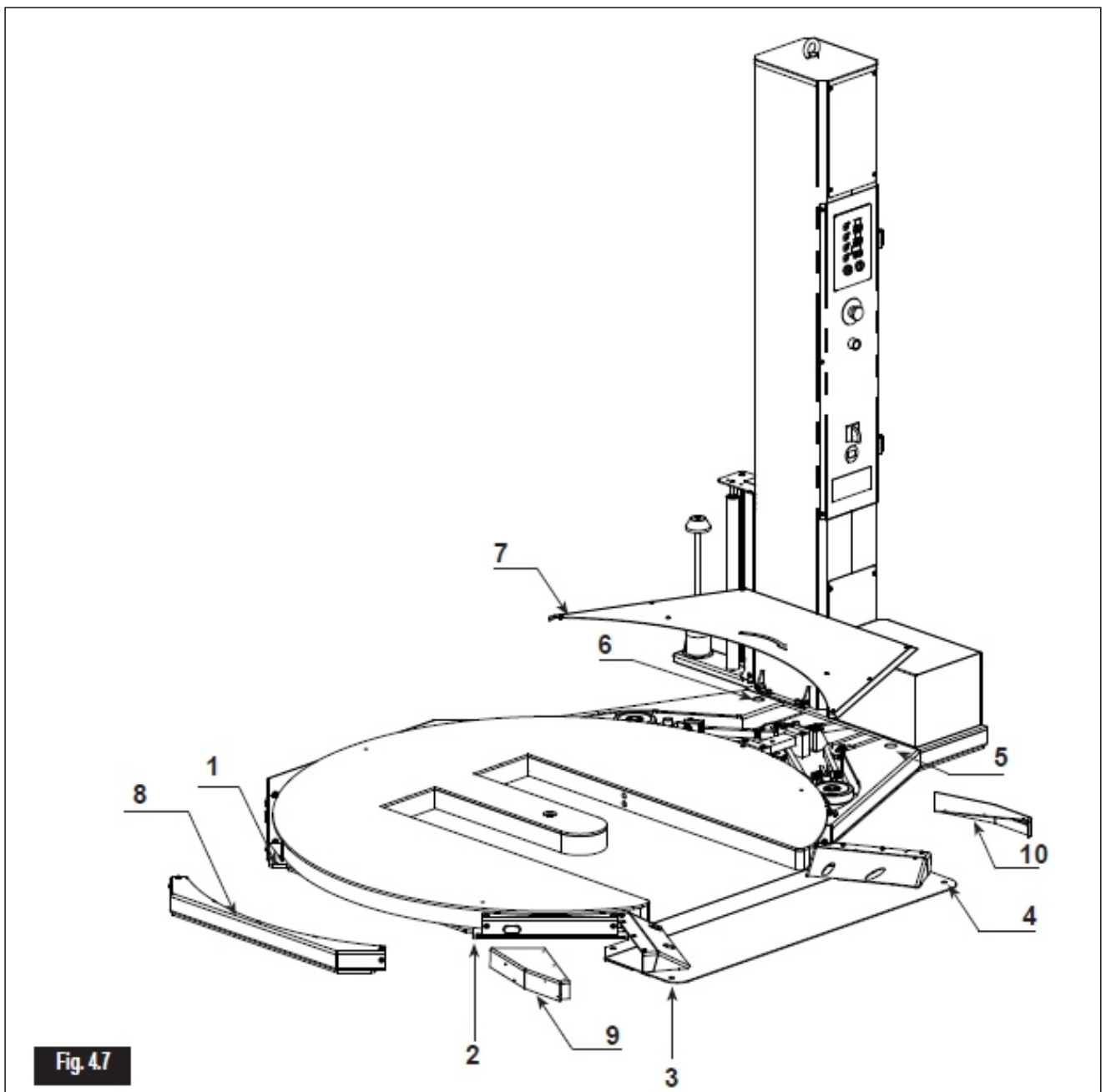
Fixing to the floor (Fig. 4.6)

- a) Remove the four plastic caps **(5)**;
- b) make holes in the floor at point **(1-2-3-4)**, drilling through the holes in the machine base;
- c) insert steel anchors and tighten;
- d) put back the plastic caps **(5)**.



Anchoring to the floor (Fig. 4.7)

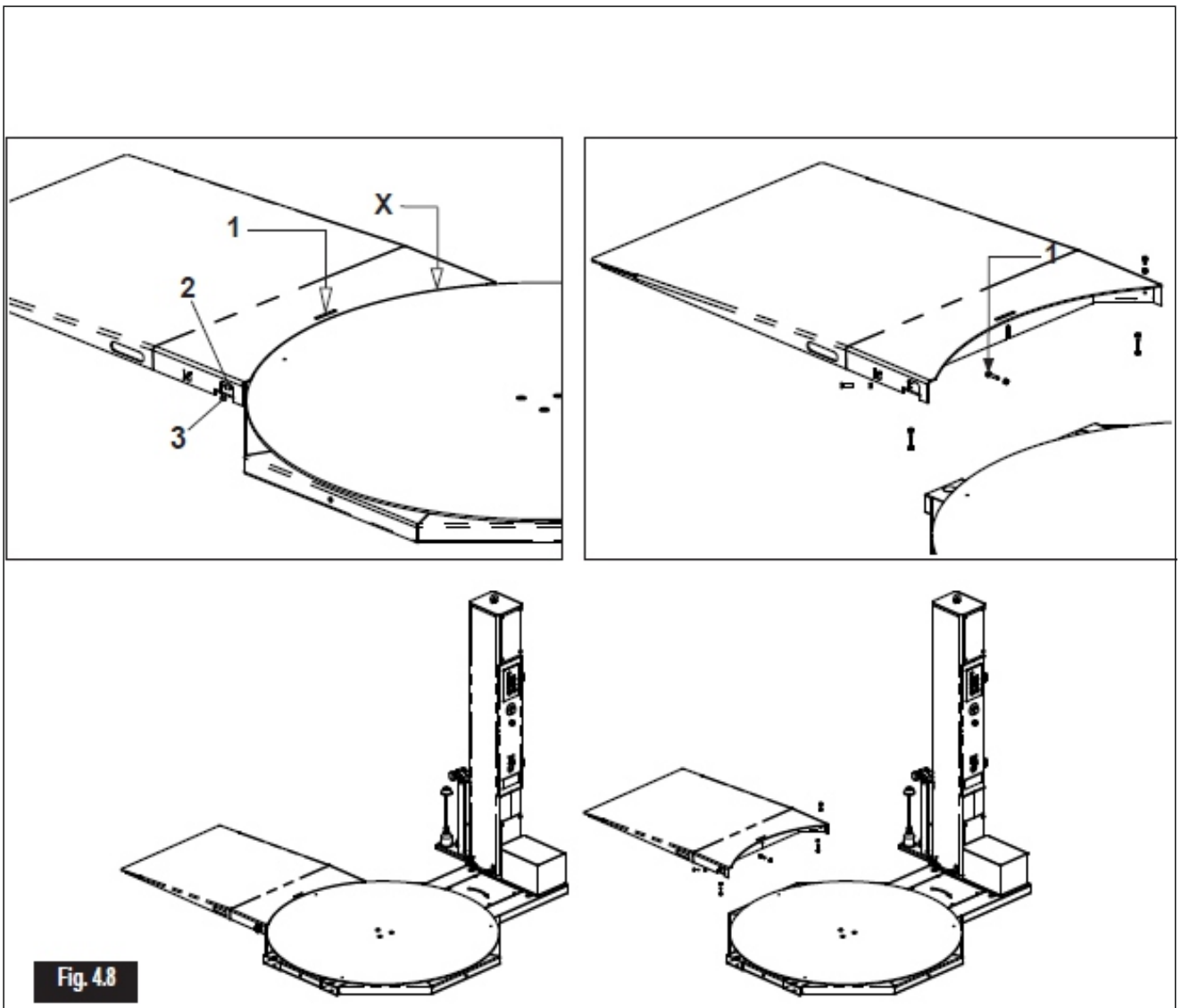
- a) Dismantle the four safety covers.(7-8-9-10);
- b) Make the holes in the floor at the points (1-2-3-4-5-6) drilling through the holes in the machine base;
- c) Insert the steel anchors and tighten;
- d) Assemble the four safety covers.(7-8-9-10).



Mounting the ramps (optional)

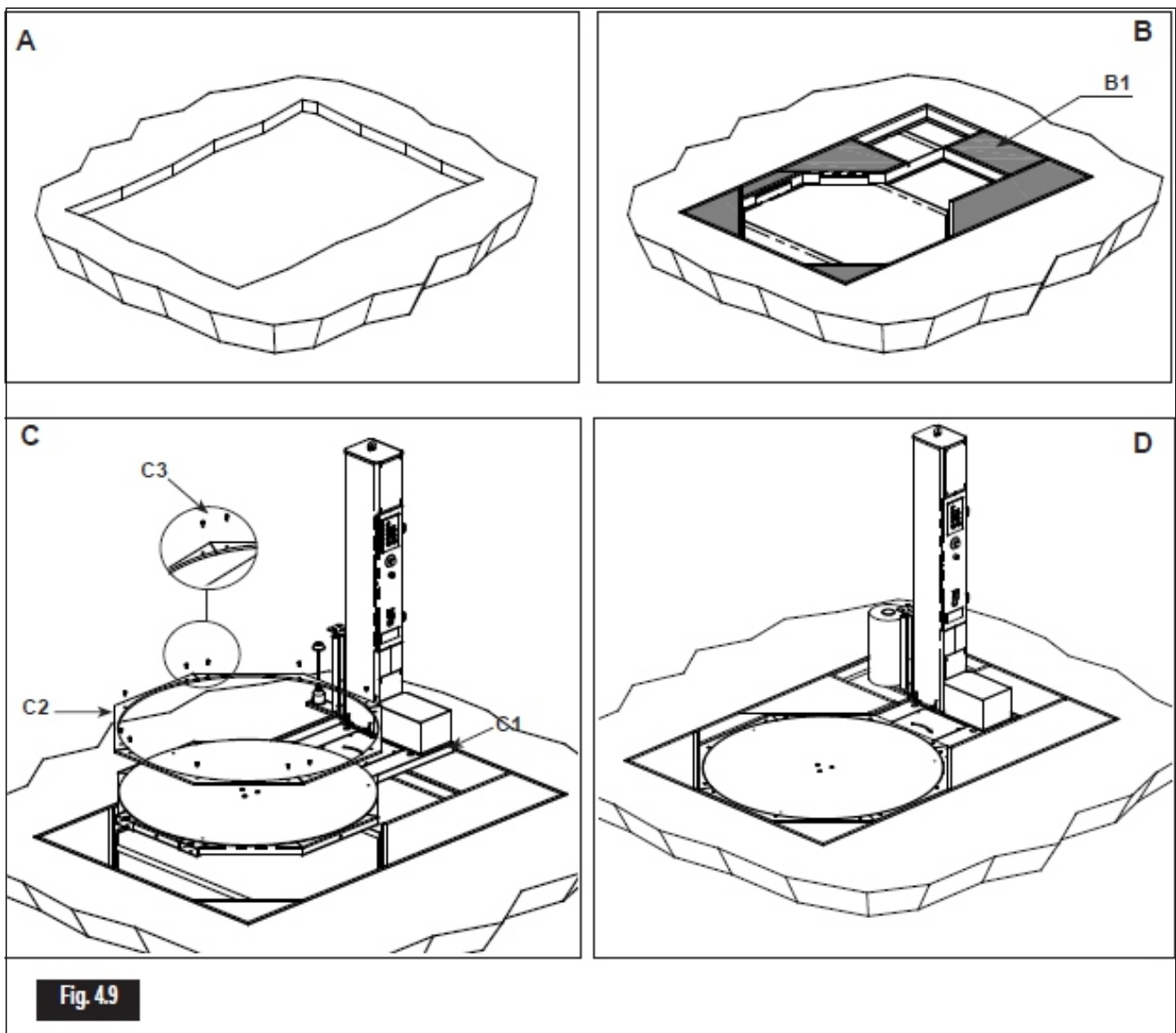
The ramp can be mounted on three sides. To mount the ramp, proceed as follows (Fig. 4.8):

- tighten the screw **(1)** in the base and push down on the ramp to fit the slot;
- adjust screw **(3)** to make the ramp flush with the base;
- adjust the distance **(X)** of the ramp from the turntable by tightening or loosening screws **(2)**, **the distance must be adjusted to $2 \div 5$ mm (max)**;
- tighten the screw **(1)**;
- tighten the lock nuts.



4.3.2 MACHINE RECESSED INTO THE FLOOR

Before assembling the machine, make a recessed area in the floor as shown in Fig. 4.9 illustrating the reference template. Make a hole at least 8 cm deep (see **A**). Secure the template flush with the floor (**B**) and level the bottom of the hole at 8 cm from the surface of the floor. Also fill in area (**B1**). Insert the machine (**C1**) and fix the sections (**C2**) around the plate, centring them and securing them with the screws (**C3**) in the free space between the round plate and the walled frame, **the distance must be adjusted to 2 ÷ 5 mm (max)**. The completed assembly is shown in (**D**).



4.4 ELECTRICAL CONNECTION

The machine is supplied with a cable **(1)** (fig. 4.10) without a plug and already connected to the terminal board on the electric panel.

THE ELECTRICIAN MUST CORRECTLY FIT AN APPROPRIATE PLUG ACCORDING TO THE CURRENT REGULATIONS IN THE COUNTRY OF USE.



THE ELECTRICAL POWER SYSTEM CONNECTED TO THIS PRODUCT MUST BE SET UP IN CONFORMITY WITH THE SAFETY STANDARDS CURRENTLY IN FORCE, EQUIPPED WITH A DIFFERENTIAL SWITCH AND AN EARTH CIRCUIT. THE VOLTAGE AND FREQUENCY MUST BE COMPATIBLE WITH THE REQUISITES GIVEN ON THE IDENTIFICATION PLATE.

The plug must be wired as shown in the following colour scheme:
Brown:Phase - Blue:Neutral - Yellow-green: Earth Turn the main power switch **(2)** to 'I'-ON.



ANY FAULTS OR ANOMALIES IN THE EARTH CIRCUIT CONNECTED TO THE MACHINE CAN, IN THE EVENT OF BREAKDOWN, LEAD TO THE OPERATOR SUFFERING ELECTRIC SHOCK WITH THE CONSEQUENT RISK OF DEATH OR SERIOUS INJURY TO THEIR HEALTH.

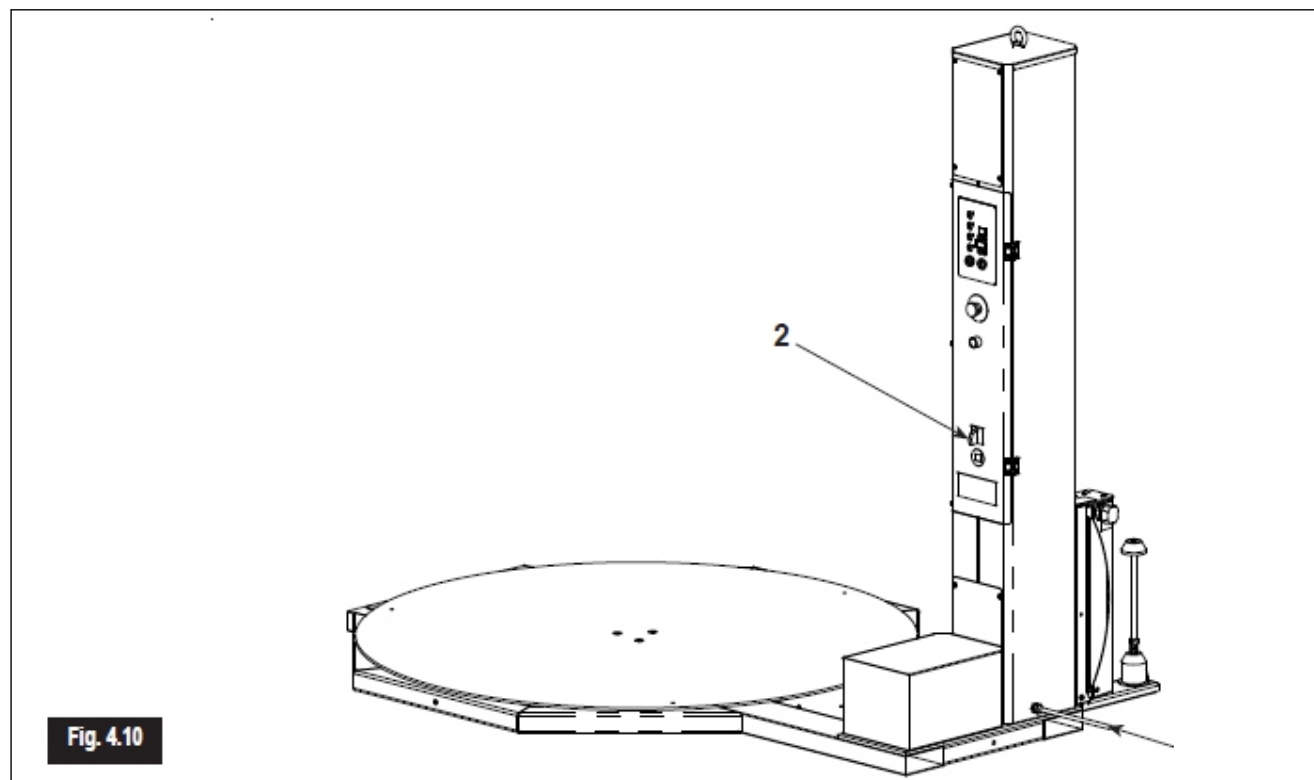


Fig. 4.10

5 STARTING UP THE MACHINE

5.1 ELECTRICAL PANEL

1. Main switch (fig. 5.1)

Switches the machine on and off, cutting off the mains power supply.

2. Reset button

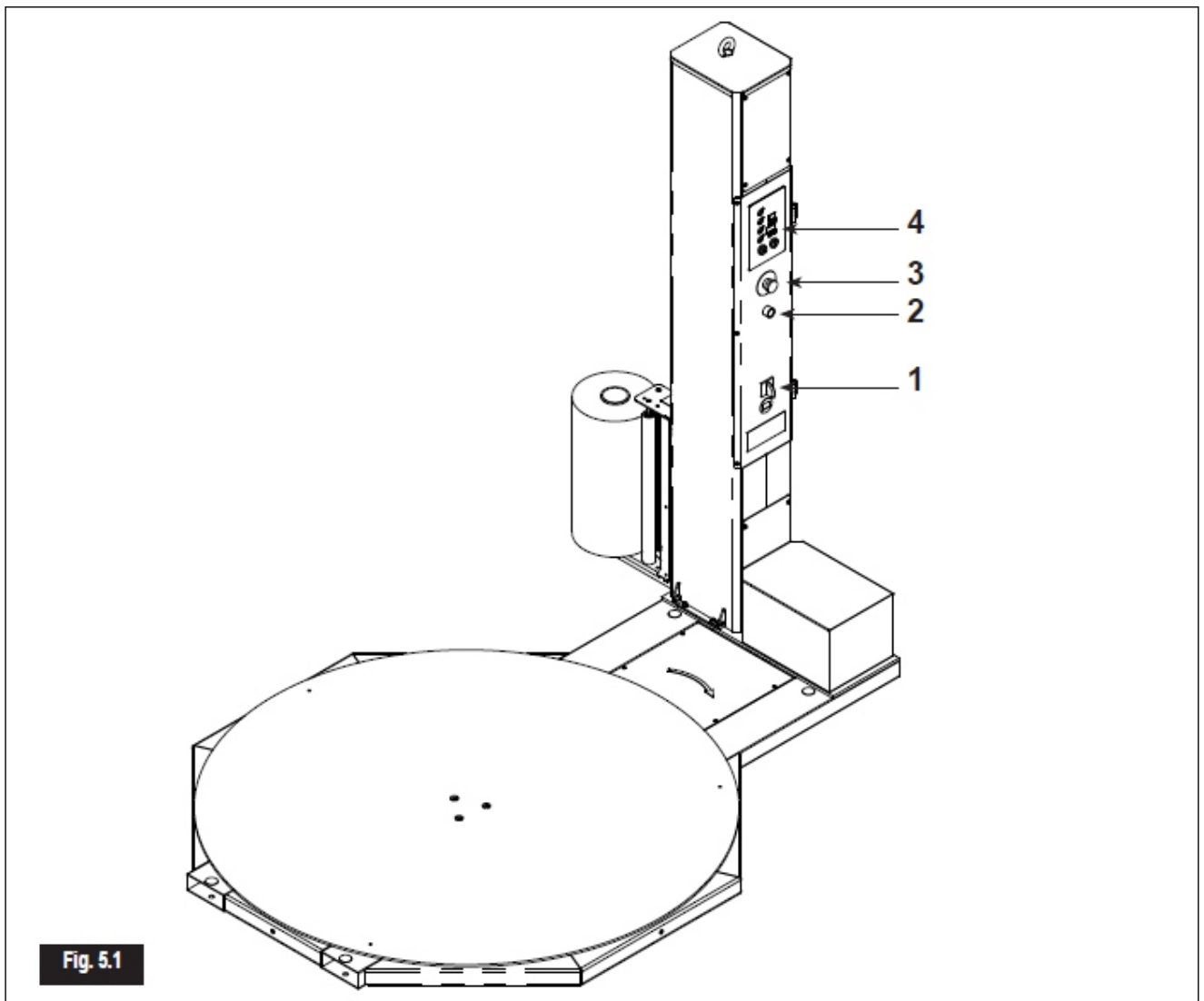
Provides power to the auxiliary circuits, has to be pressed after switching on or after the emergency button has been pressed.

3. Emergency button

Stops the machine and cuts off the main power supply in situations of emergency or imminent danger; to reset the button once it has been pressed, turn the top of the button clockwise.

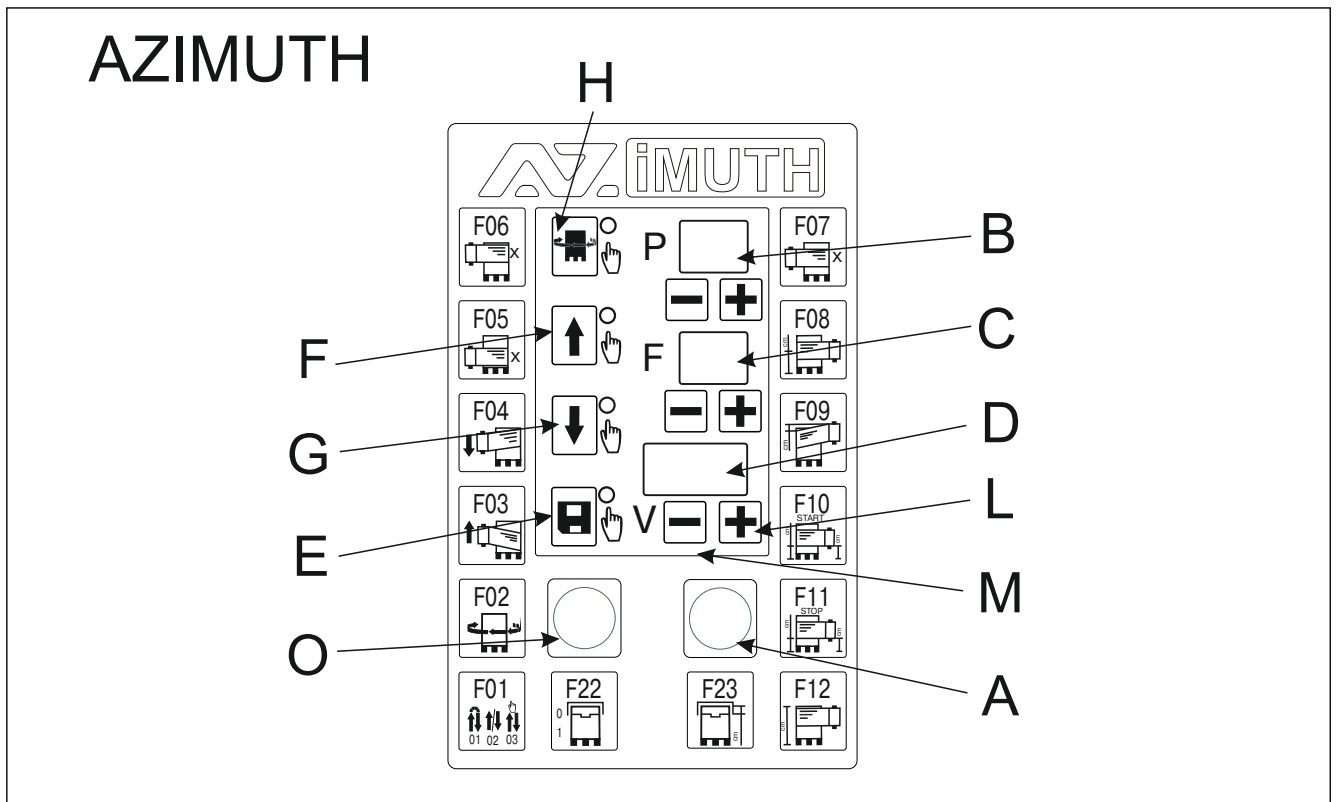
4. Control panel

Used to control the machine and the work cycle.



5.2 VERSION

5.2.1 CONTROL PANEL



A Programmed cycle START button

C 2-digit display indicating the selected program.

C 2-digit display indicating the functions (parameters) of the selected program (see section 5.3.2)

D 3-digit display indicating the value of the displayed function

E Control panel ON - Cycle or alarm reset (if present) - (Program memorisation*).

F Carriage up manual retention button

G Carriage down manual retention button (if pressed together with "E", the carriage automatically descends to the low cycle start position)

H Table rotate manual, hold down to stop the table in phase (if pressed together with "E" the table automatically turns to the phase position)

O STOP cycle pause button, the table decelerates and stops, the cycle can be resumed from the same point

L Increase values button

M Decrease values button

F+ Number of function select button (increase)

F- Number of function select button (decrease)

P+ Number of program select button (increase)

P- Number of program select button (decrease)

5.2.2 CONTROL PANEL FUNCTIONS

F00 This parameter is used to prevent cycle parameters from being overwritten.
0 - disabled, 1 - enabled

F01 Set cycle: **01** up and down **02** up or down, **03** manual cycle (see sections 5.2.3. and 5.2.4)

F02 Table rotation speed: selectable from 0 to 100

F03 Carriage up speed: selectable from 0 to 100

F04 Carriage down speed: selectable from 0 to 100

F05 Number of bottom wraps

F06 Number of top wraps

F07 Number of middle wraps (F08 \neq 0)

F08 The distance from the floor to the bottom edge of the film - height at which the F07 wraps produced

F09 Strip of film placed over the top of the product

F10 The height of the carriage at which turntable starts

F11 The height of the carriage at which turntable stops

F12 Height at which the carriage stops rising, referred to the upper edge of the roll of film (product presence photocell disabled)

F22 Cycle with pause: enabled 1 or disabled 0

F23 Carriage descent position with F22 = 1

F50 Film width: 40 - 60 cm

Automatic saving of last programme used.

When the machine is turned on again, the parameters from the last programme selected and started will be loaded

Keyboard block:

prevents modification of parameters by blocking thr key V+ and V-; hold down RESET and at the same time press F+ and F-. The LED of the display V lights up and stays lit.

Saving programs in ROM.

To save, press and hold for at least 3 seconds the button "E". Saving is possible in the absence of lock, defined function F00. If saving was successful, the left point will begin to flash rapidly for a second. If F00 not allow you to save, it is necessary to change the value of this function from 1 to 0.

Cancel the current program.

To cancel, press and hold the button STOP for at least 5 seconds. During this time running program will have time to switch to pause (the turntable and the carriage stop), and then there will be cancellation of the program.

Alarms

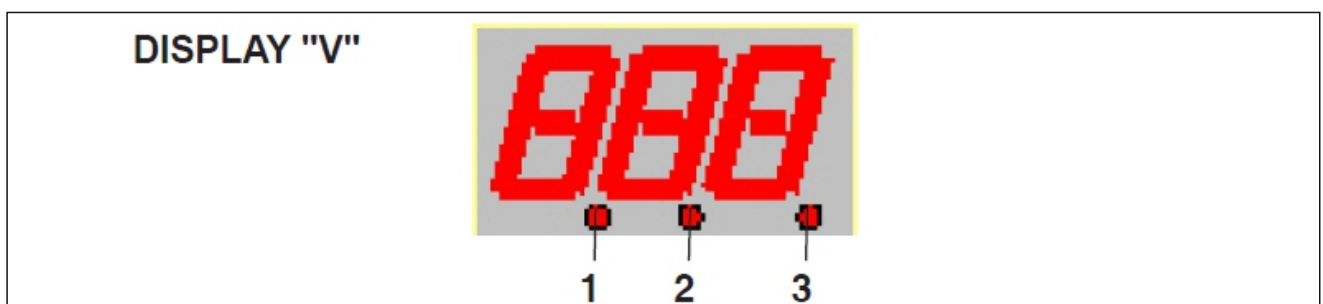
The V display is used for showing the alarms, noted at the same time by the flashing LED next to the key RESET

:

- E 0:** no cargo on the turntable
- E 1:** forklift on the turntable (transpallet turntable)
- E 2:** turntable drive error
- E 4:** obstacle under carriage
- E16:** carriage door alarm
- E99:** control panel error
- ... : control panel does not initialized

Signals LED 3

- **FLASHING:** EEPROM fault
- **ON:** keyboard blocked (V+ and V- blocked)
- **OFF:** keyboard released.



5.2.3 AUTOMATIC CYCLES

F01=01- COMPLETE UP/DOWN CYCLE

Automatic cycle which wraps the pallet starting from the bottom, reaching the top and returning to the bottom.

During winding, buttons **(F)** (carriage going up) or **(G)** (carriage going down) can be pressed to stop the carriage, add extra wraps wherever required, and start it again.

F01=02-UP ONLY OR DOWN ONLY CYCLE

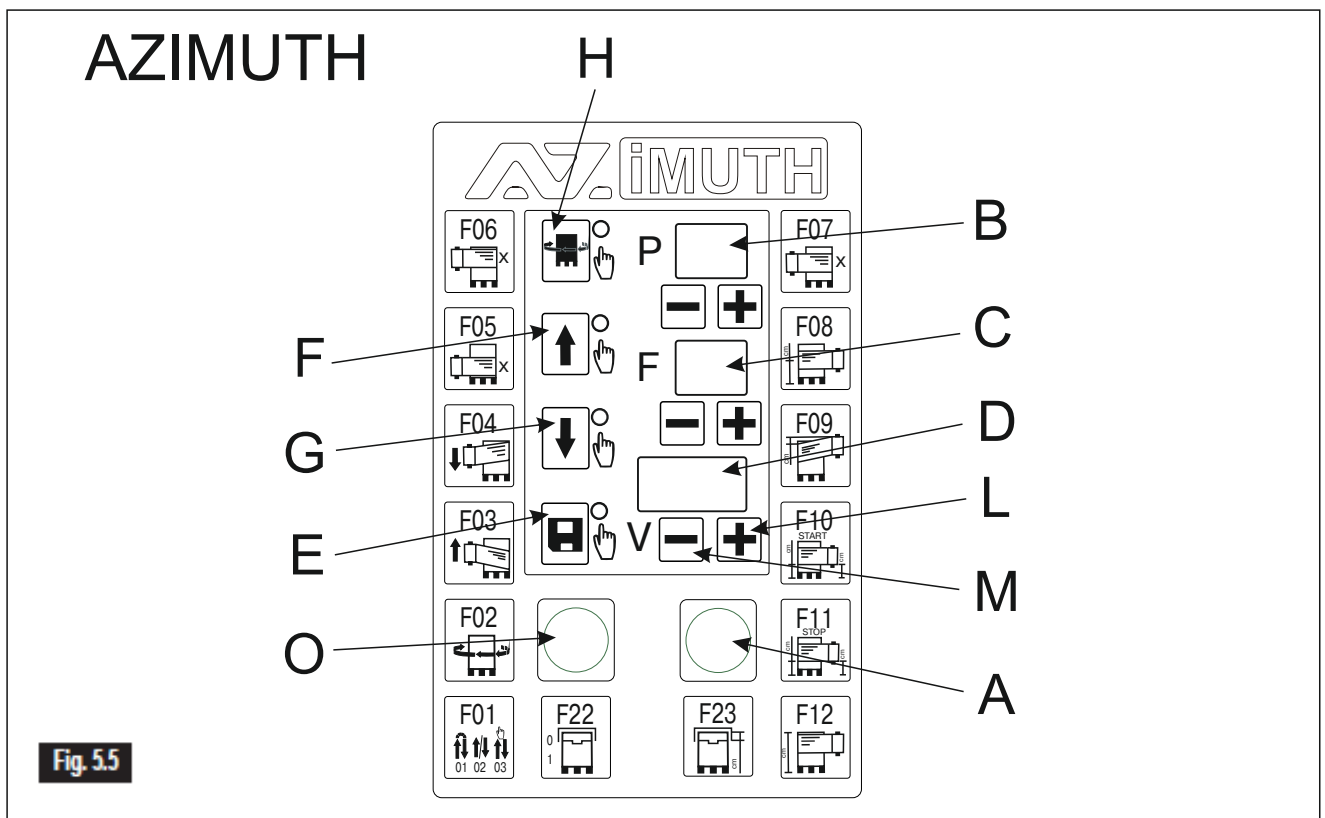


The cycle "up only or down only" is required for maximum height of the product to be wrapped at 1500mm.

Beyond this height, you must use appropriate personal protective equipment based on the risk of falling and work height exceeding 1500mm.

Automatic cycle which wraps the pallet starting from the bottom to reach the top or starting from the top to reach the bottom.

During winding, buttons **(F)** (carriage going up) or **(G)** (carriage going down) can be pressed to stop the carriage, add extra wraps wherever required, and start it again.



F22=01- COMPLETE UP/DOWN CYCLE WITH PAUSE



The cycle "up/down with pause" is required for maximum height of the product to be wrapped at 1500mm. Beyond this height, you must use appropriate personal protective equipment based on the risk of falling and work height exceeding 1500mm.

Automatic Up and Down cycle or Up only with a pause when the top of the product being wrapped is reached; before the pause the carriage can descend by a distance set with **F23**.

To complete the paused wrapping cycle press the start cycle button **(A)**.

If the cycle set is Up and Down, the carriage rises, descends towards the base and then the cycle stops.

If the cycle set is Up only, the carriage rises and then the cycle stops.

5.2.4 SEMIAUTOMATIC OPERATING CYCLE

F01=03 SEMIAUTOMATIC OPERATING CYCLE

After setting the semiautomatic cycle . Press START(A) Press buttons **(F)** and **(G)** to wrap the pallet. To stop the machine, press the previously pressed button once again.

5.3 LOADING A ROLL OF FILM

This is a general procedure (see fig. 5.6).

Carriage-specific operations are described in the relative roll-holder carriage manual.

- a) Lower the roll-holder carriage **(1)** to make it easier to load the roll;
- b) turn the main switch **(2)** to 'O' - OFF;
- c) open the carriage door (depending on the carriage model);
- d) push the roll **(3)** onto the carriage pin **(4)**;
- e) unwrap the film and thread it between the rollers;
- f) close the carriage door.

5.4 STARTING THE MACHINE

- a) Correctly place the pallet on the turntable **(5)** (Fig. 5.6);
- b) check that there is a roll of film **(3)** on the roll-holder shaft **(4)** and check that the film is correctly routed according to the diagram (see plate **(6)** indicated for the carriage **(1)** being used;
- c) turn **ON** the panel using the main switch **(1)** and press the reset button **(2)** to enable the machine;
- d) manually draw out the film protruding from the roll-holder carriage **(1)** and attach it to a corner of the pallet;
- e) set the operating cycle from the control panel as described in points 5.2 and 5.3;
- f) press the START button **(A)**;
- g) After wrapping, manually cut the film and fix it to the pallet;
- h) the pallet can now be unloaded.



**DO NOT LEAVE THE PALLET WITH LOAD ON THE TURNTABLE AFTER WORK.
CONTINUOUS STATIC LOAD ON THE TABLE CAN CAUSE DESTRUCTION OF ROLLER BEARING.**

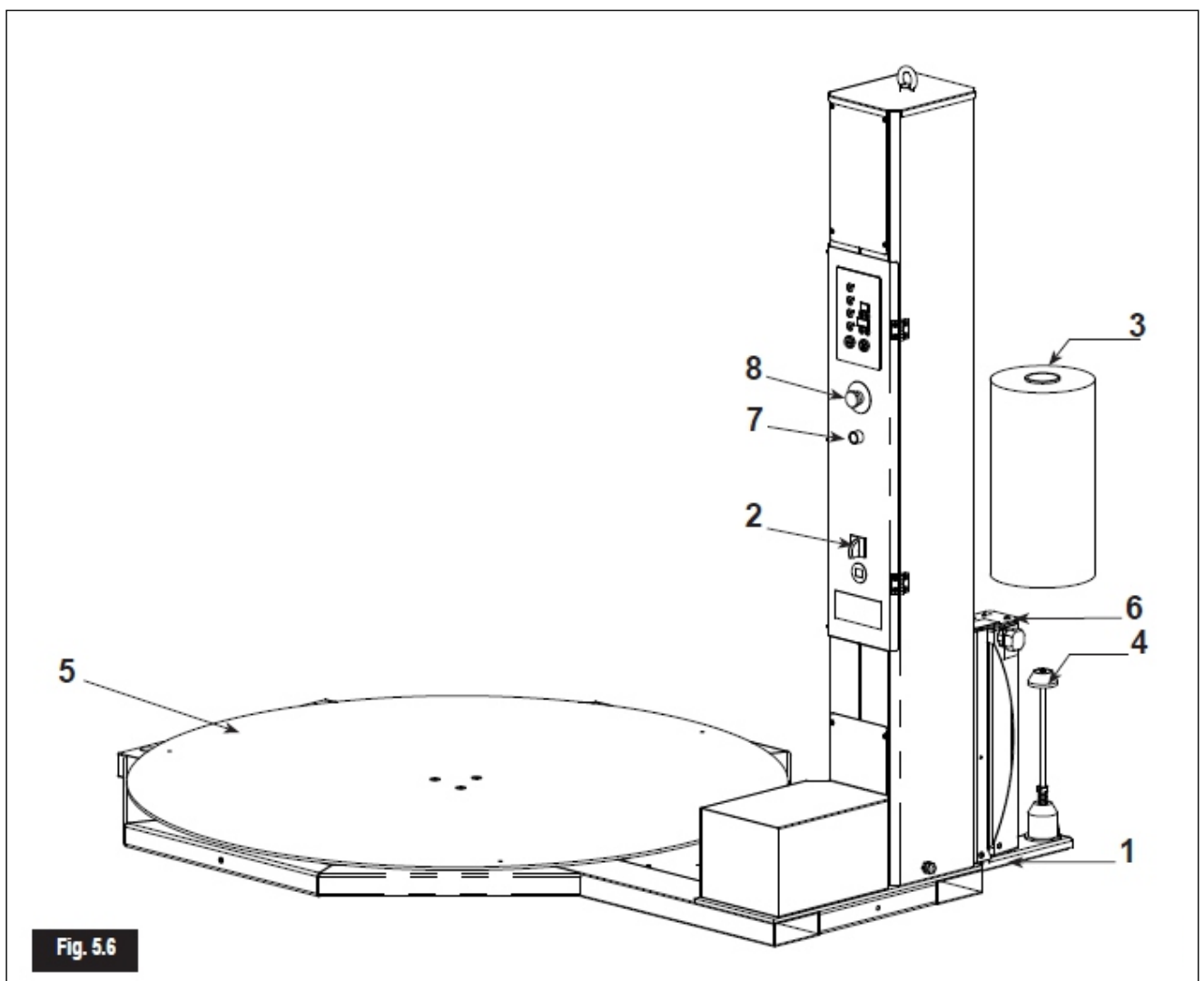
5.5 STOPPING THE MACHINE AFTER USE

After using the machine, even for short periods of inactivity, it must be put into the safe mode Fig. 5.6:

- a) lower the turntable down to the ground **(1)**;
- b) switch off the machine by turning the main power switch **(2)** to 'O'-OFF position.

5.6 EMERGENCY STOP

The machine is equipped with an emergency pushbutton **(8)** (Fig. 5.6). Pressing the pushbutton, the machine will stop immediately. To restart the machine it is necessary to turn the pushbutton to rearm and press the button to reactivate the control panel.



5.7 CYCLE STOP

Press STOP (**O**) on the operator terminal to stop machine at the end of its current cycle.

5.8 TURNTABLE END CARRIAGE IN-PHASE STOP

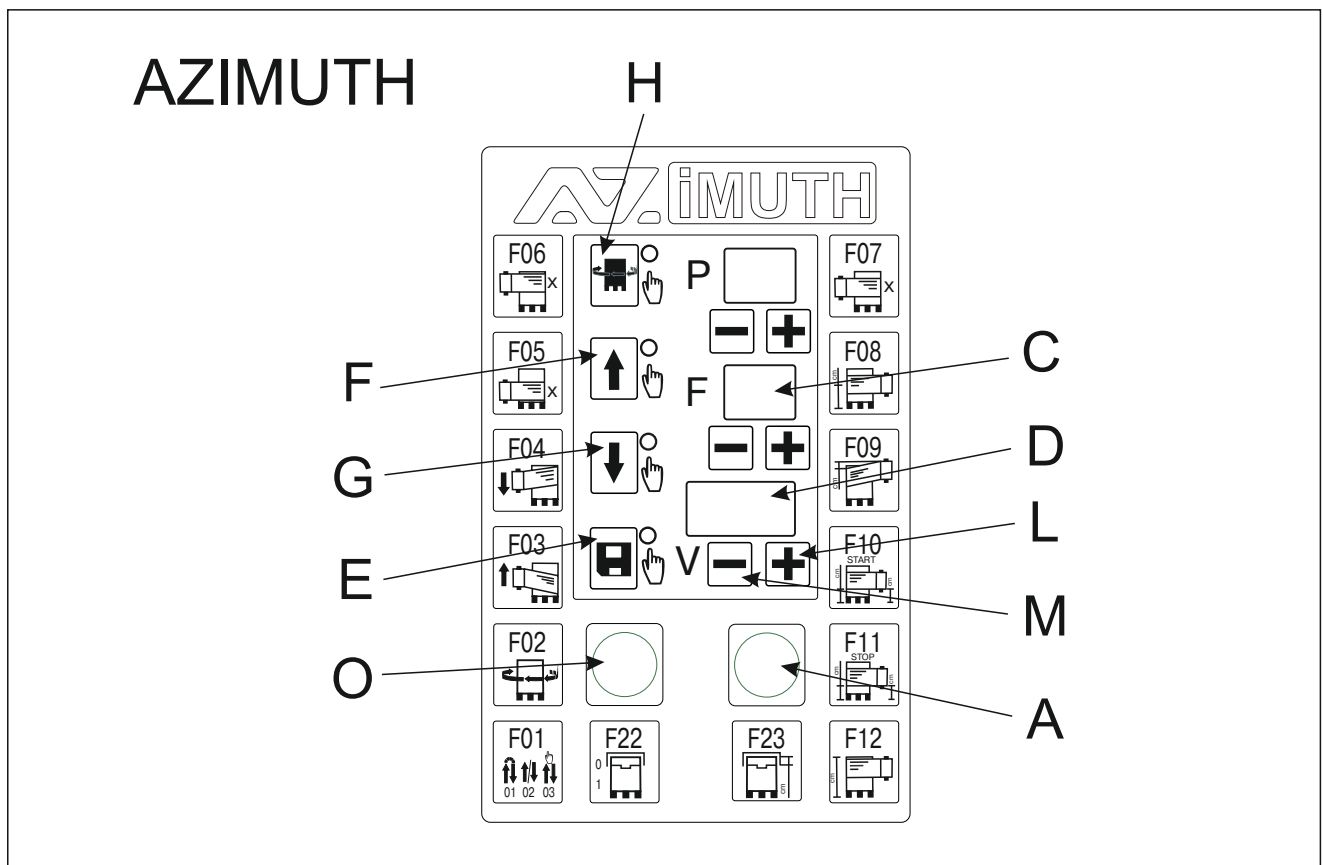
Through the combination of multiple buttons you can stop in-phase the machines.

Pressing the button (**H**) and, keeping it pressed, press the button (**E**), the turntable rotates until it reaches a predetermined position (called stop in-phase) and then stops.

Pressing the button (**G**), and keeping it pressed, press the button (**E**), the carriage falls to the low position and then stops.



**DO NOT LEAVE THE PALLET WITH LOAD ON THE TURNTABLE AFTER WORK.
CONTINUOUS STATIC LOAD ON THE TABLE CAN CAUSE DESTRUCTION OF ROLLER BEARING.**



6 MAINTENANCE

6.1 GENERAL PRECAUTIONS

6.1.1 MACHINE DISCONNECTION

Before performing any maintenance or repair operations, disconnect the machine from all the power sources. Turn the main power switch to '**O**'-OFF.

6.1.2 SPECIAL PRECAUTIONS

When performing maintenance or repair operations, observe the following:

- Before starting work, post a sign "MACHINE UNDER MAINTENANCE" in a well visible position.
- Do not use solvents or flammable materials.
- Take care not to pollute the environment with cooling lubricants.
- Use suitable equipment to access the upper parts of the machine.
- Do not climb onto machine components or guards, as they have not been designed to support the weight of a person.
- After completing the maintenance operations, refit and properly secure all the protection devices and safety guards that have been removed or opened.

6.1.3 CLEANING

Periodically clean the safety guards, particularly the transparent material of the casing, using a damp cloth.

6.2 SCHEDULED MAINTENANCE

This paragraph describes the operations to be carried out periodically in order to ensure proper functioning of the machine.



IT IS ESSENTIAL TO SCRUPULOUSLY OBSERVE THE MAINTENANCE OPERATIONS DESCRIBED BELOW IN ORDER TO MAKE THE MACHINE MORE EFFICIENT AND ENSURE A LONGER LIFE.



IF MACHINE MAINTENANCE IS NOT CARRIED OUT IN COMPLIANCE WITH THE INSTRUCTIONS PROVIDED, THE MANUFACTURER IS RELIEVED OF ALL RESPONSIBILITY FOR MALFUNCTIONING OF THE MACHINE.

6.2.1 ACTIVE SAFETY DEVICES MAINTENANCE



CHECK THE EFFICIENCY OF THE SAFETY DEVICES BEFORE STARTING WORK.

DAILY OPERATIONS:

Clean out the crush-protection safety devices with a jet of dry air.

Check that the carriage bottom plate **(A)** are working properly. Make sure also that there are no foreign bodies in the crevices **(C)**.

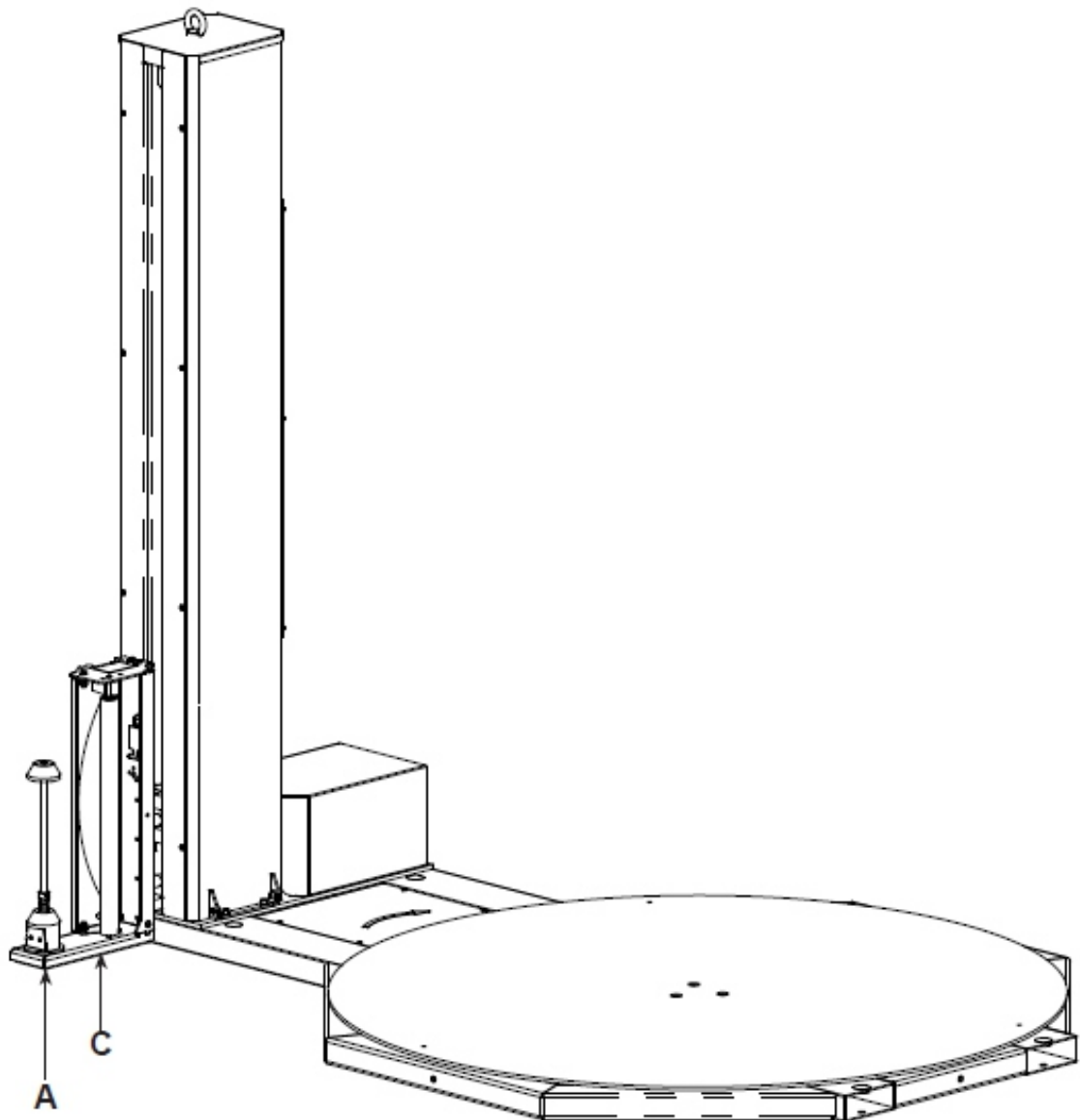


Fig. 6.1

Turntable with transpallet compartment (Fig. 6.3)

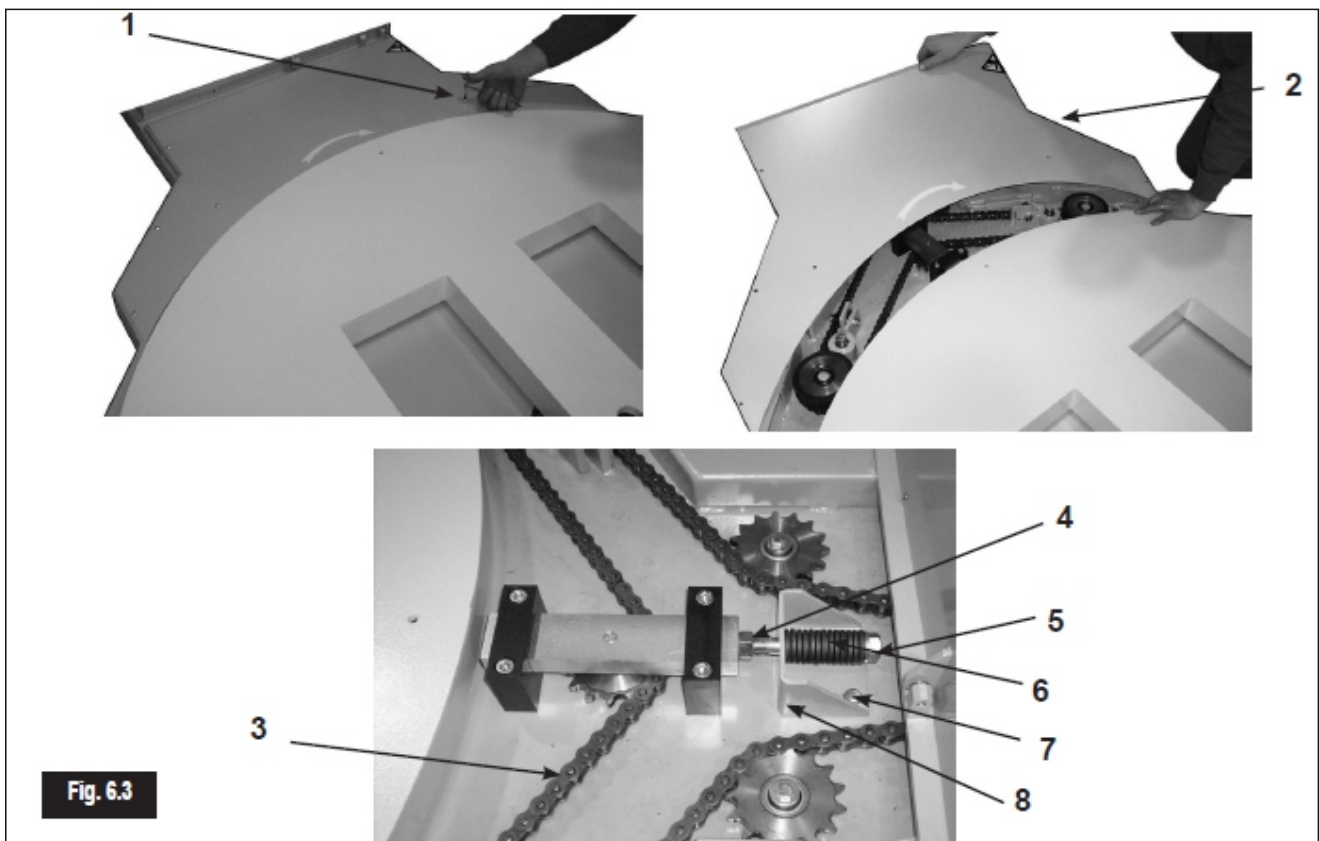
- a) Unscrew the screws **(1)**;
- b) remove the guard **(2)**;
- c) grease the chain **(3)** and check the tension.

To adjust the chain tension **(3)** proceed as follows:

- d) Loosen the lock nut **(4)**;
- e) loosen the preload screw **(5)** of the springs **(6)** until they are fully released;
- f) tighten the screw **(5)** until the spring is compressed for about 15 mm;
- g) tighten the nut **(4)**.

If adjustment of the screw **(5)** is not sufficient to tighten the chain:

- h) loosen the nut **(4)**;
- i) loosen the screw **(5)**;
- j) loosen the four screws **(7)**;
- k) slide the support **(8)** towards the machine column;
- l) tighten the screws **(7)** and retension the chain as described in points f) and g);
- m) refit the guard **(2)** and secure it with the screws **(1)**.



6.2.2 DAILY MAINTENANCE

Cleaning. Carefully eliminate all traces of dirt on all the machine surfaces. Use a clean damp cloth. Clean the photocells with a clean soft cloth.

6.2.3 QUARTERLY MAINTENANCE

Check the tension of the chain driving the turntable as follows:

Standard turntable (Fig. 6.2)

- a) Unscrew the screws **(1)**;
- b) remove the guard **(2)** and **(3)**;
- c) check the tension of the chain **(4)**. To tighten, loosen the screws **(5)**. Tighten the screw **(6)** until the tension and tighten the screws **(5)**.
Grease the chain;
- d) put back the guard **(2)** and **(3)** and secure it with the screws **(1)**.

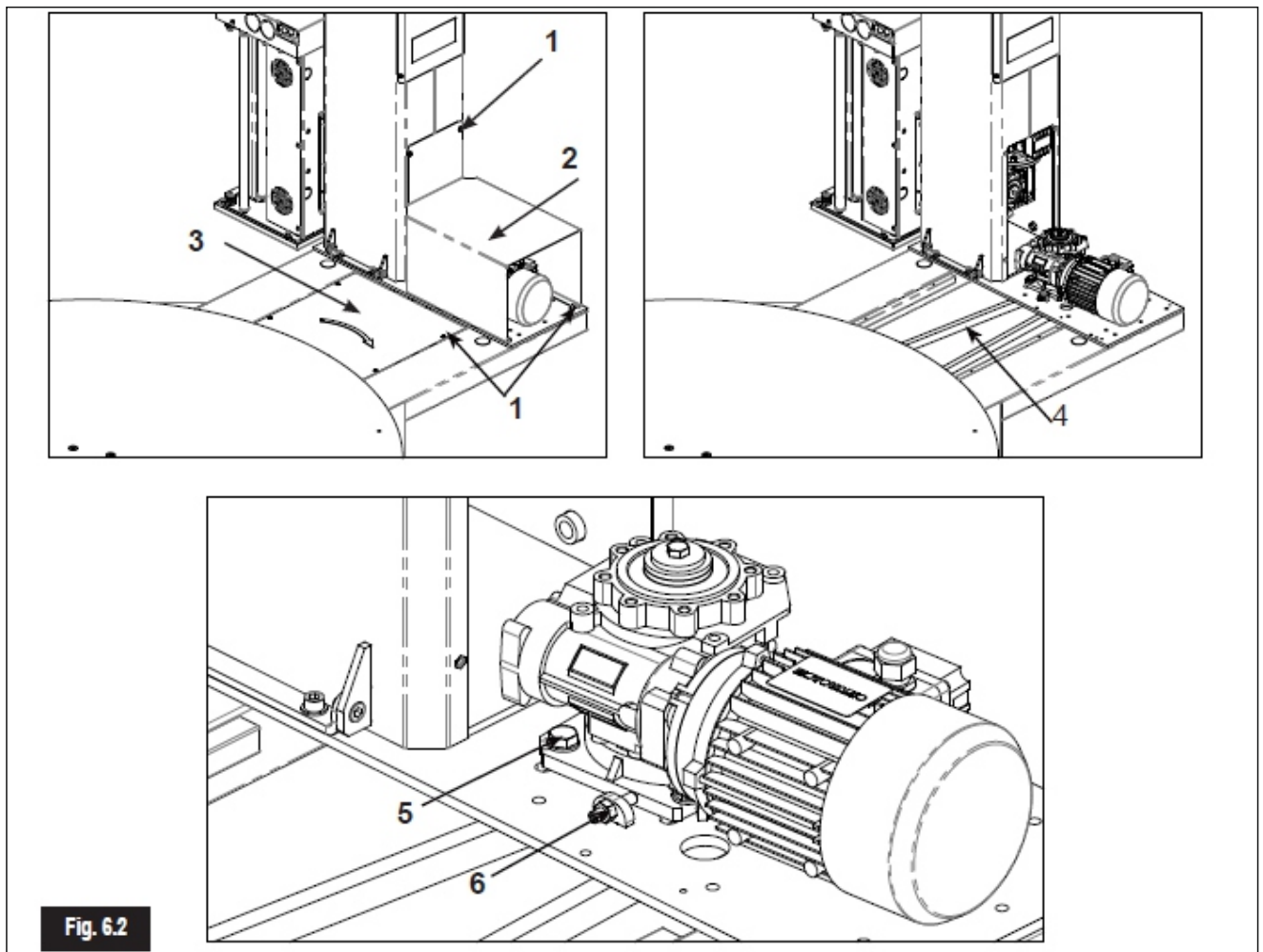
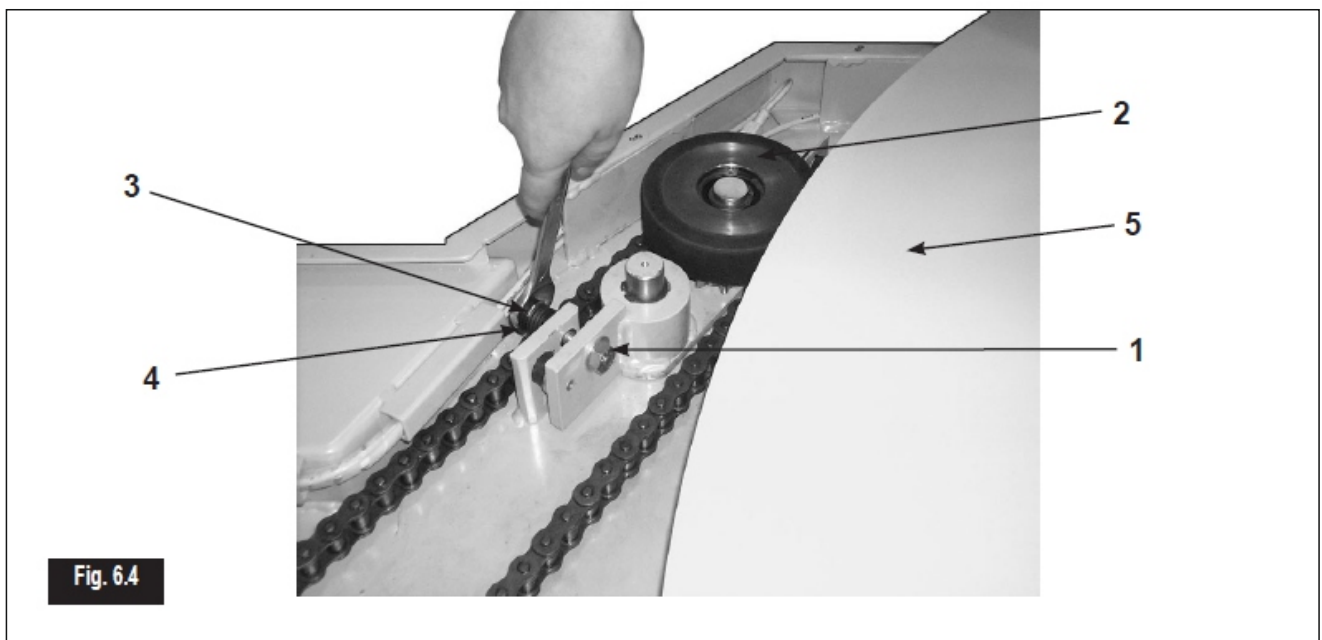


Fig. 6.2

Adjusting the friction wheels (Fig. 6.4)

To check and adjust the preload of the friction (driving) wheels **(2)**, proceed as follows:

- a) remove the guard **(2)** (Fig. 6.3);
- b) loosen the lock nut **(1)**;
- c) loosen the preload screw **(3)** of the springs **(4)** until they are fully released;
- e) make sure that the friction wheel **(2)** is in contact with the disk **(5)** and tighten the screw **(3)** until it compresses the springs **(4)** for $3 \div 4$ mm;
- f) tighten the nut **(1)** and refit the guard.



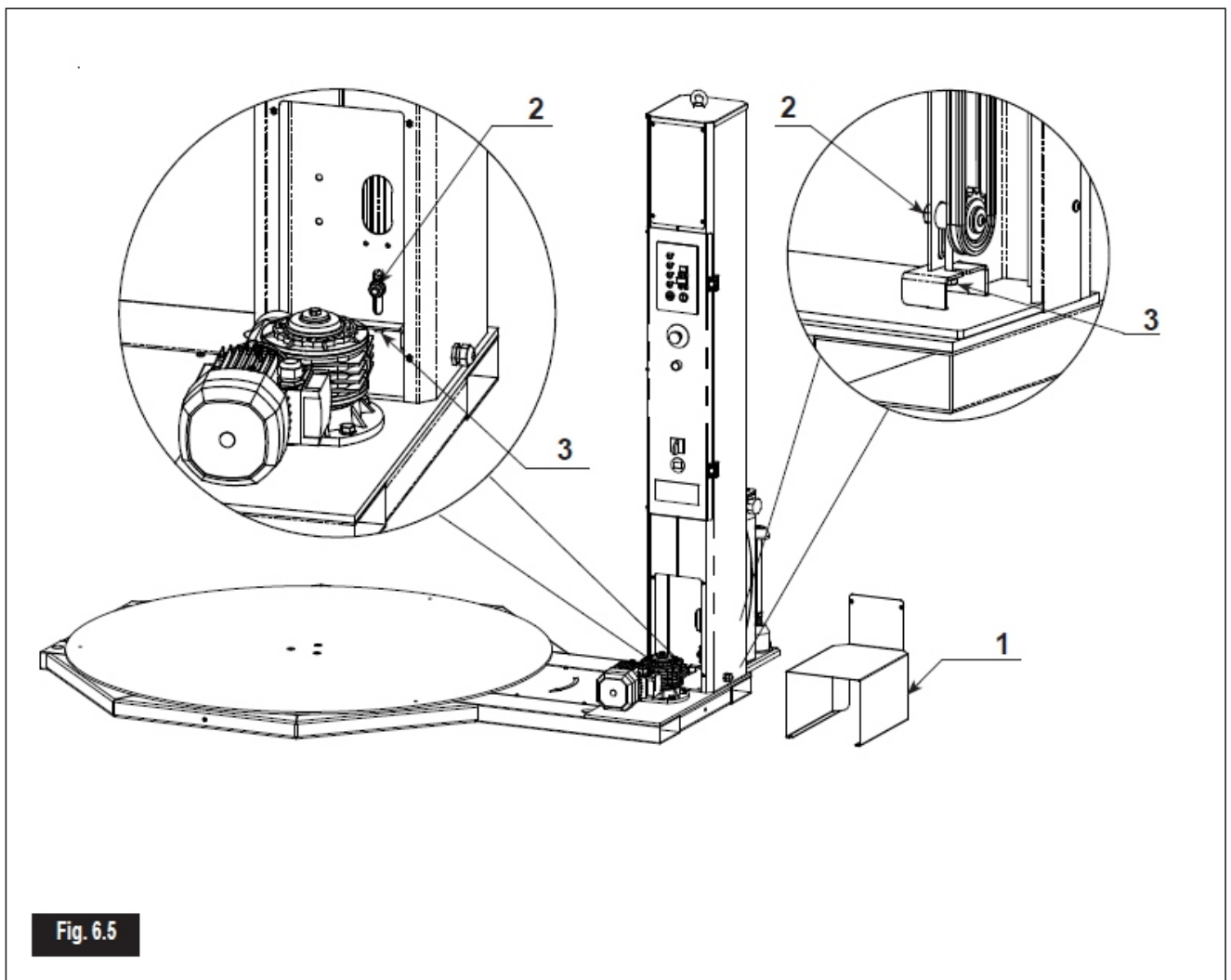
6.2.4 SIX-MONTHLY MAINTENANCE

Check the chains and transmission organs for wear and replace if necessary.

Tensioning the chain (Fig. 6.5)

Check the tension of the chain of carriage movement after the first month of use the machine and then every six months.

- Remove the screws securing the motor cover (1), and remove the motor cover from place.
- Loosen the nut (2) blocking the idler pulley. Turn the screw tension (3), placed on the head of the column.
- The pulley is then adjusted along the slot, once it reaches the correct chain tension, tighten the lock nut (2).
- Replace the motor cover (1) and secure with the screws.



7 OUT OF SERVICE

7.1 DISMANTLING, SCRAPPING AND DISPOSAL



IF THE MACHINE OR ITS COMPONENTS ARE FOUND TO BE NO LONGER SERVICEABLE OR REPAIRABLE BECAUSE THEY ARE BROKEN, WORN OR HAVE COME TO THE END OF THEIR WORKING LIFE, THEY MUST BE DEMOLISHED.

- Demolition must be carried out using suitable equipment, chosen on the basis of the type of material in question.
- All components must be dismantled and scrapped after being broken down into smaller parts, so that none of them can reasonably be used again.
- When the machine is scrapped, its parts must be disposed of in a differentiated manner, taking into account their different types (metal, oil and lubricants, plastic, rubber, etc..) handing them over to collection centres authorised for such purposes and in any case conforming to the applicable laws in force governing the disposal of solid industrial waste.



NEVER TRY TO RE-USE MACHINE PARTS OR COMPONENTS THAT MAY STILL APPEAR INTACT ONCE THEY HAVE BEEN DECLARED NO LONGER SERVICEABLE.