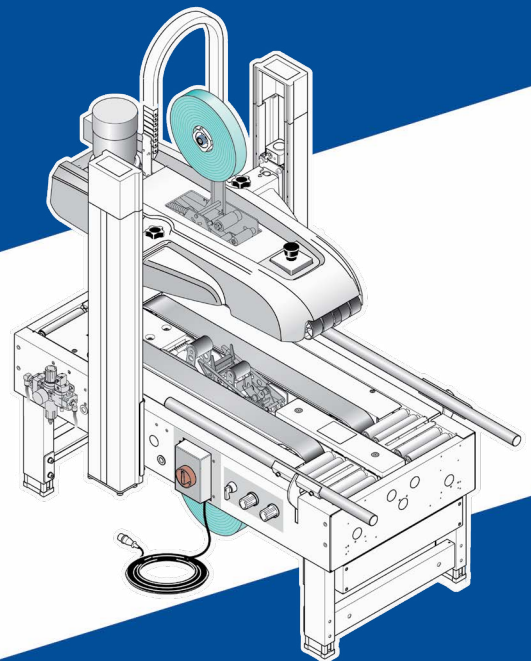


# SIAT

M. J. MAILLIS GROUP

## Semi-automatic sealer



# SR20

## Operation and maintenance manual

Translation of the “ORIGINAL INSTRUCTIONS”



<https://goo.gl/NcD125>



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## Summary

### Safety information

Purpose of the manual .....	3
Glossary of the terms .....	4
Attached documentation .....	5
General safety warnings .....	5
Safety Warnings for Handling and Installation .....	6
Safety Warnings for Operation and Use .....	7
<i>Safety Manager Obligations</i> .....	7
Safety Warnings on Misuse .....	8
Safety Warnings on Residual Risks .....	8
Safety Warnings for Maintenance and Adjustments .....	9
Safety warnings for the electrical equipment .....	10
Safety warnings for the environmental impact .....	10
Safety and information symbols .....	11

### Technical Specifications

General description of the machine .....	13
Description of the main components .....	14
Manufacturer and machine identification .....	16
Residual risks .....	16
Description of the safety devices .....	17
Description of optional devices .....	17
Specifications .....	18
Description of outer areas .....	19
Position of information and safety plates .....	20

### Use and functioning

Recommendations on Operation and Use .....	21
Control description .....	22
Start and stop .....	23
Emergency stop and new start-up .....	24
Preparing the machine for use .....	25
<i>Setting up the pressure of the upper conveyor</i> .....	25
<i>Setting up the pressure of the centring guide bars</i> .....	25
<i>Setting up the upper conveyor limit switch</i> .....	26

### Maintenance

Recommendations for maintenance interventions .....	27
Scheduled maintenance intervals .....	28
Diagram of the points of lubrication .....	29
Lubricant table .....	30
Problems, causes, remedies .....	30
Speed adjustment of centring guide .....	31
Adjusting the drive chain for the centring guide .....	32
Cleaning and replacement of the air filter .....	33
Lower conveyor belt adjustment .....	34
Upper conveyor belt adjustment .....	35
Lower conveyor belt replacement .....	36
Replacement of upper conveyor belts .....	38
Replacing the Set of 600 mm high legs (AS80) .....	40
Fitting the set of wheels for feet (AS77) .....	42
Machine Disposal and Scrapping .....	44

## K11 sealing unit

Description of sealing unit.....	45
Sealing unit technical specifications.....	47
Supplying and guiding adhesive tape .....	48
Cutting blade cleaning.....	50
Adhesive tape parameter check.....	51
Flap length adjustment.....	52
<i>Upper sealing unit (flap 70 mm).....</i>	<i>52</i>
<i>Lower sealing unit (flap 70 mm).....</i>	<i>52</i>
<i>Upper sealing unit (flap 50 mm).....</i>	<i>53</i>
<i>Lower sealing unit (flap 50 mm).....</i>	<i>53</i>
<i>Upper sealing unit (flap 30 mm).....</i>	<i>54</i>
<i>Lower sealing unit (flap 30 mm).....</i>	<i>54</i>
Replacement of the cutting blade.....	55

## K11-R sealing unit

Description of sealing unit.....	57
Sealing unit technical specifications.....	59
Supplying and guiding adhesive tape .....	60
Cutting blade cleaning.....	62
Adhesive tape parameter check.....	63
Flap length adjustment.....	64
<i>Upper sealing unit (flap 70 mm).....</i>	<i>64</i>
<i>Lower sealing unit (flap 70 mm).....</i>	<i>64</i>
<i>Upper sealing unit (flap 50 mm).....</i>	<i>65</i>
<i>Lower sealing unit (flap 50 mm).....</i>	<i>65</i>
<i>Upper sealing unit (flap 30 mm).....</i>	<i>66</i>
<i>Lower sealing unit (flap 30 mm).....</i>	<i>66</i>
Replacement of the cutting blade.....	67

## K12 sealing unit

Description of sealing unit.....	69
Sealing unit technical specifications.....	71
Supplying and guiding adhesive tape .....	72
Cutting blade cleaning.....	74
Adhesive tape parameter check.....	75
Flap length adjustment.....	76
<i>Upper sealing unit (flap 70 mm).....</i>	<i>76</i>
<i>Lower sealing unit (flap 70 mm).....</i>	<i>76</i>
<i>Upper sealing unit (flap 50 mm).....</i>	<i>77</i>
<i>Lower sealing unit (flap 50 mm).....</i>	<i>77</i>
<i>Upper sealing unit (flap 30 mm).....</i>	<i>78</i>
<i>Lower sealing unit (flap 30 mm).....</i>	<i>78</i>
Replacement of the cutting blade.....	79

## K12-R sealing unit

Description of sealing unit.....	81
Sealing unit technical specifications.....	83
Supplying and guiding adhesive tape .....	84
Cutting blade cleaning.....	86
Adhesive tape parameter check.....	87
Flap length adjustment.....	88
<i>Upper sealing unit (flap 70 mm).....</i>	<i>88</i>
<i>Lower sealing unit (flap 70 mm).....</i>	<i>88</i>
<i>Upper sealing unit (flap 50 mm).....</i>	<i>89</i>
<i>Lower sealing unit (flap 50 mm).....</i>	<i>89</i>
<i>Upper sealing unit (flap 30 mm).....</i>	<i>90</i>
<i>Lower sealing unit (flap 30 mm).....</i>	<i>90</i>
Replacement of the cutting blade.....	91
Analytical index .....	93

## Purpose of the manual

- The purpose of the manual is to inform and train operators so that they can interact with the machine in SAFE CONDITIONS.
- Its aim is also to prevent risks, to reduce the social costs resulting from accidents and damage to the health of people, property and to the environment.
- **In some cases, accidents may be due to the Operator using the machine carelessly.**
- **Caution is always necessary. Safety is also the responsibility of all the persons interacting with the machine throughout its operating life.**
- **Remember that it is too late to think about safety issues when the accident has already occurred.**
- **Reading the Operating Instructions is fundamental in order to minimize the risks and avoid accidents.**
- The content of this manual was originally edited by the Manufacturer in the mother tongue (ITALIAN), in compliance with the professional writing standards and the regulations in force.
- Any translation of the manuals shall be carried out directly and without alterations from the texts of the ORIGINAL INSTRUCTIONS.
- This applies also to the translations carried out by the agent or by the person who is in charge of delivering the equipment in the specific linguistic area.
- The Manufacturer reserves the right to make any changes to the content of the manuals without prior notice, provided that such changes do not alter the safety level.
- All information supplied by the recipients represents an important contribution to the improvement of the after-sales service that the manufacturer will offer to his/her customers.
- All supplied information is organised into an index and a table of contents, so as to easily track specific topics of interest.
- **The SAFETY WARNINGS and the INSTALLATION MANUAL are supplied as hard-copy publications.**
- **The USE AND MAINTENANCE MANUAL, operation diagrams and all other post-sale documents can be downloaded from the INTERNET.**
- Keep the manual and the attached documents in a place known and easily traceable, so that you may refer to them whenever necessary.

## Glossary of the terms

The glossary includes some terms used when processing information, with their definition, in order to facilitate understanding.

- **Training:** A process aiming at transferring the knowledge, skills and behaviours required to work in an autonomous, correct and hazard-free manner.
- **Assistant:** person chosen, trained and coordinated in an appropriate manner to minimize the risks in carrying out their tasks.
- **Emergency stop:** voluntary activation of the special control that stops the dangerous elements of the work unit in the case of imminent risk.
- **Stop in alarm conditions:** this state causes the components to stop and is activated when the control system detects a problem in the machine operation.
- **General shut down:** In addition to the normal stop this state also causes the interruption of all the power sources (electrical, pneumatic, etc.).
- **Operating Stop:** state that does not cut off power supply to the actuators, but ensures control system monitoring in safe conditions.
- **Size change:** a set of interventions to be carried out before beginning to work with specifications different with respect to the ones previously in use.
- **Test-run:** a series of operations required to ensure compliance to the design specifications, and to commission the machine under safety conditions.
- **Installer:** a technician chosen and authorized by the manufacturer or his authorized representative, among those who fulfil the requirements for installation and testing of the machine or plant in question.
- **Maintenance Operator:** a technician chosen and authorized, among those who fulfil the requirements, to carry out routine and extraordinary maintenance operations on the machine. Therefore, the maintenance operator shall possess precise knowledge and skills, with particular skills in the relevant field.
- **Routine Maintenance:** all the operations necessary to maintain the functionality and efficiency of the machine. Normally, these operations are scheduled by the manufacturer, who defines the necessary skills and methods of action.
- **Operator:** a person chosen and authorized, among those who fulfil the requirements, having the knowledge and skills necessary to operate the machine and carry out routine maintenance interventions.
- **Person in charge of the installation:** a technical expert who must carry out the installation in compliance with the laws applicable to the workplace and, at the end, assess its compliance.
- **Residual risks:** all the risks remain even if all the safety solutions have been adopted and integrated when the machine has been designed.
- **Expert Technician:** A person authorised by the Manufacturer and/or his representative to carry out services that require specific technical skills and abilities.
- **Forwarder and Handler:** Authorized persons with recognized expertise in the use of means of transport and lifting devices, in safety conditions.
- **Improper use:** reasonably foreseeable use different from what is specified in the use manual, that may be caused by human behaviour.

## Attached documentation

The **SAFETY WARNINGS** and the **INSTALLATION MANUAL** are supplied as hard-copy publications.

- The USE AND MAINTENANCE MANUAL, operation diagrams and all other post-sale documents can be downloaded from the INTERNET.
- The list shows the documentation supplied with the machine.
- CE Declaration of conformity
- Operation and maintenance manual
- Installation manual
- Wiring diagrams
- Pneumatic system diagrams
- Specific Manuals for installed components or sub-assemblies available commercially

## General safety warnings

- The machine has been designed and built with all the precautionary measures aimed at minimising the possible risks over its expected life cycle.
- Tampering with and bypassing the safety devices may lead to severe risks for the Operators.
- Before interacting with the machine, and in particular, before its first use, read the SAFETY WARNINGS contained in the manual.
- Spend some of your time reading this information to avoid any risk for people's health and safety as well as economic damage.
- Respect the SAFETY WARNINGS. Avoid any IMPROPER USE of the machine and assess the RESIDUAL RISKS.
- When operating the machine, DO NOT wear clothes and/or accessories that could become caught in the moving or protruding parts.
- Before machine use and/or maintenance, read the information contained in the reference documents and accurately implement the described procedures.
- Carry out the interventions ONLY according to the modes recommended by the Manufacturer in the "Instructions for use".
- The personnel in charge of carrying out interventions on the machine must have suitable and proven experience in this specific field.
- Please keep safety signs and information legible and follow the instructions.
- The information signals may be of different shapes and colours, to indicate dangers, obligations, prohibitions and indications.
- Signals which are no longer legible must be replaced and repositioned in the same place of origin.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

## **Safety Warnings for Handling and Installation**

- The manufacturer has attached special attention to the packaging of the machine, to minimise the risks associated with the shipping, handling and transport phases.
- The personnel authorised to handle the machine (loading and unloading) must have acknowledged technical skills and professional ability.
- Before handling, please read the instructions, in particular those on safety, contained in the installation manual, on the packages and/or on the removed parts.
- In order to make transport easier, the equipment can be shipped with a few disassembled and properly protected and packaged components.
- Loading and transport must be carried out with equipment of adequate capacity by anchoring it to specific points indicated on the packages.
- DO NOT attempt to by-pass the instructions concerning the lifting requirements and special points provided for lifting and handling each item and/or disassembled part.
- Slowly lift the pack to the minimum necessary height and move it very carefully in order to avoid dangerous vibrations.
- The packs being shipped must be properly fastened to the means of transport in order to ensure safe conditions during transfer and the integrity of their contents.
- Certain steps might request one or more operators, who must be previously trained and informed on the tasks they will have to perform.
- Download packages in the immediate vicinity of the machine setting, which must be sheltered from bad weather.
- Do not stack the packs onto each other in order to avoid any damage and to avoid the risk of sudden and dangerous movements.
- In case of prolonged storage, regularly check that the component stocking conditions do not change.
- The installation area is to be prepared so as to be able to carry out the operations as specified in the manuals and in conditions of safety.
- Ensure that the installation environment is protected against atmospheric agents, free of corrosive substances and free of any risk of explosion and/or fire.
- Make sure that the installation area has a suitable ventilation to avoid the concentration of unhealthy air for the Operators.
- Signal and delimit the installation area in a proper way in order to prevent non authorised personnel from accessing the installation area.
- The connections to the power sources (electric, pneumatic, etc.) must be performed correctly, as shown in the diagrams and in compliance with the regulatory and legal requirements in force.
- ONLY qualified and experienced personnel are allowed to carry out the electrical connections.
- After completing the connections, perform a general check to ensure that all the interventions have been carried out properly and that the requirements have been met.
- The installation manager, before commissioning, must check that all the safety devices are properly installed and functioning.
- At the end of operations check that there are no other tools or other material near the moving parts or in dangerous areas.
- Dispose of all packing in accordance with the laws in force in the country of installation.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**



## Safety Warnings for Operation and Use

- The machine must be used by one single operator ONLY, who must be trained and capable of performing the work and be in suitable conditions.
- Certain steps might request one or more operators, who must be previously trained and informed on the tasks they will have to perform.
- Consult the user manual, in particular during the first use, and make sure that you fully understand its content.
- Find out the position and function of the controls and simulate some operations (in particular start and stop) in order to acquire familiarity.
- The machine shall be used ONLY for the purposes and complying with the procedures specified by the Manufacturer.
- Make sure that all the safety devices are properly installed and efficient.
- The machine should be used ONLY with the original safety devices installed by the Manufacturer.
- Ensure the area around the machine, especially the control post, is ALWAYS unobstructed and in good condition to minimize the risks for the Operator.
- According to the type of operation to carry out, wear the Personal Protective Equipment listed in the “Instructions for use” and that indicated by the Labour laws.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

### ■ Safety Manager Obligations

- The safety manager must train the operator and help him or her familiarise and interact with the machine in an independent, adequate and risk-free manner.
- The operator must be informed about reasonably predictable INCORRECT USES and about the RESIDUAL RISKS that remain.
- The operator must demonstrate that he has acquired the relevant skills and has understood the “User Instructions” in such a way as to carry out his activities safely.
- The operator must be able to recognise the safety signals and demonstrate that he is in suitable condition to carry out his assigned duties.
- The safety manager must release educational material to trainees and document the delivered training, so as to be able to produce such documentation in case of litigation.

## Safety Warnings on Misuse

**Improper use: reasonably foreseeable use different from what is specified in the use manual, that may be caused by human behaviour.**

- ONLY trained, documented and authorized Operators are allowed to use the machine.
- DO NOT use or allow other persons to use the machine if the safety devices are faulty, disabled and/or incorrectly installed.
- DO NOT use or allow other persons to use the machine for purposes and in ways different from what specified by the Manufacturer.
- DO NOT use the machine in home environments.
- DO NOT wear clothes and/or accessories that could become caught in the moving or protruding parts.
- When operating the machine, ALWAYS wear the Personal Protective Equipment specified by the Manufacturer and by the current regulations on safety at work.
- If troubles arise, do NOT continue to use the machine. Stop it immediately and restart only after restoring the normal operating condition.
- DO NOT use the machine if the scheduled routine maintenance interventions have not been carried out.
- DO NOT tamper with, override, bypass or eliminate the safety devices installed on the machine.
- DO NOT modify the manufacturing and functional characteristics of the machine in any manner whatsoever.
- DO NOT perform any interventions other than those specified in the Operation Manual without the explicit authorization of the Manufacturer.
- DO NOT carry out any intervention when the machine is being operated. Stop the machine and put it in safety condition before carrying out any intervention.
- DO NOT clean or wash the machine using aggressive products that may damage its components.
- DO NOT replace the components with non-genuine spare parts or other components with different design and manufacturing specifications.
- DO NOT dump in the environment any materials, polluting liquids and maintenance waste generated during the operations. Dispose of them according to the regulations in force.
- DO NOT leave the machine unattended during operation and DO NOT leave it at the end of the work without stopping it to safety conditions.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

## Safety Warnings on Residual Risks

**Residual risks: all the risks remain even if all the safety solutions have been adopted and integrated when the machine has been designed.**

- Upon designing and building the machine, the Manufacturer has paid particular attention to the RESIDUAL RISKS that may affect the safety and health of the Operators.
- For specific information about residual risks, please refer to the machine user manual.

## Safety Warnings for Maintenance and Adjustments

- Always keep the machine in optimum operating condition and carry out the routine maintenance according to the intervals and procedures specified by the Manufacturer.
- **A good maintenance will ensure a stable performance over time, longer working life and constant compliance with the safety requirements.**
- The personnel authorized to carry out the ordinary maintenance must have qualified expertise and specific skills in the field of intervention.
- Any work on the electrical system must ONLY be performed by technicians with acknowledged, field-specific skills.
- Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
- According to the type of operation to carry out, wear the Personal Protective Equipment listed in the “Instructions for use” and that indicated by the Labour laws.
- Respect the SAFETY WARNINGS. Avoid any IMPROPER USE of the machine and assess the RESIDUAL RISKS.
- Before carrying out any intervention, activate all the safety measures, and assess any residual energy which may still be present.
- Interventions to not easily accessible or dangerous areas shall be carried out ONLY after arranging the required safety conditions.
- Carry out the interventions ONLY according to the modes recommended by the Manufacturer in the “Instructions for use”.
- All operations must be carried out ONLY with suitable tools which shall be in good condition, in order to avoid damaging any components and parts of the machine.
- Replace the components and/or safety devices ONLY with original spare parts in order not to alter the required safety level.
- The use of similar but not genuine spare parts can lead to non-compliant repairs, impaired performance and economic damage.
- Use the lubricants (oils and greases) recommended by the Manufacturer or lubricants of equivalent chemical and physical characteristics.
- At work completion, restore all the security conditions aimed to prevent and minimize the risks during the human-machine interaction.
- At the end of operations check that there are no other tools or other material near the moving parts or in dangerous areas.
- Refer to the Technical Assistance Service of the Manufacturer, in case interventions not described in the “Instructions for use” are needed.
- All EXTRAORDINARY MAINTENANCE interventions shall be performed only by authorized Technicians with proven and gained experience in the field.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

## Safety warnings for the electrical equipment

**The electrical equipment has been built in accordance with the applicable standards and its efficiency is ensured if the listed conditions are met.**

- Ambient temperature and relative humidity between maximum and minimum permitted limits.
- Absence of environmental electromagnetic noise and radiation (X-rays, laser, etc.).
- Absence of environment areas with gas and dust concentration levels potentially explosive and/or at risk of fire.
- Use of products and materials free from contaminants and corrosive agents.
- Products containing chemicals, acids, salts, etc. can come into contact with the electrical components and cause irreversible damage.
- Transport and storage temperatures between minimum and maximum permitted limits.
- Altitude not exceeding the maximum permitted limits.
- Installation at altitudes higher than the permitted values will affect the efficiency of electrical and electronic components.
- Power Cable with section suitable for the current power and intensity values indicated in the data plate.
- Protection class in accordance with data plate indications.
- The power supply line to which the machine must be connected must have identical characteristics to those mentioned in the data plate.

### **Important**

**All the listed requirement values are contained in the technical specifications table.**

- **If one or more of the listed requirements cannot be met, alternative solutions should be agreed at the ordering stage.**

## Safety warnings for the environmental impact

**Each organization is responsible for implementing procedures aimed at identifying, evaluating and controlling the environmental impact of its own activities (products, services, etc.).**

- Procedures for identifying significant environmental impact must take account of the factors listed.
  - Emissions in the atmosphere
  - Discharged liquids
  - Waste disposal
  - Soil contamination
  - Use of raw materials and natural resources
  - Local problems related to the environmental impact
- In order to minimize the environmental risks during the man-machine interaction follow the recommended instructions.
  - Dispose of all packing in accordance with the laws in force in the country of installation.
  - Make sure that the installation area has a suitable ventilation to avoid the concentration of unhealthy air for the Operators.
  - Keep noise level to the minimum to reduce noise pollution.
  - Select materials on the basis of their composition and provide for differentiated disposal in accordance with the laws in force.

- Avoid dumping polluting materials and products in the environment (oils, greases, electrical and electronic apparatus etc.).
- All the components of Electrical and Electronic Apparatus contain dangerous substances and are appropriately marked.
- Dispose of Electrical and Electronic Apparatus Waste properly, at authorised collection centres, to avoid harmful and damaging effects.
- Incorrect disposal of dangerous waste is punishable with sanctions regulated by the laws in force on the territory in question.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

## Safety and information symbols

The figures show safety signs and information and the relevant meaning.

- For more details on the signs actually used, refer to the section on "Position of the safety signs and information".
- **Electrical shock or electrocution hazard:** hazard signal that warns the operator from accessing the areas under voltage in order to avoid risks.
- **Risk of tripping:** danger signal indicating that attention should be paid to projections from the structure.
- **Risk of slipping:** danger signal indicating that attention should be paid during transfers on flat surfaces.
- **Risk of crushing body parts:** danger signal warning to stay out of the active machine work range.
- **Risk of crushing upper limbs:** danger signal warning to keep upper limbs out of the active machine work range.
- **Risk of projection of objects:** it indicates the presence of flying materials due to high operating speeds or load instability.



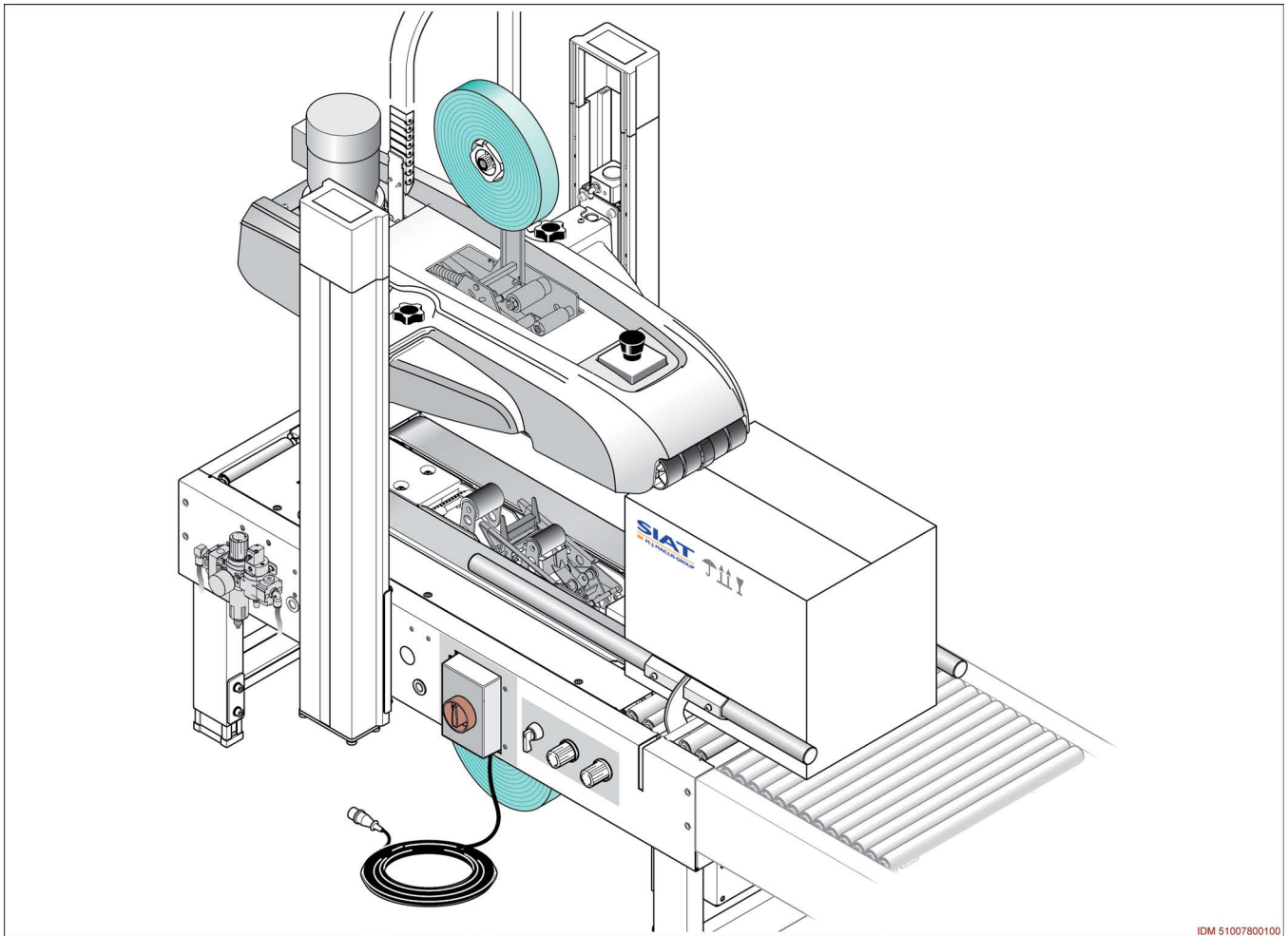
- **Cutting hazard:** danger sign warning not to come close to the cutting parts with the upper limbs.
- **Risk of entanglement:** danger sign warning not to come close to the moving parts with the upper limbs.
- **Information Signal:** indicates the required direction of rotation for operation.
- **Information Signal:** indicates the lifting points for fork-type devices.
- **Information sign:** it indicates the points where to attach the hooks of the lifting device.
- **Information Signal:** indicates the earthing point.
- **Information warning sign:** read the operation and maintenance manual carefully before performing any operations.
- **Information signal:** before performing any operation, disconnect the power plug to avoid electric shock hazards.



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## General description of the machine

The SR4 sealer is a semi-automatic random machine that uses adhesive tape to seal the top and bottom flaps of cardboard boxes or cases.



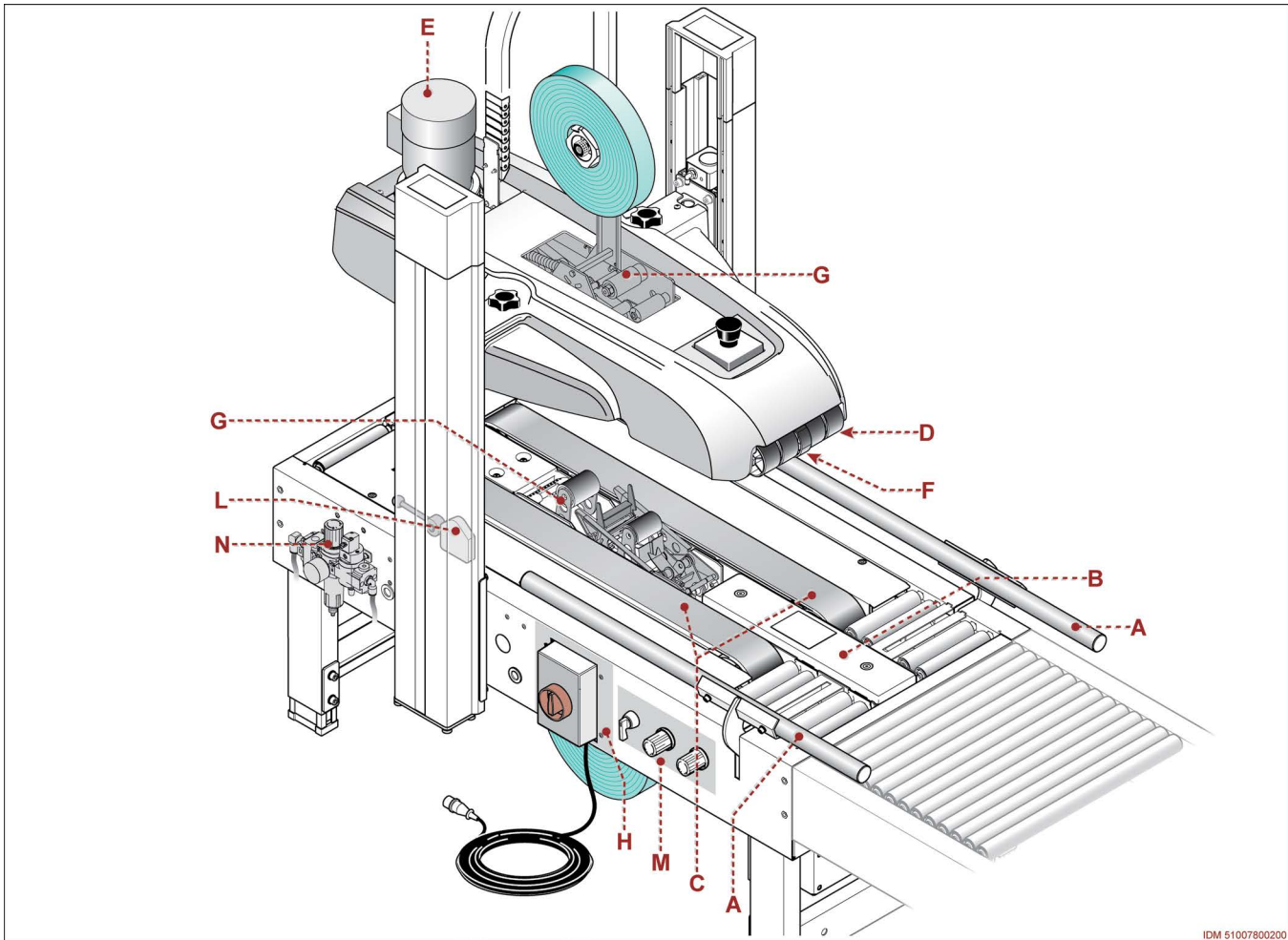
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- The machine must be used by one single operator ONLY, who must be trained and capable of performing the work and be in suitable conditions.
  - The case (with the bottom flaps closed) is pushed until it activates the sensor , which operates the bars of the centring guide to align it and hold it in position.
  - The filled case (with the top flaps folded down) is pushed to activate the control , which automatically lifts the upper conveyor.
  - The case is pushed up to the lower conveyor and is automatically transferred for bottom and top sealing.
  - The operator must also replace the adhesive tape and carry out routine maintenance.
  - The machine has been designed, built and equipped by applying integrated safety principles.
  - The machine is for professional use only and must be installed in industrial-type settings - factories or workshops.
  - The machine must be installed ONLY in environments that are free from the risk of explosion and / or fire.
  - On request, the machine may be equipped with accessories, either when it is ordered or later.
- See "Description of optional devices" for further details.



## Description of the main components

The image shows the main components and the list reports their description and function.



- A) Centring guide:** it is equipped with bars to keep the case aligned and centred.
- B) Pressure control:** it activates the bar operating system of the centring guide **A** when the case touches it.
- C) Lower conveyor:** it is equipped with belts driven by the gear-motor to transfer the cases during sealing.
- D) Upper conveyor:** it is equipped with belts driven by the gear-motor **E** to transfer the cases during sealing.
  - The conveyor is lifted automatically to the sealing height when the case activates the control **F**.
  - When the case has been sealed, the upper conveyor lowers until it reaches the limit switch **L**.
  - The position of the limit switch **L** can be adjusted to suit the different heights of the cases to be sealed.
- G) Sealing units:** they are fitted with an adhesive tape holder that seals the lower and upper part of the cardboard cases and/or cartons.
  - Each sealing unit is equipped with devices that apply and cut the adhesive tape.
- H) Electrical Panel:** contains the electrical components for the power and control features of the machine.



**M) Pneumatic panel:** it consists of the control devices for the pneumatic components.

**N) Air treatment unit:** its purpose is filtering and dehumidifying the air flow to the pneumatic system.

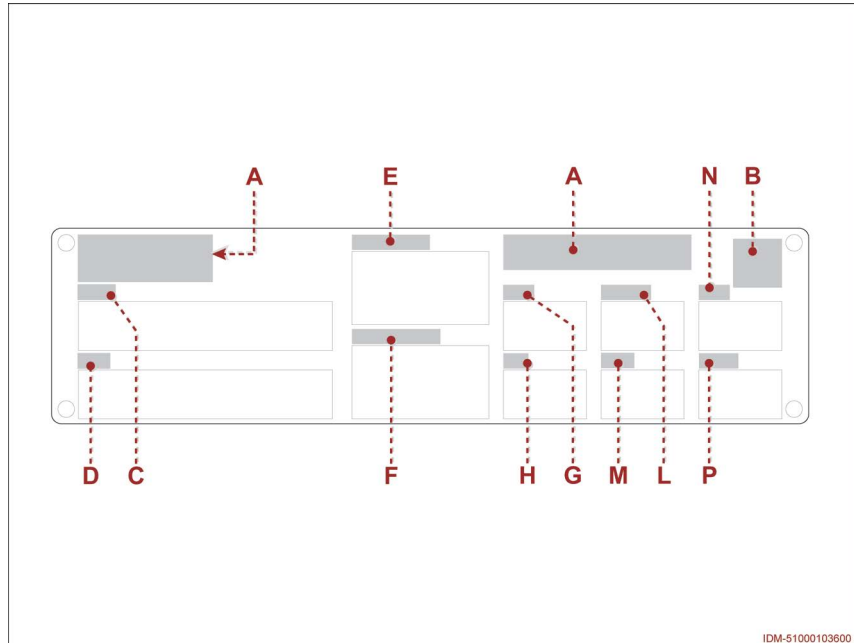
- The unit is equipped with a tap (which can be padlocked) complete with a pressure regulator and pressure gauge.
- In the “CLOSED” position, the valve automatically discharges the residual pressure.

## Manufacturer and machine identification

The identification plate (pictured) is affixed directly to the machine.

- In addition to the references for identification provided by the Manufacturer, they also list all the essential information for a safe operation.

- A) Manufacturer identification
- B) Space reserved for CE compliance marking
- C) Machine model
- D) Machine type
- E) Serial number
- F) Serial number
- G) Year of fabrication
- H) Power supply voltage
- L) Electrical power consumption
- M) Power supply frequency
- N) Absorbed power
- P) Power supply phases



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## Residual risks

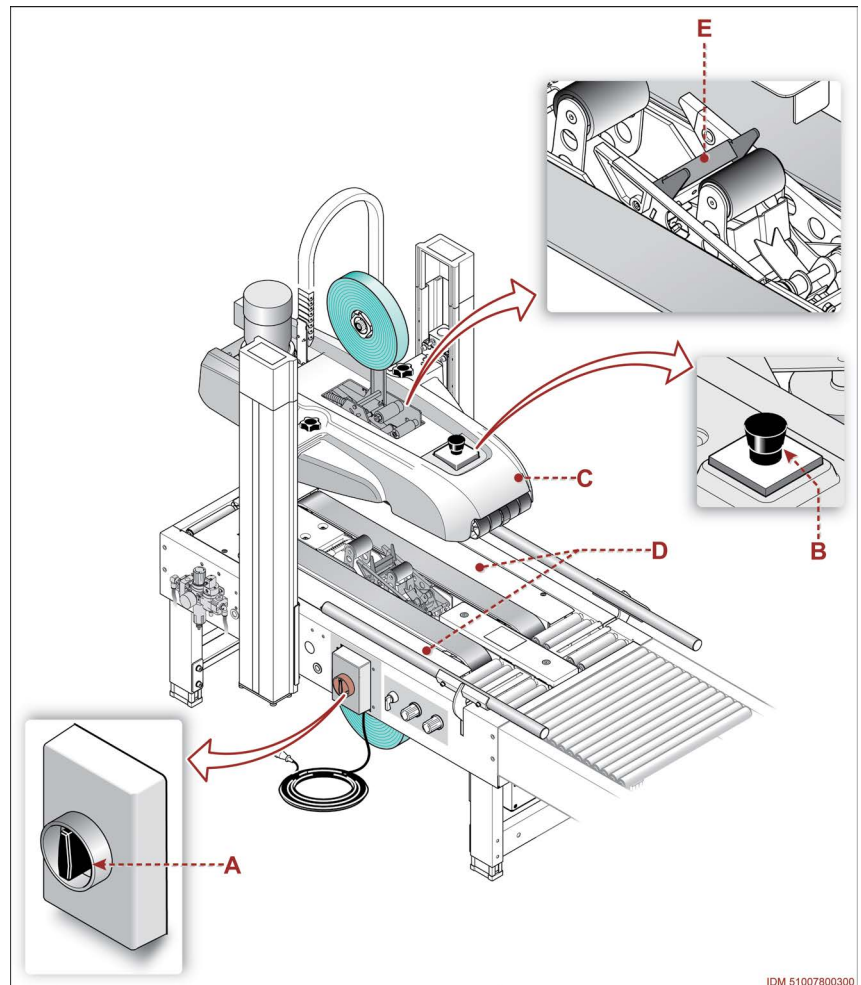
Residual risks are defined as: “Any risk that remains notwithstanding the safety solutions adopted and integrated during the design phase”.

- Each residual risk is signalled with a special sign. Some of them are applied close to the areas where the risk is present, others are placed in an easily visible position.
- The list includes the residual risks that may persist on this type of machine.
- **Cutting hazard:** do not operate the cutting blade without wearing the suitable devices for the protection of your upper limbs.
- **Risk of crushing upper limbs:** stop following the case as soon as it is picked up by the conveyor in order to avoid contact with the lateral pressure rollers.
- **Risk of entanglement:** never wear clothes or accessories that could become caught in the moving parts.

## Description of the safety devices

The machine is equipped with safety devices that reduce the risks during the man-machine interaction.

- A) Electric disconnecter:** safety control that powers the electric panel.
- B) Emergency stop button:** safety control that, in case of an imminent risk, stops all parts whose function might constitute a risk.
- C) Fixed guard:** safety device that prevents access to the parts whose operation may be dangerous.
- D) Fixed guard:** safety device that prevents access to the parts whose operation may be dangerous.
- E) Mobile guard:** safety device that covers the cutting blade (when not working), thus preventing contact with the upper limbs.



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## Description of optional devices

On request, the machine may be equipped with accessories, either when it is ordered or later.

- Set of 600 mm high legs (AS80)  
See “Replacing the Set of 600 mm high legs (AS80)”
- Set of wheels for feet (AS77)  
See “Fitting the set of wheels for feet (AS77)”
- Roller table (RG)
- Extendible roller conveyor (GTL - GTR)

## Specifications

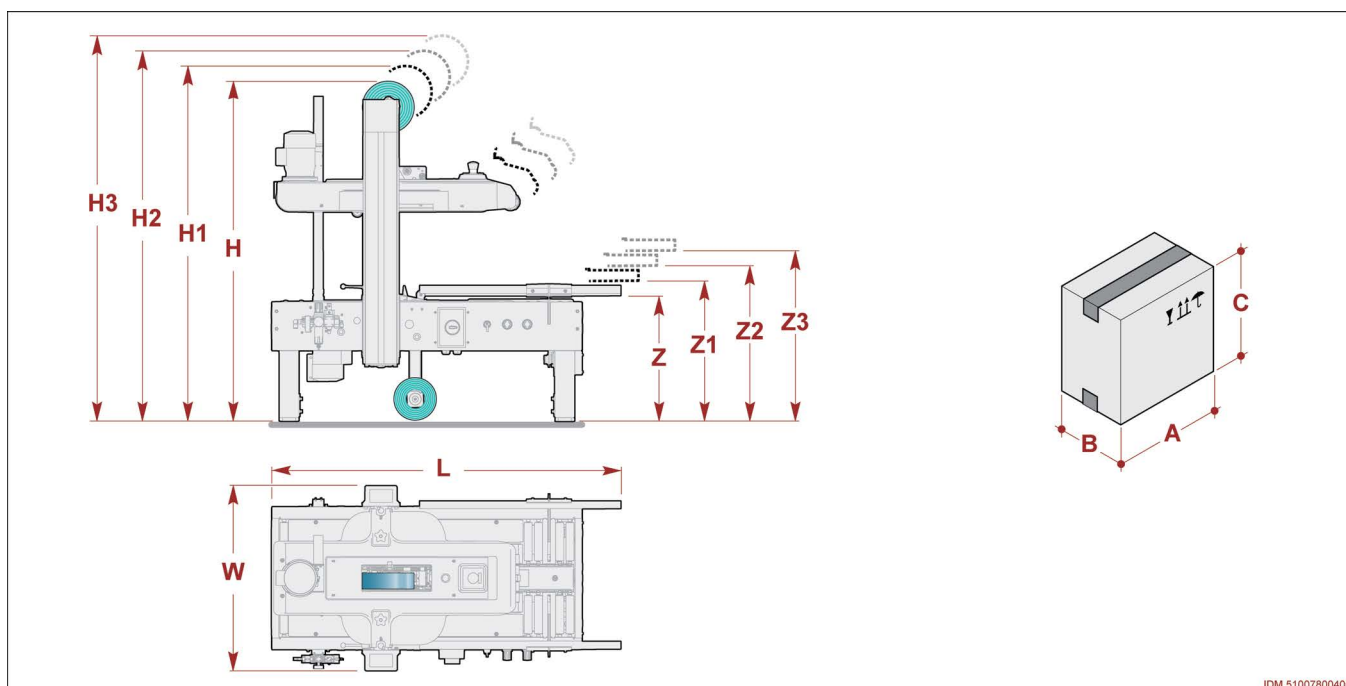


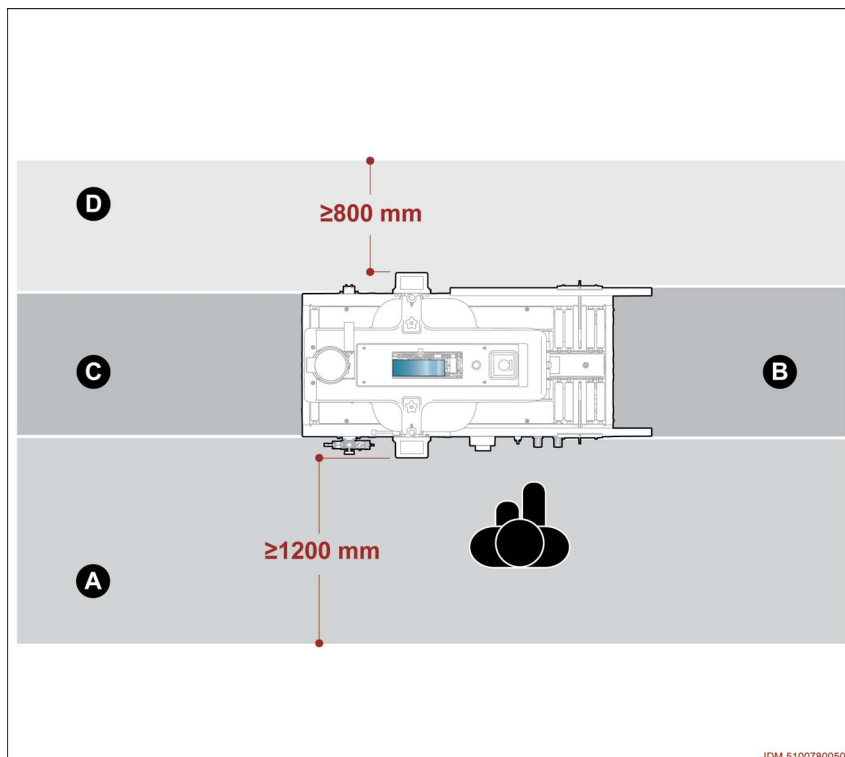
Table: Technical data of the machine

Description	Unit of measurement	Value
<b>Electric supply</b>	see the identification plate	
<b>Pneumatic power supply</b>		
Operating pressure	bar	5,5 ÷ 7
Air consumption	NI/cycle	6.5
<b>Machine dimensions</b>		
Dimensions (LxW)	mm	1395 x 740
Height <b>H</b> (standard legs)	mm	1295 ÷ 1860
Height <b>H1</b> (standard legs + set of wheels AS77)	mm	1405 ÷ 1970
Height <b>H2</b> (set of optional legs AS80)	mm	1455 ÷ 2020
Height <b>H3</b> (set of optional legs AS80 + set of wheels AS77)	mm	1565 ÷ 2130
Work surface height <b>Z</b> (standard legs)	mm	480 ÷ 820
Work surface height <b>Z1</b> (standard legs + set of wheels AS77)	mm	595 ÷ 935
Work surface height <b>Z2</b> (set of optional legs AS80)	mm	645 ÷ 985
Work surface height <b>Z3</b> (set of optional legs AS80 + set of wheels AS77)	mm	755 ÷ 1095
Weight	kg	145
<b>Operation characteristics</b>		
Maximum hourly production	packs/hour	900
Case dimensions (standard column)		
- Min dimensions	mm	150 x 140 x 100
- Max dimensions	mm	∞ x 500 x 700
Maximum case weight	kg	30
Dimensions of adhesive tape roller	See Sealing unit technical specifications	
<b>Environmental conditions</b>		
Maximum operating height (asl)	m	1000
Relative humidity (detected at a temperature included between 20°C and 40°C)	-	30% - 80%
Ambient functioning temperature	°C	-5° / +40°
Environmental brightness	LUX	150
Maximum level of noise	dB	72

## Description of outer areas

The figure shows different areas to be considered in the planning of the installation area.

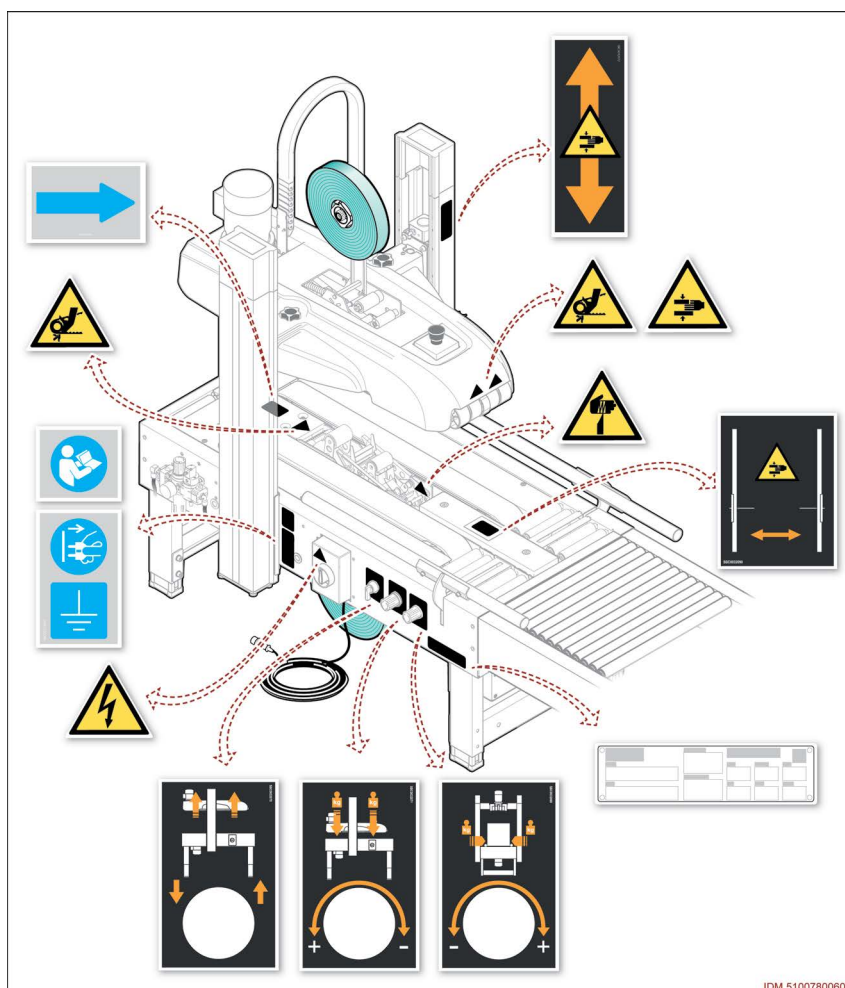
- A) Operator control and standing area
- B) Case feed area
- C) Case transfer area to next steps
- D) Perimeter area



## Position of information and safety plates

**The figure shows the position of the signals applied on the machine.**

- Please keep safety signs and information legible and follow the instructions.
- Signals which are no longer legible must be replaced and repositioned in the same place of origin.
- For more details on the signs used, refer to the section on “Safety signs and information”.



## Recommendations on Operation and Use

- The machine must be used by one single operator ONLY, who must be trained and capable of performing the work and be in suitable conditions.
- Consult the user manual, in particular during the first use, and make sure that you fully understand its content.
- Find out the position and function of the controls and simulate some operations (in particular start and stop) in order to acquire familiarity.
- The machine shall be used ONLY for the purposes and complying with the procedures specified by the Manufacturer.
- Make sure that all the safety devices are properly installed and efficient.
- Ensure the area around the machine, especially the control post, is ALWAYS unobstructed and in good condition to minimize the risks for the Operator.
- According to the type of operation to carry out, wear the Personal Protective Equipment listed in the “Instructions for use” and that indicated by the Labour laws.

## Control description

The illustration shows the main commands and their description and function are listed.

**A) Electric disconnect:** safety control that powers the electric panel.

- “OFF” position: function deactivated.
- Position “TRIPPED”: stop in emergency conditions.
- The conveyors stop and the machine remains electrically powered.
- The conveyors stop and the machine remains electrically powered even when the emergency stop button is pressed.
- “ON” position: function activated.
- Control can be padlocked in order to avoid operations by non-authorized personnel.

**B) Emergency stop button:** safety control that, in case of an imminent risk, stops all parts whose function might constitute a risk.

- The control must stay “locked” until all the normal operating conditions have been restored.
- After having normalised running conditions, unblock the button with a deliberate action to authorise restart.

**C) Selector switch:** control to move the upper conveyor to the raised, lowered or sealing position.

- Up arrow: conveyor in the raised position.
- Centre position: ready for sealing.
- Down arrow: conveyor in the lowered position.

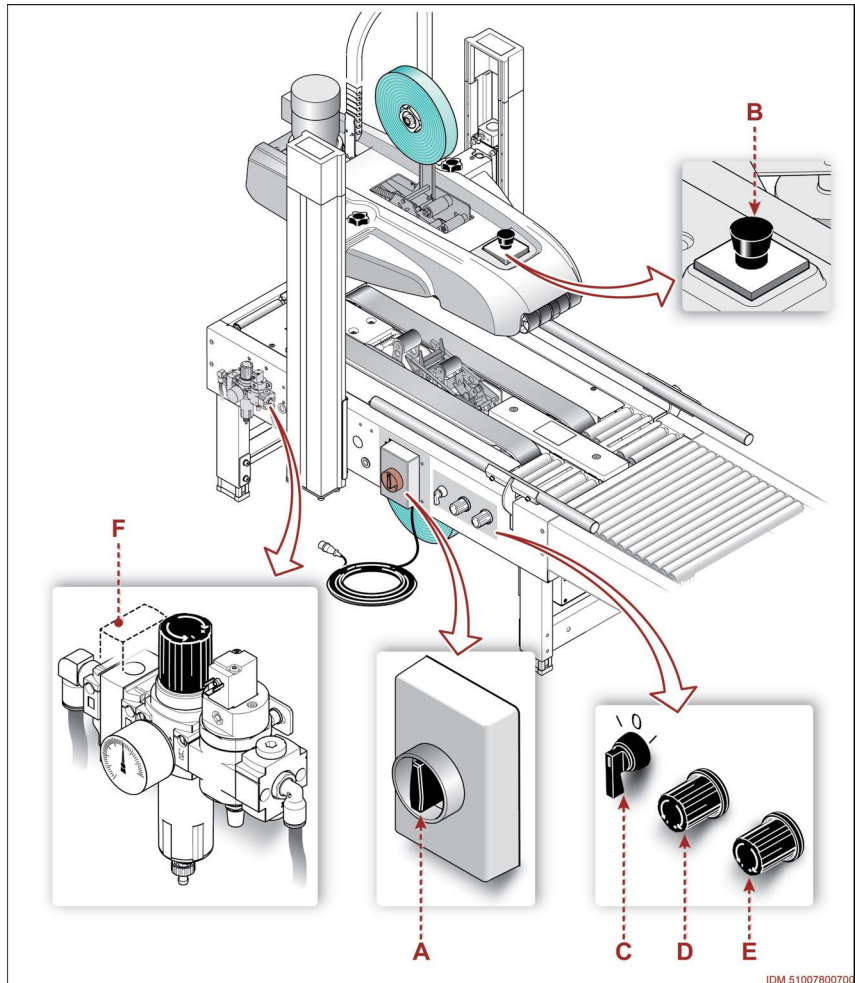
**D) Regulator:** control to adjust the pressure that the upper conveyor exerts on the case.

- Clockwise: the value decreases.
- Anti-clockwise: the value increases.

**E) Regulator:** control to adjust the pressure required to activate the bars of the centring guide.

- Clockwise: the value increases.
- Anti-clockwise: the value decreases.

**F) Tap:** used to turn on and off the pneumatic supply.



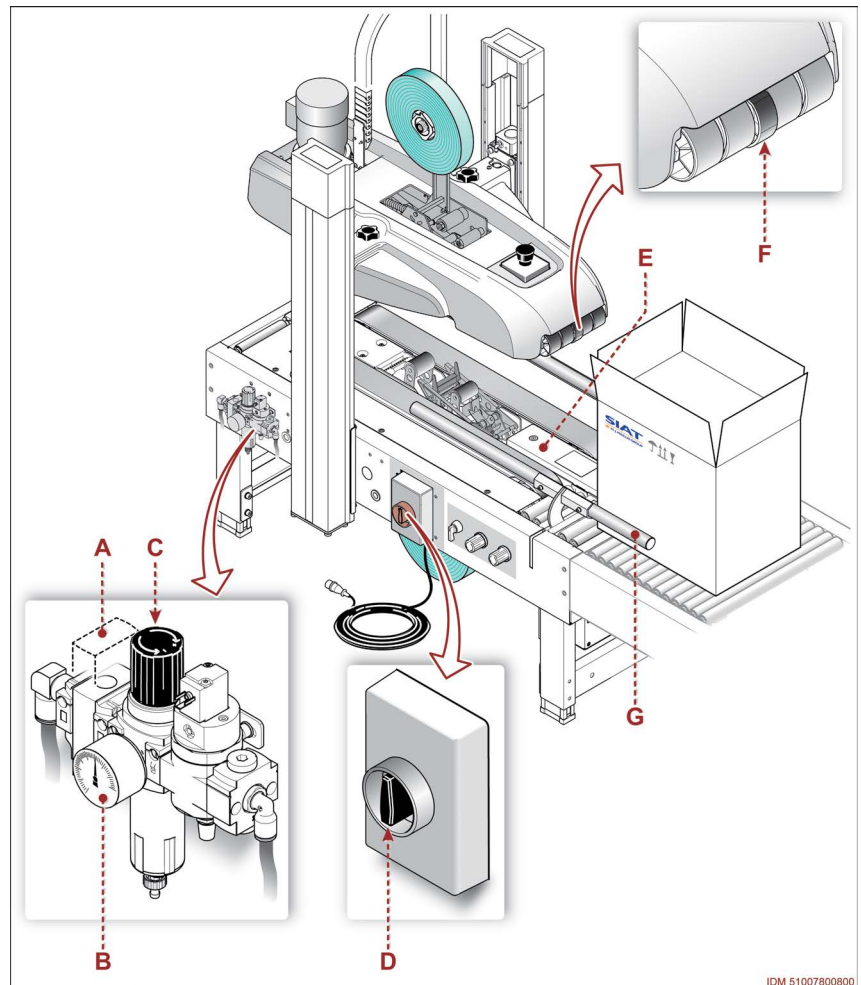


## Start and stop

The figure shows the points of intervention and the description shows the procedures to be adopted.

### ■ Start-up

1. Check that the position of the upper conveyor limit switch is correct with respect to the height of the cases to be sealed (See "Setting up the upper conveyor limit switch").
2. Open the valve **A** to activate the pneumatic supply.
3. Check on gauge **B** that the pressure value is correct.
  - In the event of an incorrect value, adjust it via the knob **C**.
4. Turn the main disconnect **D** to position "I" (ON) to connect power supply.
  - The conveyors (lower and upper) start.
5. Place the case on the roller conveyor, with the bottom flaps closed, and move it forward until it presses the sensor **E**.
  - The bars **G** of the centring guide will lift to align the case and hold it in position.
6. Insert the product in the case.
7. While holding the top flaps closed, move the case forward until it presses the control **F**.
  - The upper conveyor will automatically lift to the sealing height.
8. Push the case so that the belts of the lower conveyor transfer it for sealing.
  - The bars **G** of the centring guide will return to the open position when the case is no longer over the sensor **E**.



IDM 51007800800

### **Attention Warning**

To prevent the risk of abrasion, touch the rear of the case when handling it.

- When the case has been sealed, the upper conveyor lowers until it reaches the limit switch.

### ■ Stop

- Rotate main disconnect **D** to position "O" (OFF) to deactivate the power supply.
9. Close the valve **A** to turn off the pneumatic supply.
    - The residual pressure will be discharged automatically and the upper conveyor will lower until it reaches the limit switch.

## Emergency stop and new start-up

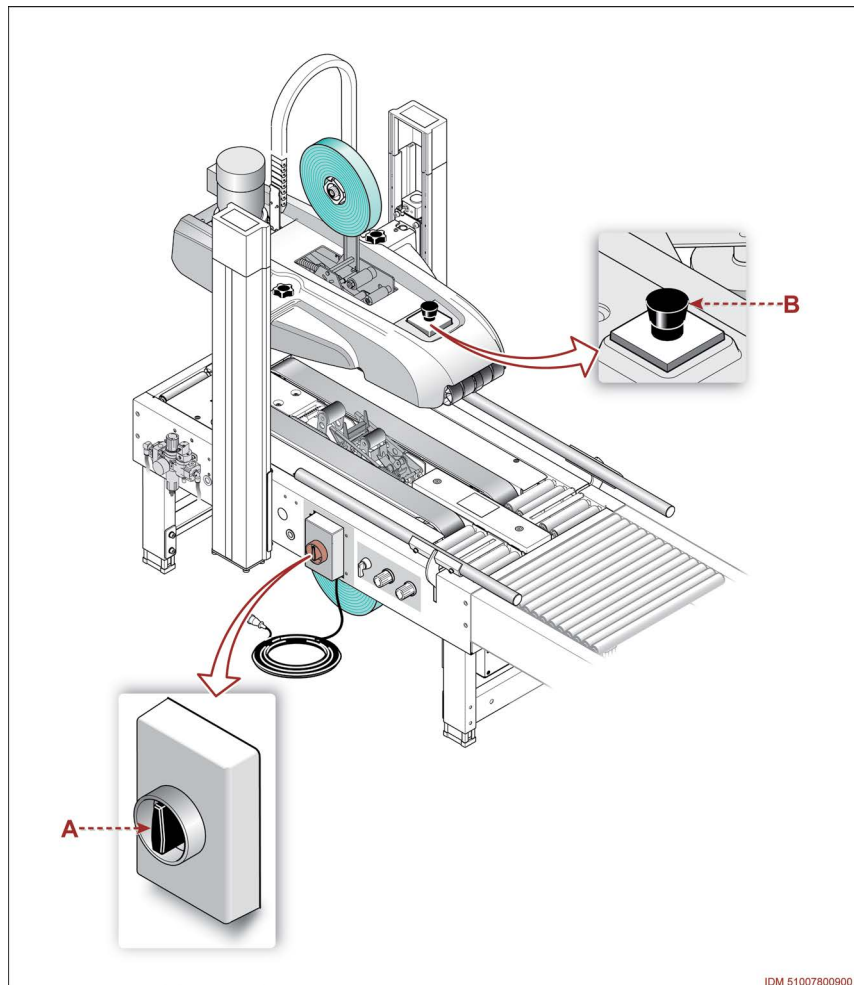
The figure shows the points of intervention and the description shows the procedures to be adopted.

1. In the presence of an imminent risk press the emergency stop button **B**.
  - All moving devices immediately stop.
  - **Isolator switch A is automatically positioned on “TRIPPED”**.
2. Rotate main disconnecter **A** to position “O” (OFF) to deactivate the power supply.
3. Identify the causes that have caused the stop.
4. Restore normal running conditions

### **Important**

The recovery operations that are not within the operator's field of competence shall be carried out by authorised personnel and with recognised skills.

5. Unlock the emergency stop button with a voluntary action.
6. Turn the main disconnecter **A** to position “I” (ON) to connect power supply.
  - The conveyors (lower and upper) start.



IDM 51007800900

## Preparing the machine for use

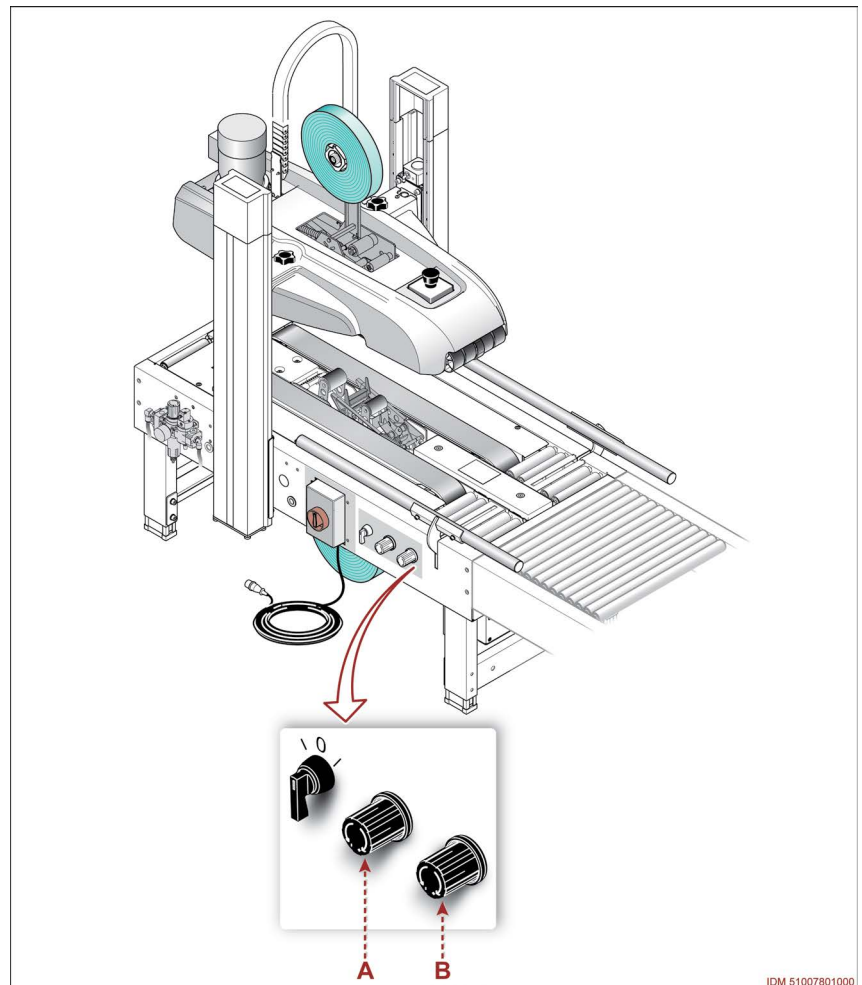
The following lists some of the operations required to prepare the machine for sealing.

### ■ Setting up the pressure of the upper conveyor

- Operate the regulator **A** to change the value so that the case is transferred correctly for sealing.
  - Clockwise: the value decreases.
  - Anti-clockwise: the value increases.

### ■ Setting up the pressure of the centring guide bars

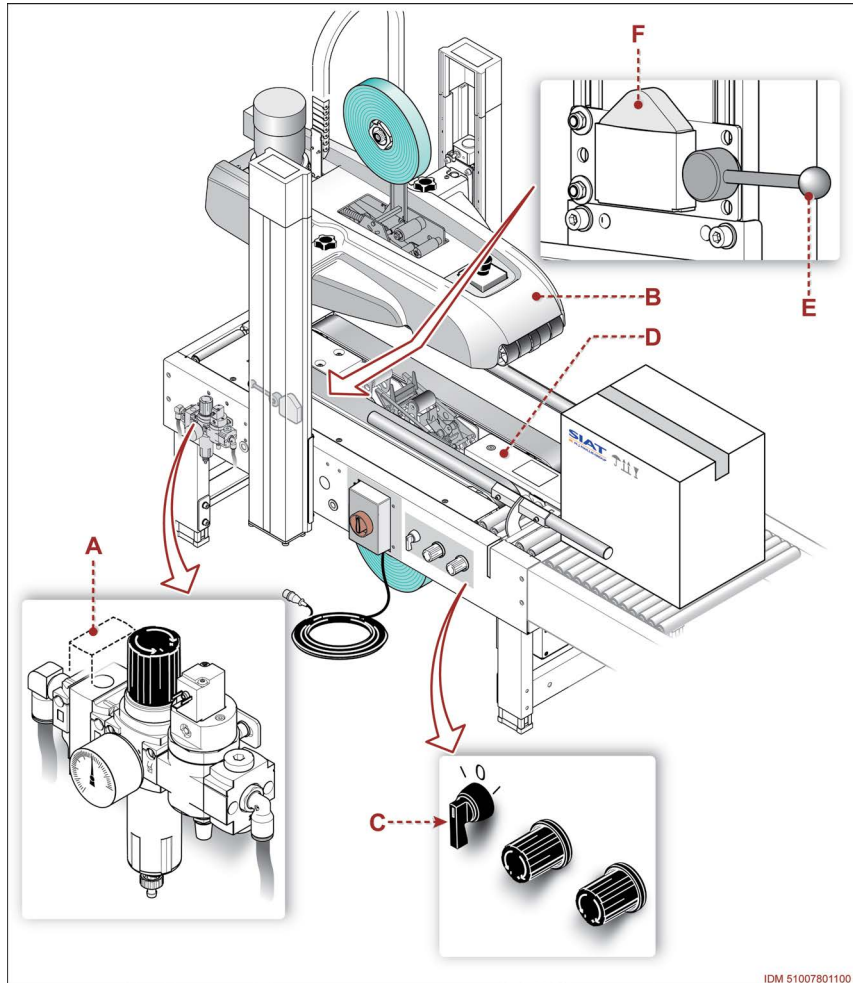
- Operate the regulator **B** to change the value so that the case is held in position properly.
  - Clockwise: the value increases.
  - Anti-clockwise: the value decreases.



IDM 51007801000

## ■ Setting up the upper conveyor limit switch

1. Prepare a case of the new format with the bottom and top flaps closed with adhesive tape.
2. Open the valve **A** to activate the pneumatic supply.
3. Use the selector switch **C** to lift the upper conveyor **B**.
4. Place the case on the sensor **D**.
  - The bars of the centring guide will lift to align the case and hold it in position.
5. Use the selector switch **C** to lower the upper conveyor **B**.
6. Turn the lever **E** to secure the limit switch **F**.
7. Rest the limit switch **F** (without pressing it) on the reference on the upper conveyor and secure it with the lever **E**.
  - Lower the limit switch by about 10 mm so that even cases with slightly different heights are sealed properly.



IDM 51007801100

### NOTE

To optimize the productivity of cases with various heights, we recommend grouping them into homogeneous batches. When it is not possible to group them into homogeneous batches, use the height of the lowest case as the reference.

8. Turn the selector switch **C** to the centre position.
9. Remove case

### Important

When production starts, make sure that the operation has been properly performed in order to avoid excessive waste.

## Recommendations for maintenance interventions

- The personnel authorized to carry out the ordinary maintenance must have qualified expertise and specific skills in the field of intervention.
- Any work on the electrical system must ONLY be performed by technicians with acknowledged, field-specific skills.
- Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
- According to the type of operation to carry out, wear the Personal Protective Equipment listed in the “Instructions for use” and that indicated by the Labour laws.
- Before carrying out any intervention, activate all the safety measures, and assess any residual energy which may still be present.
- Interventions to not easily accessible or dangerous areas shall be carried out ONLY after arranging the required safety conditions.
- Carry out the interventions ONLY according to the modes recommended by the Manufacturer in the “Instructions for use”.
- Carry out all interventions ONLY with suitable tools in good state to avoid damaging work unit components and parts.
- At work completion, restore all the security conditions aimed to prevent and minimize the risks during the human-machine interaction.
- At the end of operations check that there are no other tools or other material near the moving parts or in dangerous areas.
- Refer to the Technical Assistance Service of the Manufacturer, in case interventions not described in the “Instructions for use” are needed.
- All EXTRAORDINARY MAINTENANCE interventions shall be performed only by authorized Technicians with proven and gained experience in the field.
- **The non-compliance with the information provided herein may lead to risks for the safety and health of the persons involved and may also lead to economic damages.**

## Scheduled maintenance intervals

Always keep the machine in optimum operating condition and carry out the routine maintenance according to the intervals and procedures specified by the Manufacturer.

- A good maintenance will ensure a stable performance over time, longer working life and constant compliance with the safety requirements.

### Maintenance schedule

#### Every working day

Component	Operation required	Procedures to implement
Safety devices	Efficiency control	<ul style="list-style-type: none"> <li>- Make sure that the listed devices are efficient.</li> <li>- Emergency stop button.</li> <li>- Main electric disconnecter</li> <li>- Cutting blade protection</li> </ul>

#### Every 40 work hours (max 1 week)

Component	Operation required	Procedures to implement
Sealing machine and unit	Cleaning	<ul style="list-style-type: none"> <li>- Remove dirt and residues with the use of a suitable vacuum system.</li> <li>- Use a clean, dry (not abrasive) cloth.</li> </ul>
Cutting blade	Cleaning	<ul style="list-style-type: none"> <li>- Clean the cutting blade (See "Cleaning the cutting blade").</li> </ul>
Air treatment unit	Check for condensation	<ul style="list-style-type: none"> <li>- Drain the condensation water</li> </ul>

#### Every 600 work hours (max 3 months)

Component	Operation required	Procedures to implement
Sealing unit rollers	Lubrication	<ul style="list-style-type: none"> <li>- Use grease spray (See "Diagram of the points of lubrication").</li> </ul>

#### Every 1200 work hours (max 6 months)

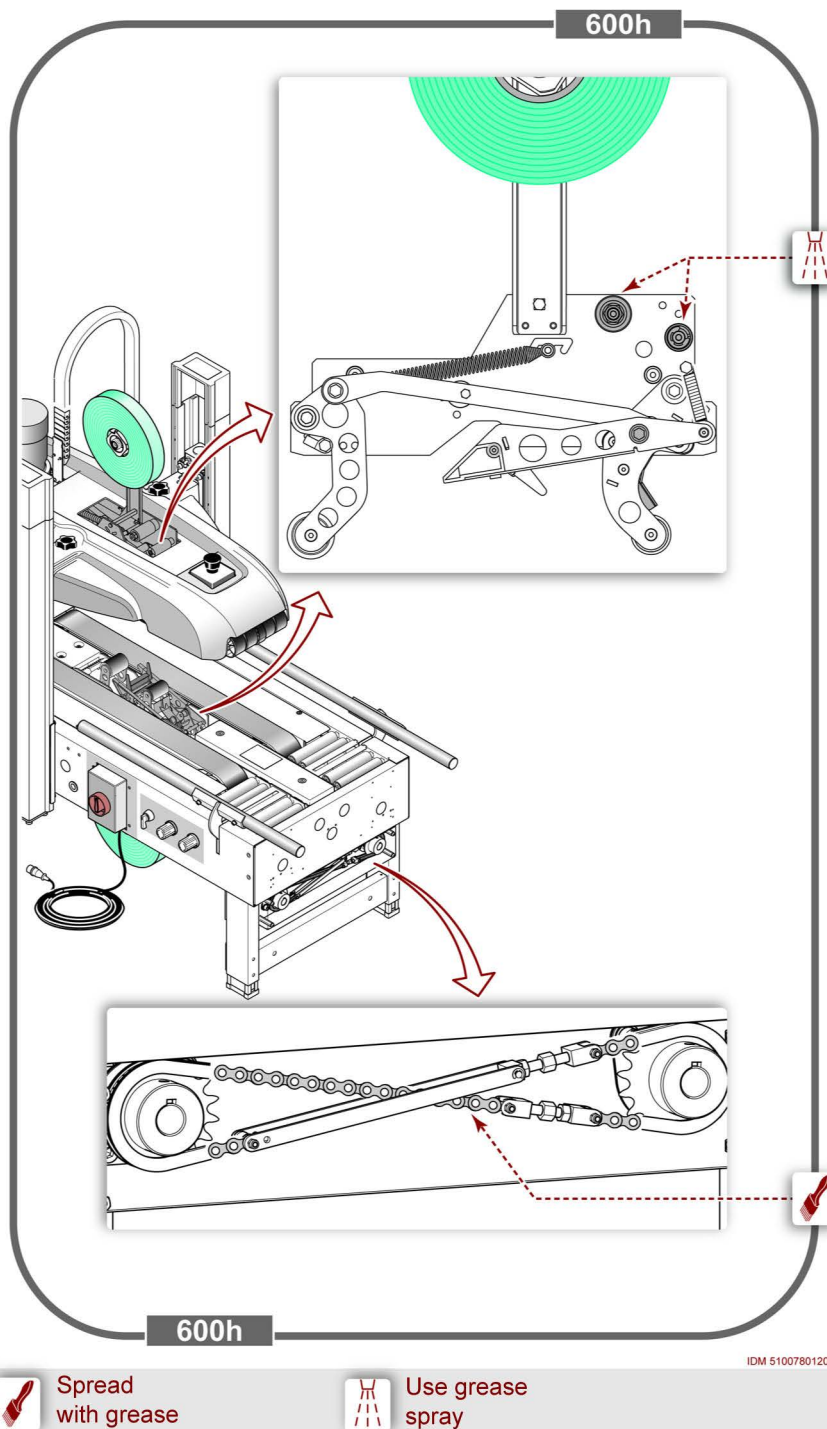
Component	Operation required	Procedures to implement
(Lower and upper) conveyor belts	Wear and tear control	<ul style="list-style-type: none"> <li>- Check the state of wear of the belts.</li> <li>- Replace the belts (See "Lower conveyor belt replacement" - "Replacement of upper conveyor belts").</li> </ul>
(Lower and upper) conveyor belt driving pulley rings	Wear and tear control	<ul style="list-style-type: none"> <li>- Check the rubber ring for wear.</li> <li>- Replace the component, if it is worn out</li> </ul>
Cutting blade	Wear and tear control	<ul style="list-style-type: none"> <li>- Check the state of wear of the blade.</li> <li>- Replace the component if there are signs of wear (See "Replacing the cutting blade").</li> </ul>
Sealing unit springs	Efficiency control	<ul style="list-style-type: none"> <li>- Check the spring efficiency.</li> <li>- Replace the springs if the case inlet and outlet rollers do not return correctly to their position.</li> </ul>
Sealing unit rollers	Wear and tear control	<ul style="list-style-type: none"> <li>- Check the state of wear of the rollers.</li> <li>- Replace the component, if worn</li> </ul>
Case centring guide levers chain	Checking the tension	<ul style="list-style-type: none"> <li>- Check the tension of component (See "Adjusting the drive chain for the centring guide").</li> </ul>
	Lubrication	<ul style="list-style-type: none"> <li>- Lubricate all the greasing points (See "Diagram of the points of lubrication").</li> </ul>



## Diagram of the points of lubrication

Lubricate the parts indicated according to the frequency and methods shown.

- Use the lubricants (oils and greases) recommended by the Manufacturer or lubricants of equivalent chemical and physical characteristics.
- Some components (reducers, bearings, etc.) do not request lubrication because they are self-lubricating or life lubricated.



## Lubricant table

Use the lubricants (oils and greases) recommended by the Manufacturer or lubricants of equivalent chemical and physical characteristics.

**Table:** Recommended lubricants

Lubricant type	make	Abbreviation	Component
Synthetic grease	Tecnolube Seal	Rheolube 393	- Upper conveyor adjusting screw
Oil	Standard lubricating oil		- Cutting blade - Sealing unit rollers

## Problems, causes, remedies

The table shows the list of faults that can occur during the standard operation and it highlights possible remedies.

**Table:** Operation failures

Problem	Cause	Remedy
When isolator switch <b>A</b> is in position "ON", operation will not start.	Emergency stop button pressed	- Unlock the emergency stop button with a voluntary action.
	Electric motor short circuit with activation of the circuit breaker	- Identify the cause of the fault.
The driving pulleys turn, but the (upper and lower) conveyor belts do not move forward evenly.	(Lower and upper) conveyor belts not properly tensioned	- Adjust as required (See "Lower conveyor belt adjustment" - "Upper conveyor belt adjustment").
	Worn (lower and upper) conveyor belt driving pulley rings	- Replace the components.
The belts of the conveyors do not move the case evenly.	Worn (lower and upper) conveyor belts	- Replace (See "Lower conveyor belt replacement" - "Replacement of upper conveyor belts").
The case is not sealed because the upper conveyor remains in the raised position.	Selector switch in the "Up arrow" position	- Turn the selector switch to the "Down arrow" position.
The bars of the centring guide do not lift to align the case and hold it in position.	Insufficient operating pressure for the bars	- Adjust the operating pressure for the bars (See "Setting up the pressure of the centring guide bars").
The adhesive tape applied to the case is crinkled.	The case inlet and outlet rollers are not properly adjusted	- Adjust the components.
The adhesive tape is not centred in the case.	The roll of tape is not centred properly.	- Adjust as required ( See Adhesive tape centring check )
The adhesive tape applied to the case is irregular.	Cutting blade with glue residues	- Clean the cutting blade (See "Cleaning the cutting blade").
	Worn cutting blade	- Replace (See "Replacing the cutting blade").
The adhesive tape applied to the case is folded.	Sealing unit rollers with glue or dirt residues	- Clean and remove the residues from the rollers.
	Worn sealing unit rollers	- Replace the components.



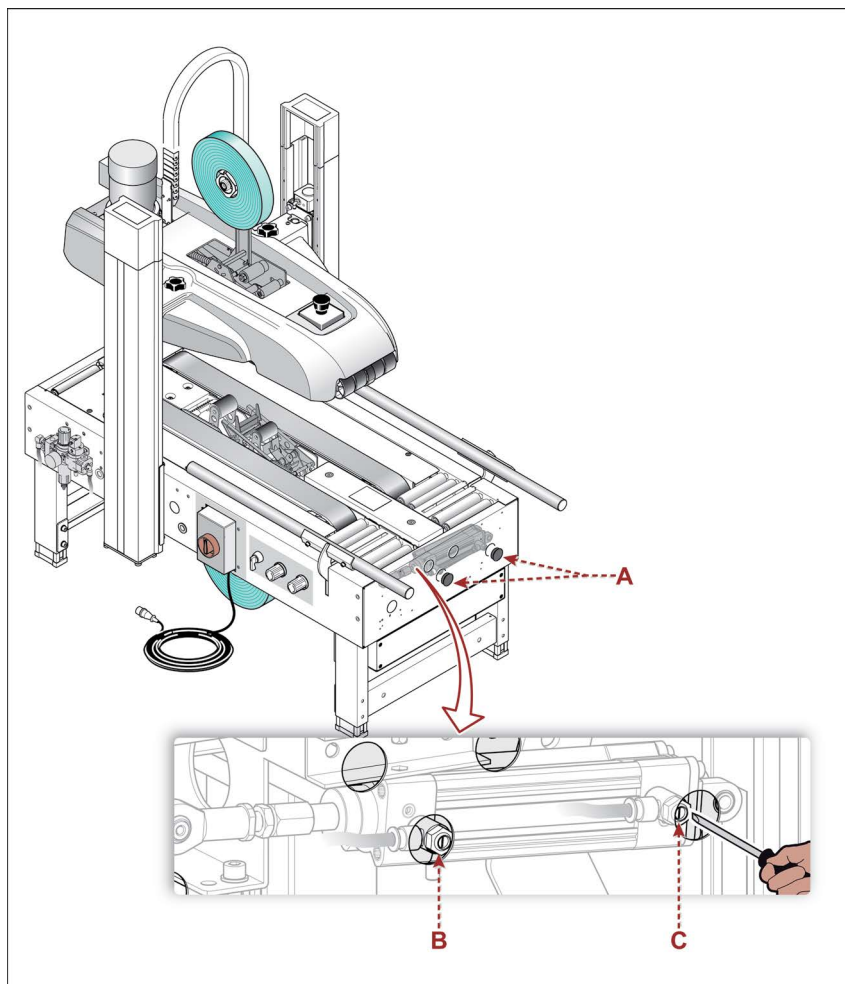
## Speed adjustment of centring guide

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.

Make sure to fulfil the required requirements in order to work under safe conditions.

- The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Disconnect the support surface (fixed or roller conveyor) to facilitate the procedure.
3. Remove the protection plugs **A**.
4. Adjust the opening and closing speed of the case centring guide via the flow regulators **B-C**.
  - Closing speed: adjust the flow regulator **B**.
  - Opening speed: adjust the flow regulator **C**.
  - Clockwise: the value decreases.
  - Anti-clockwise: the value increases.
5. Introduce a first small change and check if the speed is adequate.
6. Repeat the operation by small variations to obtain your required final speed.
7. Refit the plugs **A** when the operation is finished.



## Adjusting the drive chain for the centring guide

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.

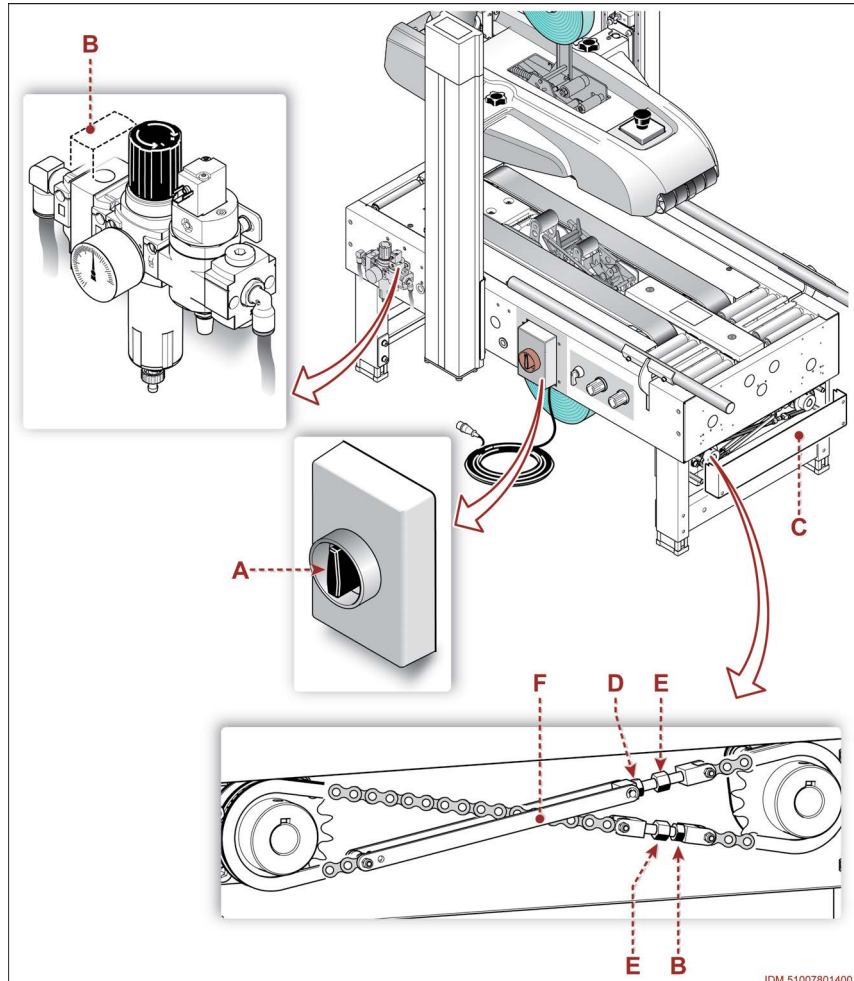
Make sure to fulfil the required requirements in order to work under safe conditions.

- The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
  2. Rotate main disconnecter **A** to position “O” (OFF) to deactivate the power supply.
  3. Close the valve **B** to turn off the pneumatic supply.
  4. Disconnect the support surface (fixed or roller conveyor) to facilitate the procedure.
  5. Unscrew the screws to disassemble the guard **C**.
  6. Loosen the lock nuts **D**.
  7. Tighten to the same extent the screws **E** to adjust the tension of the chain **F**.
- **Tightening to the same degree is essential to ensure the timed opening and closing of the bars E of the centring guide.**

### **Important**

**Do not overtighten so as not to cause any malfunctioning.**



8. Tighten lock nuts **D** after completing the adjustment.
  9. Assemble the guard **C**, and then fasten it by using the screws.
  10. Open the valve **B** to activate the pneumatic supply.
  11. Rotate main disconnecter **A** to position “I” (ON) to activate the power supply.
- **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

## Cleaning and replacement of the air filter

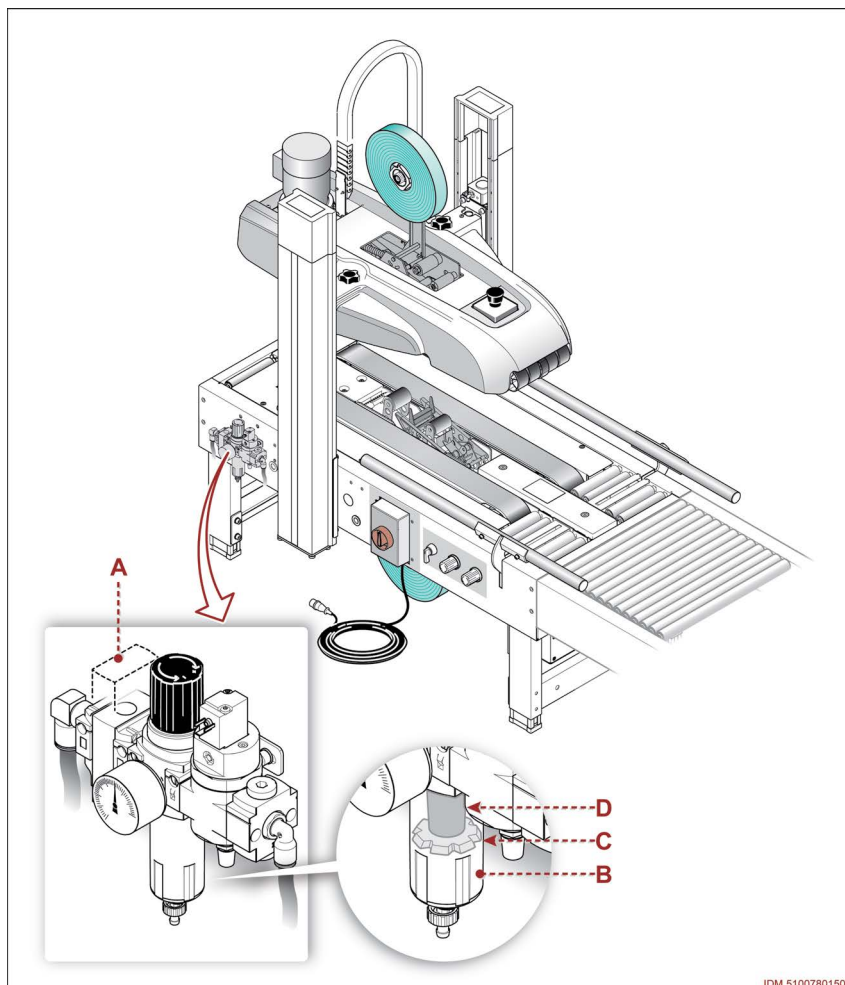
The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Close the valve **A** to turn off the pneumatic supply.
2. Remove cup **B**.
3. Unscrew the ring nut **C** and remove the filter cartridge **D**.
4. Clean filter and bucket inside with dry compressed air.
5. Check the condition of the filter; if damaged, replace it with original spare parts.
6. Install filter cartridge **D** and screw ring nut **C**.
7. Replace the cup **B**.
8. Open the valve **A** to activate the pneumatic supply.



### **Important**

Replace the components **ONLY** with **GENUINE SPARE PARTS** or with other components of equivalent design and functional specifications.



IDM 51007801500

## Lower conveyor belt adjustment

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.

Make sure to fulfil the required requirements in order to work under safe conditions.

- The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Disconnect the support surface (fixed or roller conveyor) to facilitate the procedure.
3. Rotate main disconnecter **A** to position "O" (OFF) to deactivate the power supply.
4. Use the selector switch **C** to lift the upper conveyor **B**.
5. Close the valve **D** to turn off the pneumatic supply.
6. Remove the protection plugs **E**.
7. Undo the screws and remove the sensor **F**.
8. Slightly loosen nut **G**.
9. Adjust the tension of belt **H** by means of the adjusting system **L**.

### **Important**

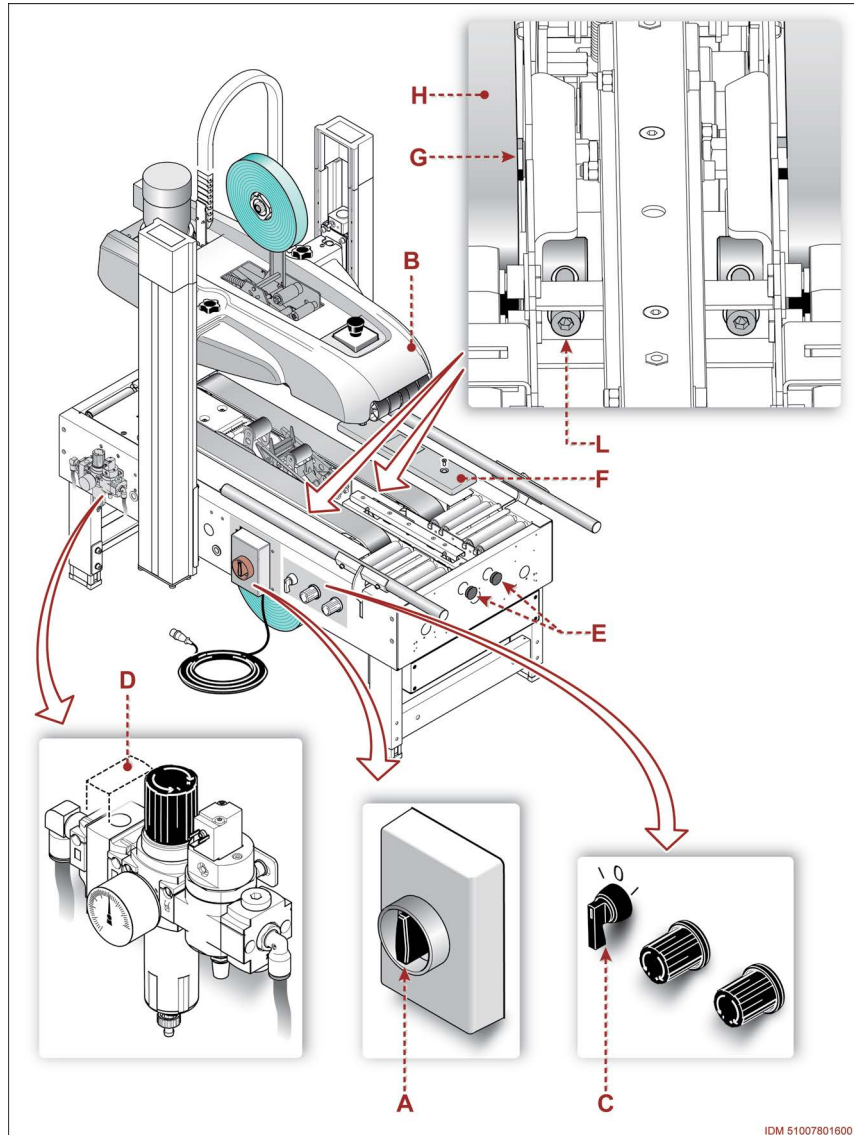
**Do not overtighten so as not to cause any malfunctioning.**

10. Tighten the nut **G**.
11. Repeat the operations on the other identical component.

### **NOTE**

**Adjust the belts to the same tension.**

12. Fit the sensor **F** and secure it with the screws.
  13. Refit the plugs **E** when the operation is finished.
  14. Connect the support surface (fixed or roller conveyor).
  15. Open the valve **D** to activate the pneumatic supply.
  16. Turn the selector switch **C** to the centre position.
  17. Rotate main disconnecter **A** to position "I" (ON) to activate the power supply.
- **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**



IDM 51007801600



## Upper conveyor belt adjustment

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.

Make sure to fulfil the required requirements in order to work under safe conditions.

- The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Rotate main disconnecter **A** to position “O” (OFF) to deactivate the power supply.
3. Use the selector switch **C** to lower the upper conveyor **B**.
4. Close the valve **D** to turn off the pneumatic supply.
5. Unscrew the knobs **E** and remove the guard **F**.
6. Unscrew screw **G**.
7. Remove the mount **H** and place it on the upper conveyor.
8. Slightly loosen nut **L**.
9. Adjust the tension of belt **M** by means of the adjusting system **N**.

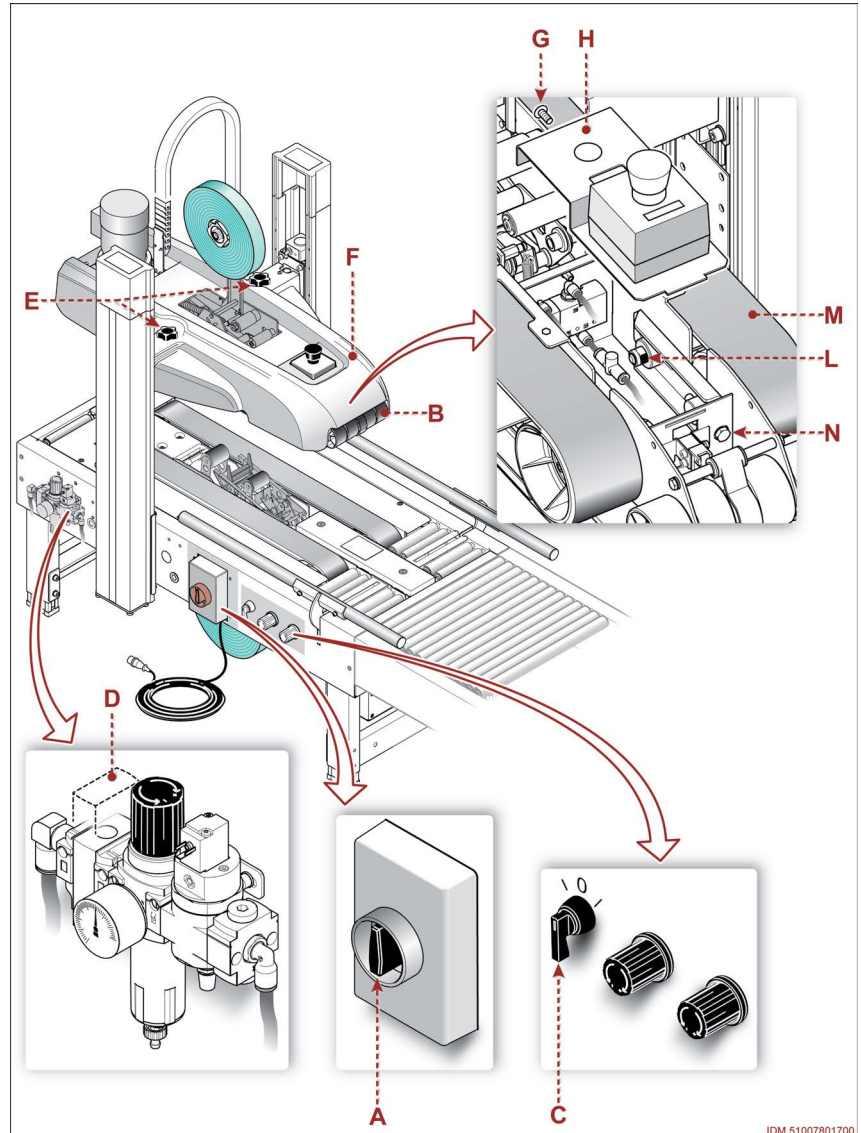
### Important

Do not overtighten so as not to cause any malfunctioning.

10. Tighten the nut **L**.
11. Repeat the operations on the other identical component.

### NOTE

Adjust the belts to the same tension.



IDM 51007801700

12. Fit the component **H** in its original position and secure it with the screws **G**.
  13. Fit the guard **F** and secure it with the knobs **E**.
  14. Open the valve **D** to activate the pneumatic supply.
  15. Turn the selector switch **C** to the centre position.
  16. Rotate main disconnecter **A** to position “I” (ON) to activate the power supply.
- At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.

## Lower conveyor belt replacement

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.

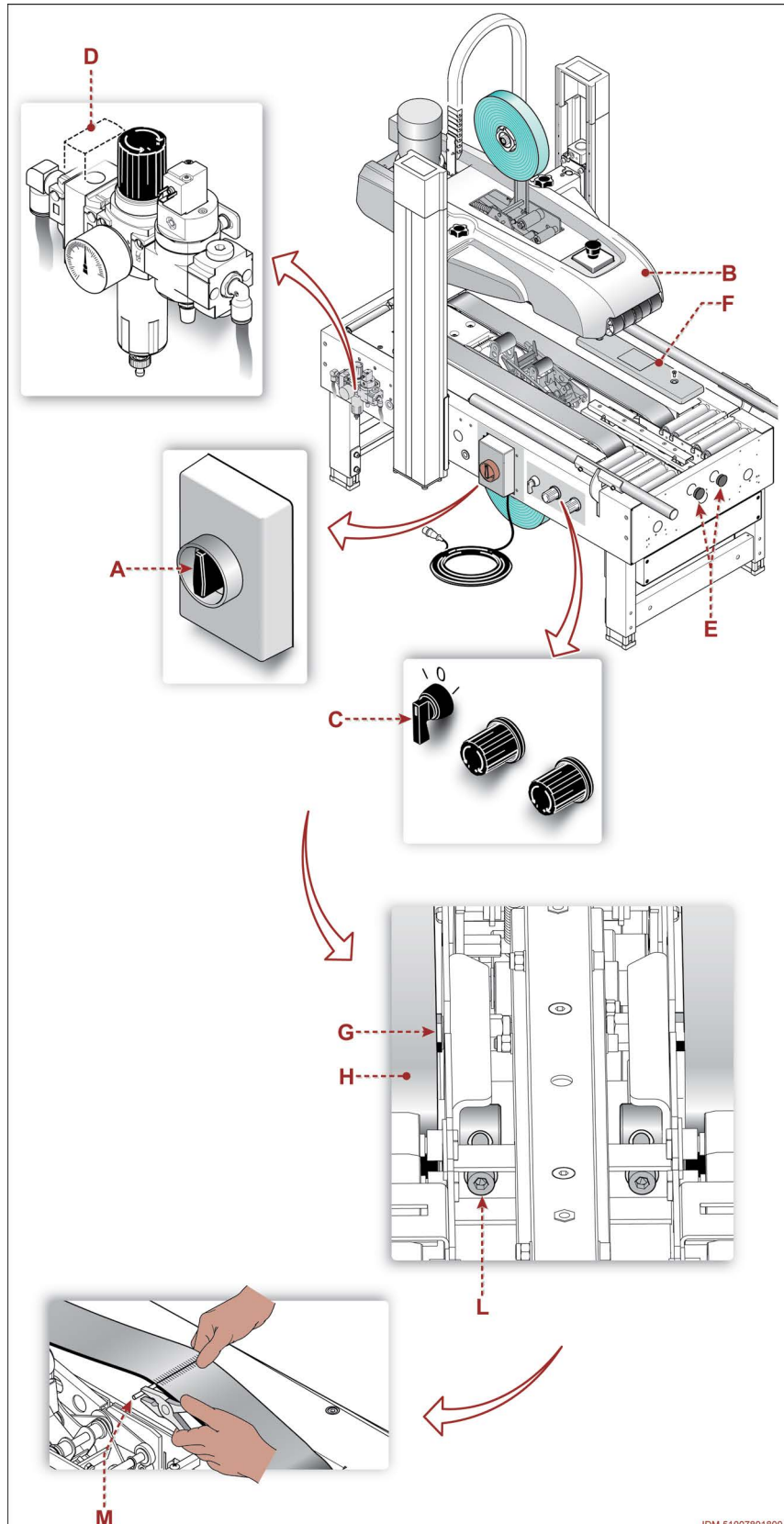
Make sure to fulfil the required requirements in order to work under safe conditions.

- The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Disconnect the support surface (fixed or roller conveyor) to facilitate the procedure.
3. Rotate main disconnecter **A** to position "O" (OFF) to deactivate the power supply.
4. Use the selector switch **C** to lift the upper conveyor **B**.
5. Close the valve **D** to turn off the pneumatic supply.
6. Remove the protection plugs **E**.
7. Undo the screws and remove the sensor **F**.
8. Slightly loosen nut **G**.
9. Loosen the belt **H** completely by means of the adjusting system **L**.
10. Position connecting link manually in an easily accessible point.
11. Slip out pin **M**.
12. Connect the end of belt to be replaced to the new one in order to facilitate the replacement.
13. Remove belt to be replaced until the point of connection to new belt and disconnect the end.
14. Connect the ends of the belt and insert the pin **M**.
15. Repeat the procedure in order to replace belt on the other side.

### NOTE

Replace the components **ONLY** with **GENUINE SPARE PARTS** or with other components of equivalent design and functional specifications.



16. Adjust the tension of belt **H** by means of the adjusting system **L**.

**Important**

Do not overtighten so as not to cause any malfunctioning.

17. Tighten the nut **G**.

18. Repeat the operations on the other identical component.

**NOTE**

Adjust the belts to the same tension.

19. Fit the sensor **F** and secure it with the screws.

20. Refit the plugs **E** when the operation is finished.

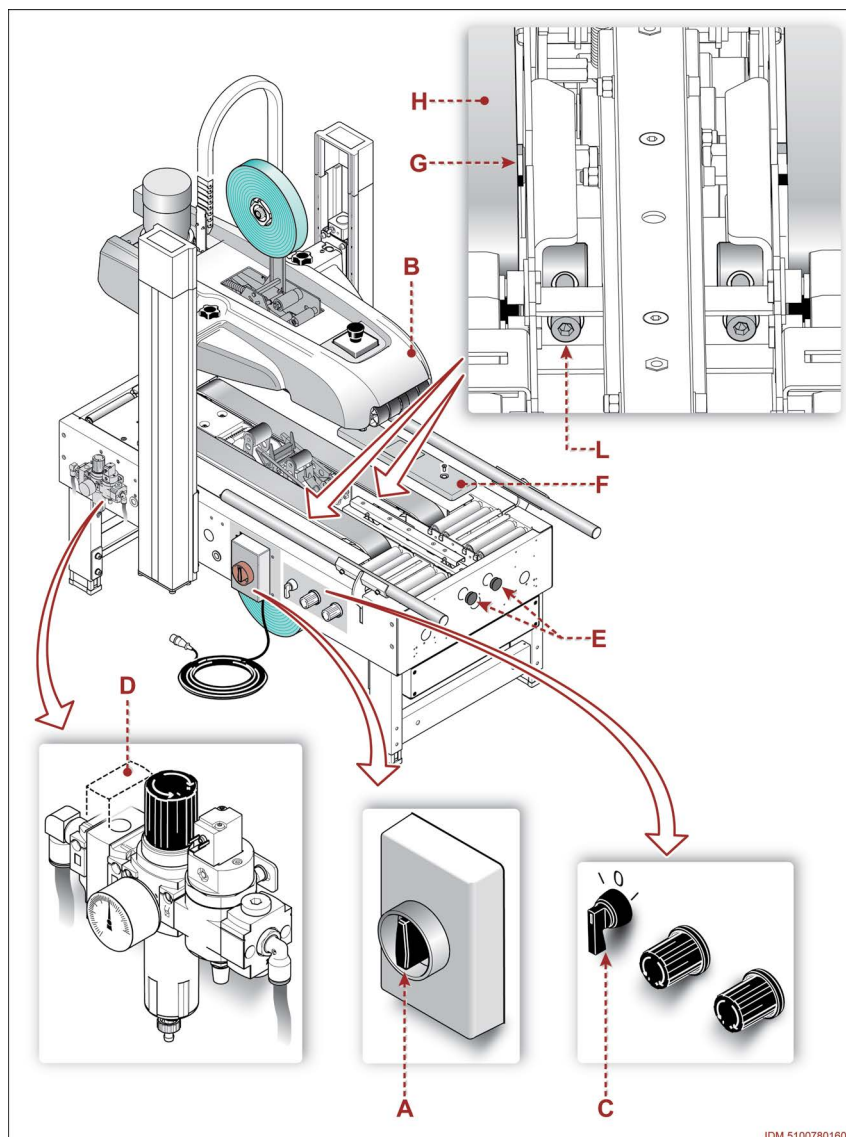
21. Connect the support surface (fixed or roller conveyor).

22. Open the valve **D** to activate the pneumatic supply.

23. Turn the selector switch **C** to the centre position.

24. Rotate main disconnecter **A** to position "I" (ON) to activate the power supply.

- At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.



IDM 51007801600



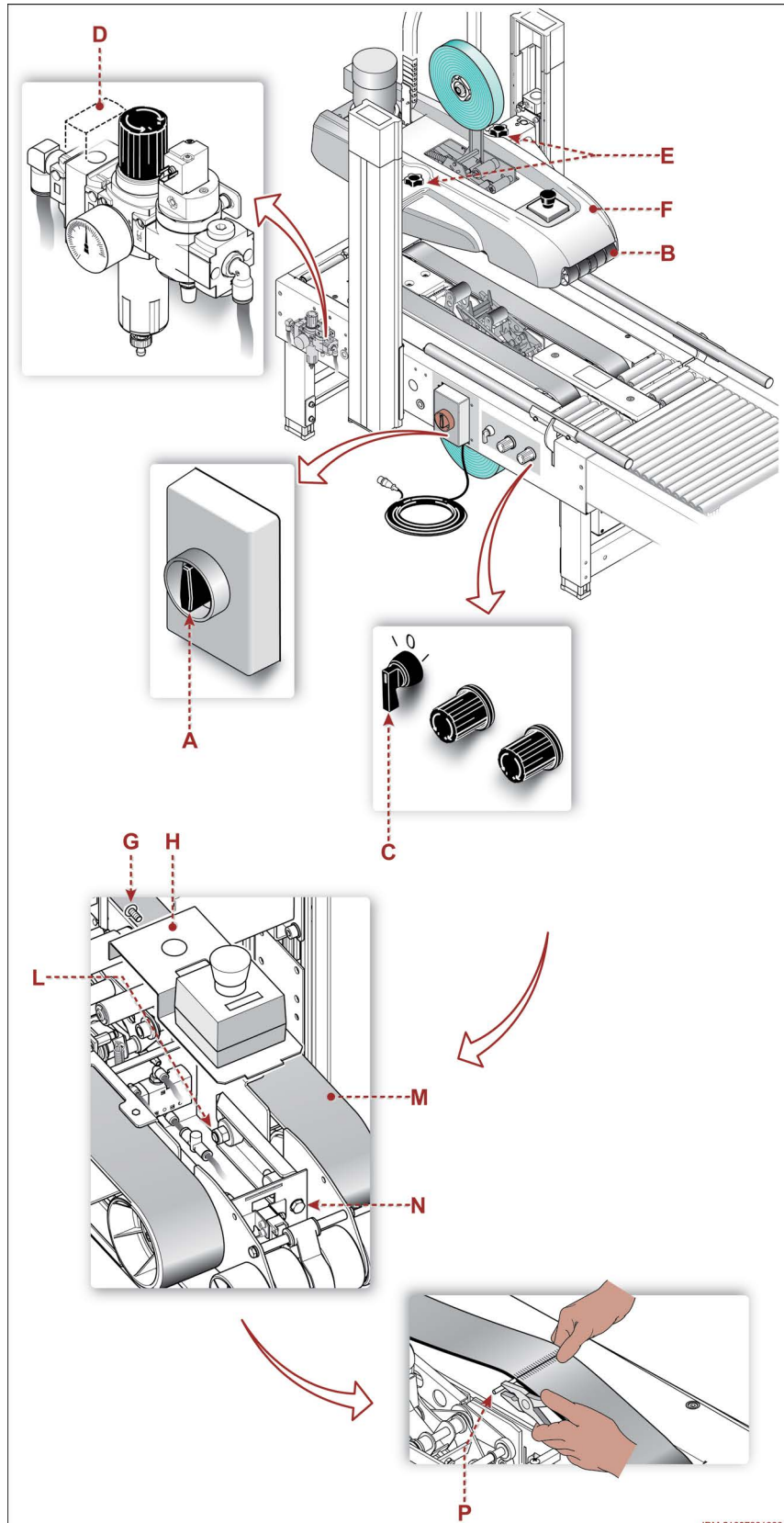
## Replacement of upper conveyor belts

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.

Make sure to fulfil the required requirements in order to work under safe conditions.

- The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Rotate main disconnecter **A** to position "O" (OFF) to deactivate the power supply.
3. Use the selector switch **C** to lower the upper conveyor **B**.
4. Close the valve **D** to turn off the pneumatic supply.
5. Unscrew the knobs **E** and remove the guard **F**.
6. Unscrew screw **G**.
7. Remove the mount **H** and place it on the upper conveyor.
8. Slightly loosen nut **L**.
9. Loosen the belt **M** completely by means of the adjusting system **N**.
10. Position connecting link manually in an easily accessible point.
11. Slip out pin **P**.
12. Connect the end of belt to be replaced to the new one in order to facilitate the replacement.
13. Remove belt to be replaced until the point of connection to new belt and disconnect the end.
14. Connect the ends of the belt and insert the pin **P**.
15. Repeat the procedure in order to replace belt on the other side.



IDM 51007801900

IDM 510078-0

### NOTE

Replace the components **ONLY** with **GENUINE SPARE PARTS** or with **other components of equivalent design and functional specifications**.



16. Adjust the tension of belt **M** by means of the adjusting system **N**.

**Important**

Do not overtighten so as not to cause any malfunctioning.

17. Tighten the nut **L**.

18. Repeat the operations on the other identical component.

**NOTE**

Adjust the belts to the same tension.

19. Fit the component **H** in its original position and secure it with the screws **G**.

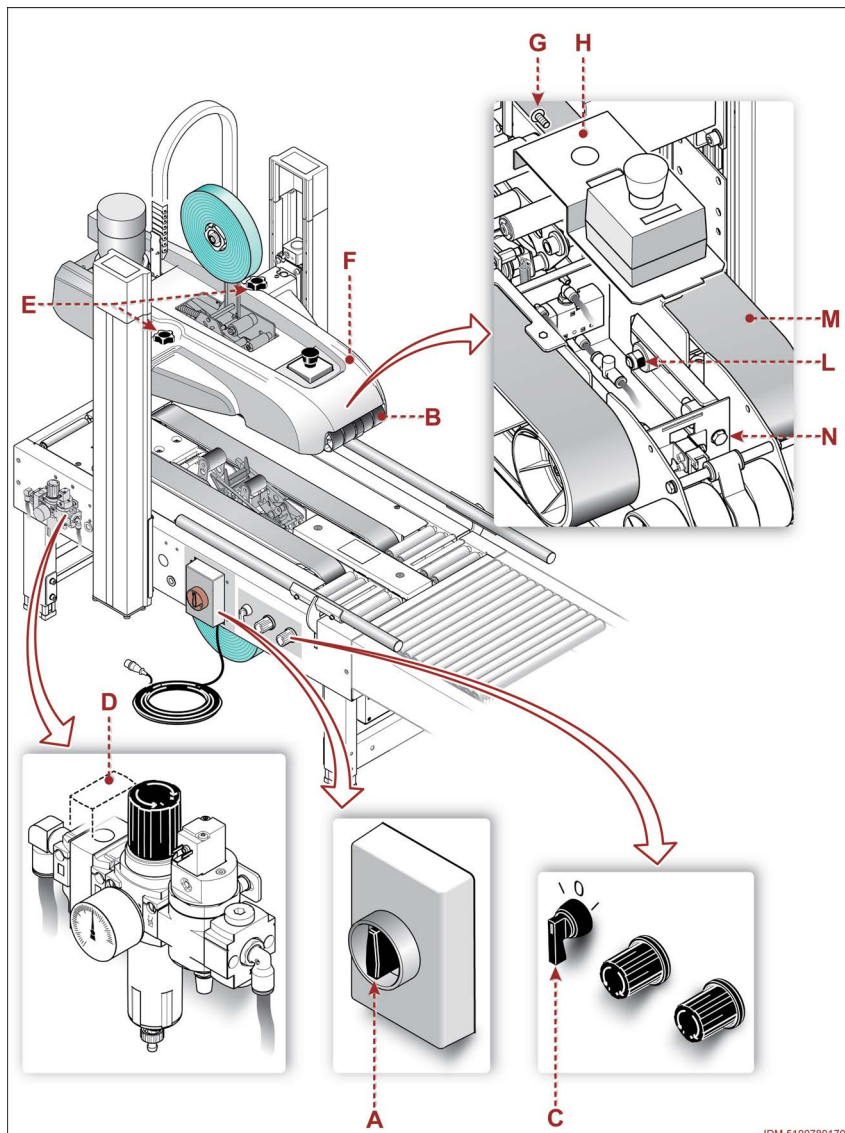
20. Fit the guard **F** and secure it with the knobs **E**.

21. Open the valve **D** to activate the pneumatic supply.

22. Turn the selector switch **C** to the centre position.

23. Rotate main disconnecter **A** to position "I" (ON) to activate the power supply.

- At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.



IDM 51007801700

## Replacing the Set of 600 mm high legs (AS80)

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.

- The figure shows the points of intervention and the description shows the procedures to be adopted.

**Make sure to fulfil the required requirements in order to work under safe conditions.**

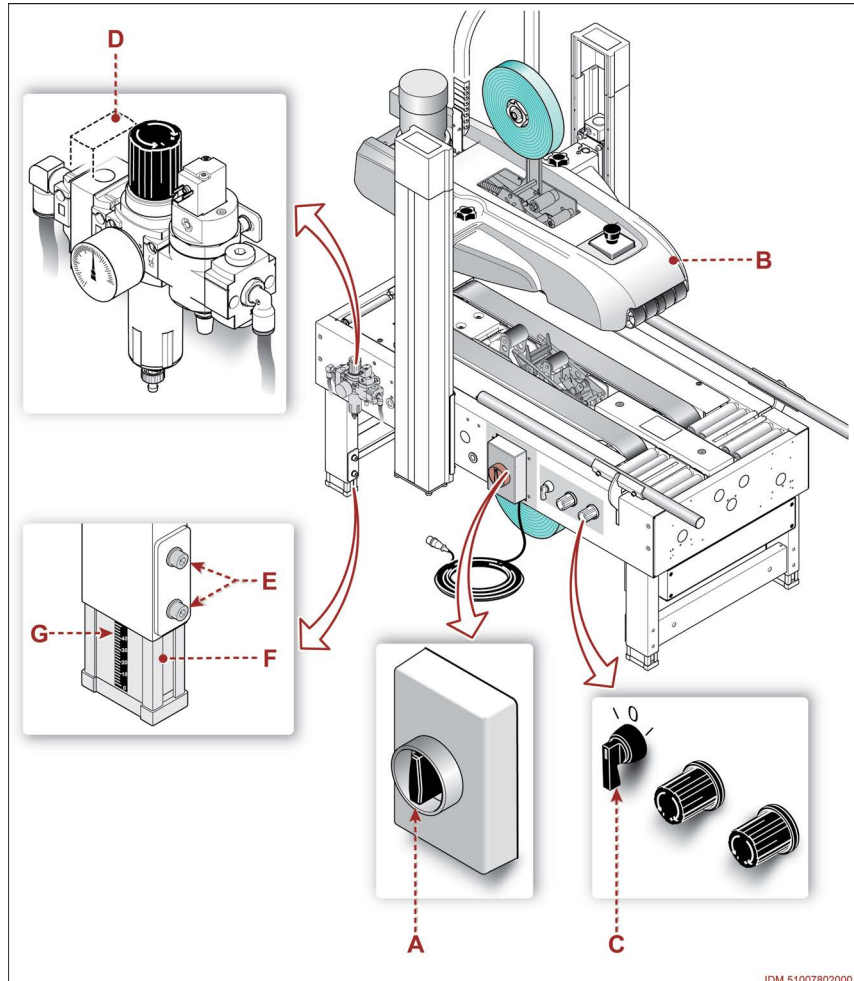
1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Rotate main disconnecter **A** to position "O" (OFF) to deactivate the power supply.
3. Use the selector switch **C** to lower the upper conveyor **B**.
4. Close the valve **D** to turn off the pneumatic supply.
5. Disconnect the plug from the power socket.
6. Lift the machine enough to allow the operation to be carried out.

### **Important**

Carry out all handling operations by using lifting equipment, secured so as to avoid sudden movements.

7. Loosen the screws **E**.
8. Slide out the foot **F**.
9. Repeat the operations on the other identical components.
10. Insert the new foot and secure it at the required height with the screws **E**.

- Use the graduated scale **G** as a reference.



IDM 51007802000

### **NOTE**

The values shown on the graduated scale correspond to the height of the work surface from the ground.

11. Repeat the operation on the other identical components.
12. Put the machine on the floor.
13. Check that the machine is level (longitudinally and transversally).

### **NOTE**

To ensure that it is levelled properly, use the screws to adjust the height of the feet that are not correct.

14. Open the valve **D** to activate the pneumatic supply.

15. Turn the selector switch **C** to the centre position.
  16. Plug the connector into the electrical power outlet.
  17. Rotate main disconnect **A** to position “**I**” (ON) to activate the power supply.
- **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

## Fitting the set of wheels for feet (AS77)

The operation must be carried out by the maintenance technician or by personnel with suitable competences, skills and knowledge.

Make sure to fulfil the required requirements in order to work under safe conditions.

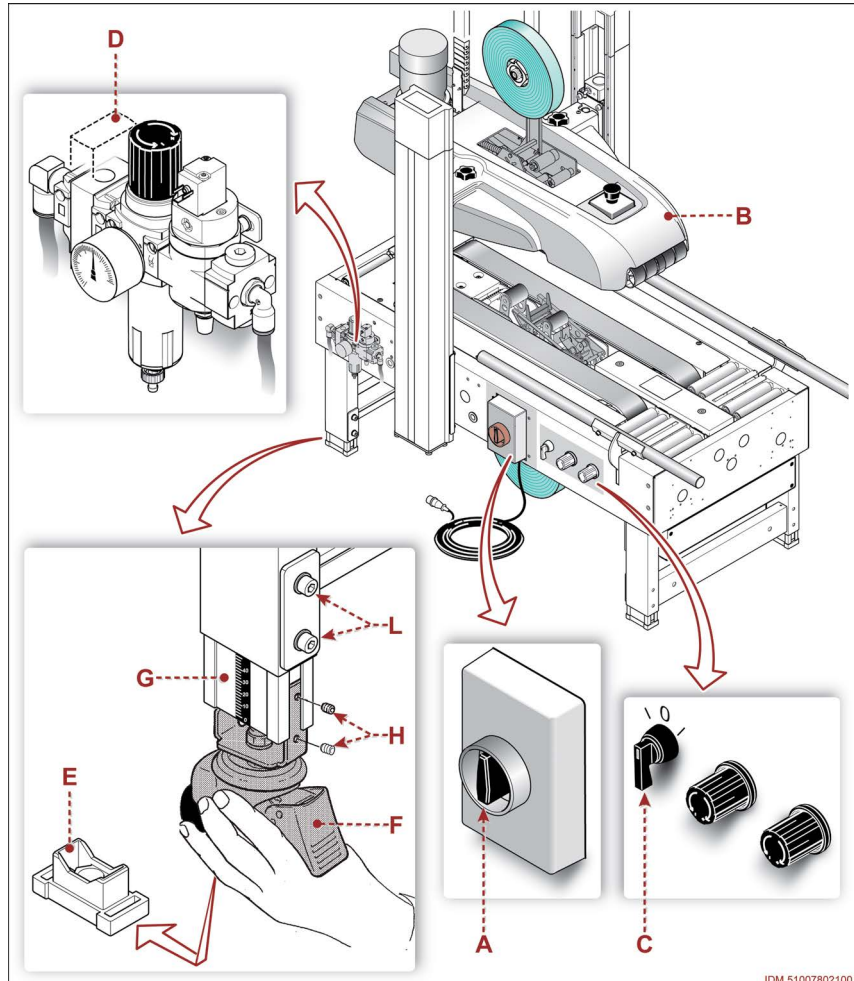
- The figure shows the points of intervention and the description shows the procedures to be adopted.

1. Mark the intervention area and prevent access to the devices that, if activated, may cause unexpected hazards and jeopardize the safety level.
2. Rotate main disconnecter **A** to position "O" (OFF) to deactivate the power supply.
3. Use the selector switch **C** to lower the upper conveyor **B**.
4. Close the valve **D** to turn off the pneumatic supply.
5. Disconnect the plug from the power socket.
6. Lift the machine enough to allow the operation to be carried out.

### Important

Carry out all handling operations by using lifting equipment, secured so as to avoid sudden movements.

7. Remove the component **E**.
  8. Insert the wheel **F** into the foot **G** and secure it with the screws **H**.
  9. Repeat the operations on the other identical components.
  10. Loosen the screws **L** slightly.
  11. Adjust the foot **G** to the required height and secure it with the screws **L**.
- Use the graduated scale **M** as a reference.



IDM 51007802100

### NOTE

Subtract **M** mm, which corresponds to the height of the wheel 100, from the reference height shown on the graduated scale.

12. Repeat the operations on the other identical components.
13. Put the machine on the floor.
14. Position the machine in its chosen setting.
15. Check that the machine is level (longitudinally and transversally).

### NOTE

To ensure that it is levelled properly, use the screws to adjust the height of the feet that are not correct.

16. Block the wheels using the braking system.

- **This is required to hold the machine in position and prevent it from moving.**

17. Open the valve **D** to activate the pneumatic supply.

18. Turn the selector switch **C** to the centre position.

19. Plug the connector into the electrical power outlet.

20. Rotate main disconnect **A** to position “I” (ON) to activate the power supply.

- **At the end of operations, check that there are no tools or other material near the moving parts or in dangerous areas.**

## Machine Disposal and Scrapping

### ■ Machine dismantling

- Disconnect the supplies from the energy sources (electrical, pneumatic, etc.) in order to prevent any restart.
- Carefully drain the systems containing hazardous substances, according to the applicable regulations on safety at work and environmental protection.
- Position the machine in a place that is not easily accessible by non authorised people.

### ■ Machine Scrapping

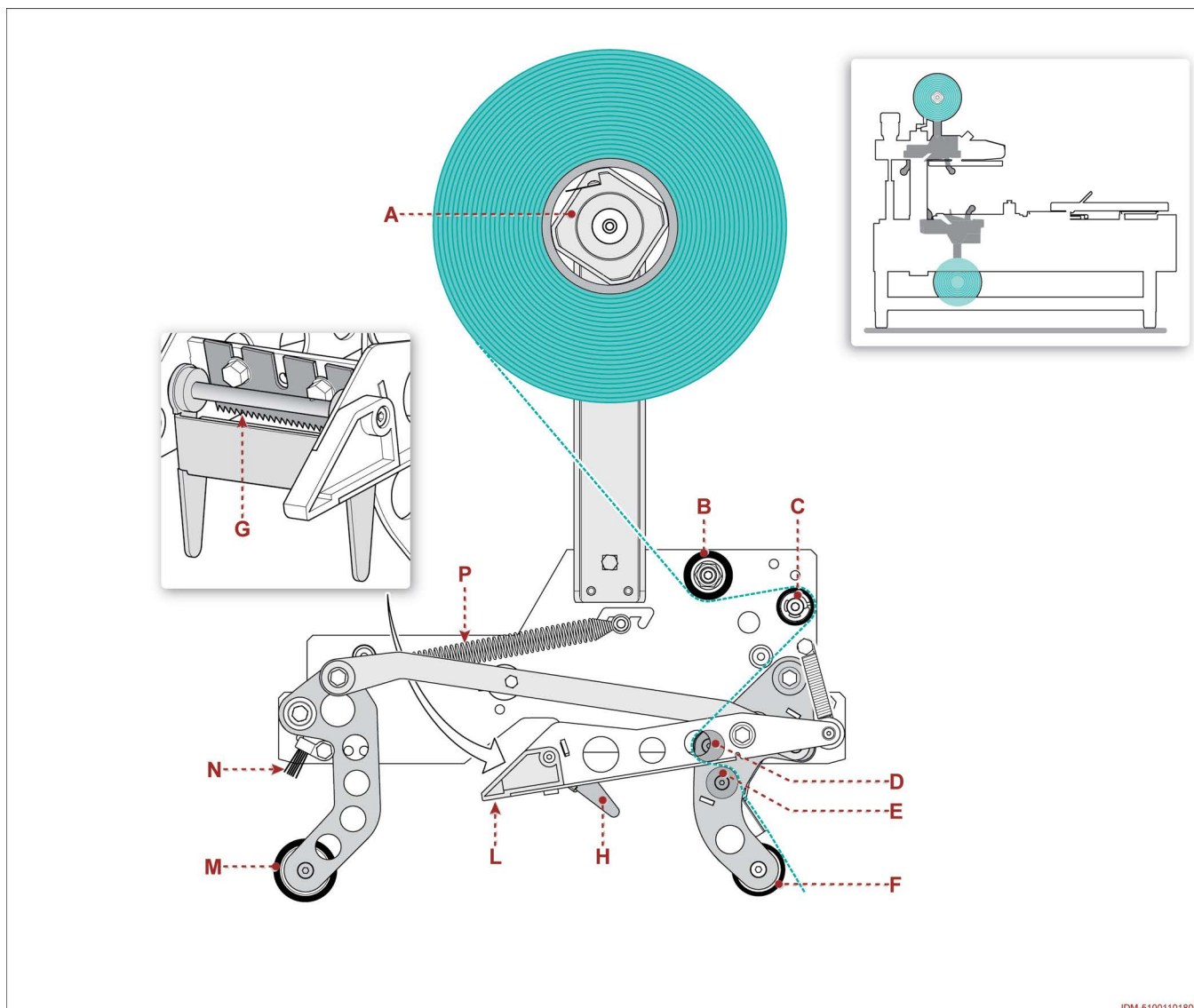
- Carefully drain the systems containing hazardous substances, according to the applicable regulations on safety at work and environmental protection.
- The machine is to be scrapped at the authorized centres by skilled personnel equipped with all the necessary means to operate in safety conditions.
- The personnel carrying out the scrapping of the machine must identify any residual energy and implement a “safety plan” to avoid any unexpected hazard.
- The components must be selected based on the chemical and physical characteristics of their materials and disposed of separately according to the regulations in force.



## Description of sealing unit

Sealing unit is fitted with an adhesive tape holder that seals the lower and upper part of the cardboard cases and/or cartons.

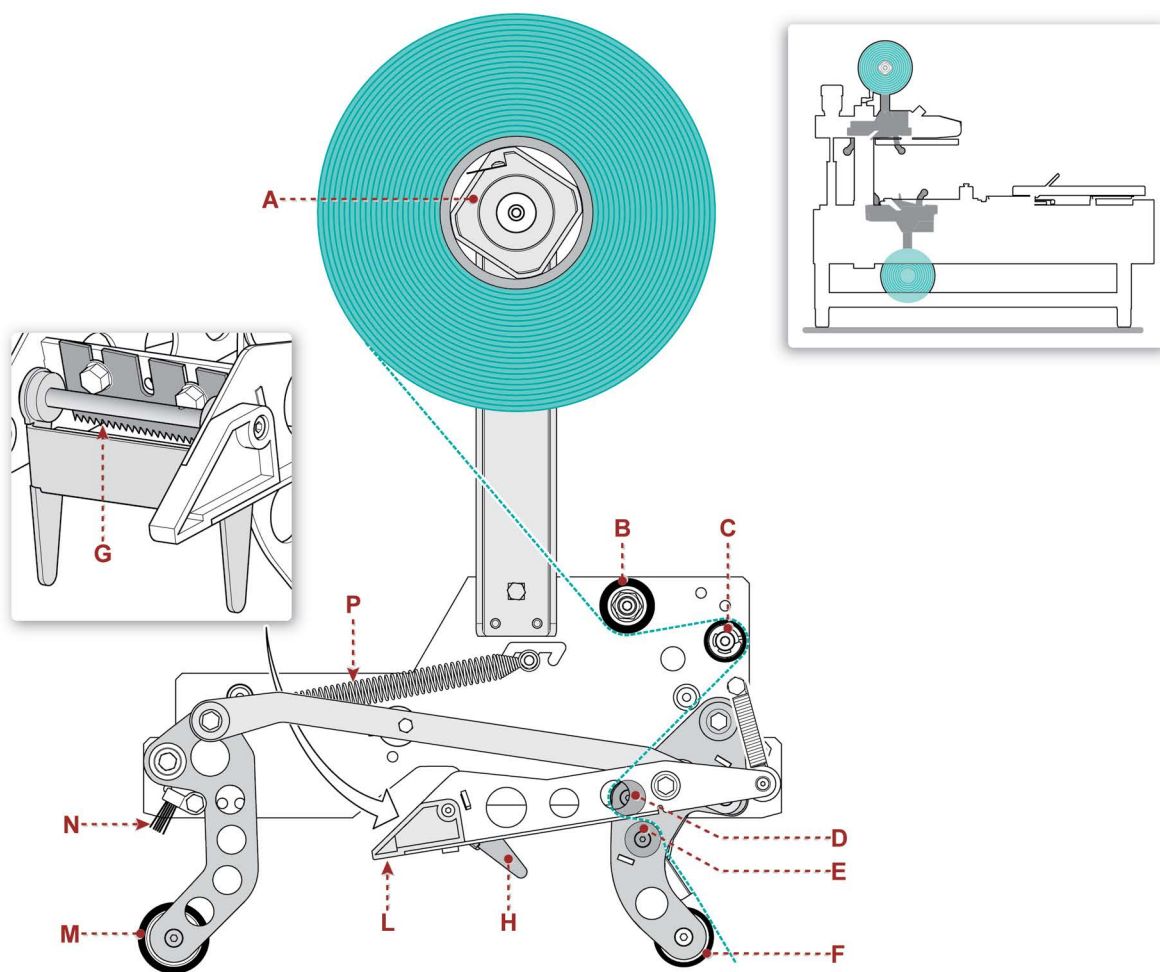
- The K11 version is specifically for 2" adhesive tape.
- Each sealing unit is equipped with devices that apply and cut the adhesive tape.
- The illustration shows the main components.



IDM-51001101800

- A) Tape holder
- B) Roller with non-return device
- C) Transmission roller
- D) Idle roller (knurled surface)
- E) Idle roller (smooth surface)
- F) Case inlet roller
- G) Cutting blade
- H) Cutting blade protection





IDM-51001101800

**L) Cut adjustment sliding block**

**M) Case outlet roller**

**N) Adhesive tape roller smoothing brush**

**P) Roller return spring**

- Tape stretcher is supplied; it is necessary to guide the adhesive tape for the first time.

## Sealing unit technical specifications

Table: Sealing unit technical specifications K11

Description	Unit of measurement	K11
<b>Sealing unit size</b>		
Length, width, height (LxWxH)	mm	400 x 98 x 480
Weight	kg	5,75
<b>Dimensions of adhesive tape roller</b>		
Flap length ( <b>A</b> )	mm	70-50-30 <sup>1)</sup>
Inside Diameter ( <b>d</b> )	mm (inch)	76 (3")
Maximum external diameter ( <b>D</b> )	mm (inch)	410 (16")
Height ( <b>H</b> )	mm (inch)	50 (2")
Type of adhesive tape	PVC - OPP (oriented polypropylene)	

<sup>1)</sup> Sealing unit can be requested for 70 mm or 50 mm flaps.

- For a 30 mm flap, request the components necessary to transform the version with 70 mm or 50 mm flaps.
- For more details, see “Flap length adjustment” heading.

## Supplying and guiding adhesive tape

The intervention must be carried out with the machine stopped in safety conditions.

### ■ Lower sealing unit

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
3. Remove the adhesive tape from the sealing unit.
4. Remove the cardboard core.
5. Insert new roller.
6. Apply tape stretcher to the adhesive side of the tape.
7. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
8. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

9. Insert sealing unit into its original housing.

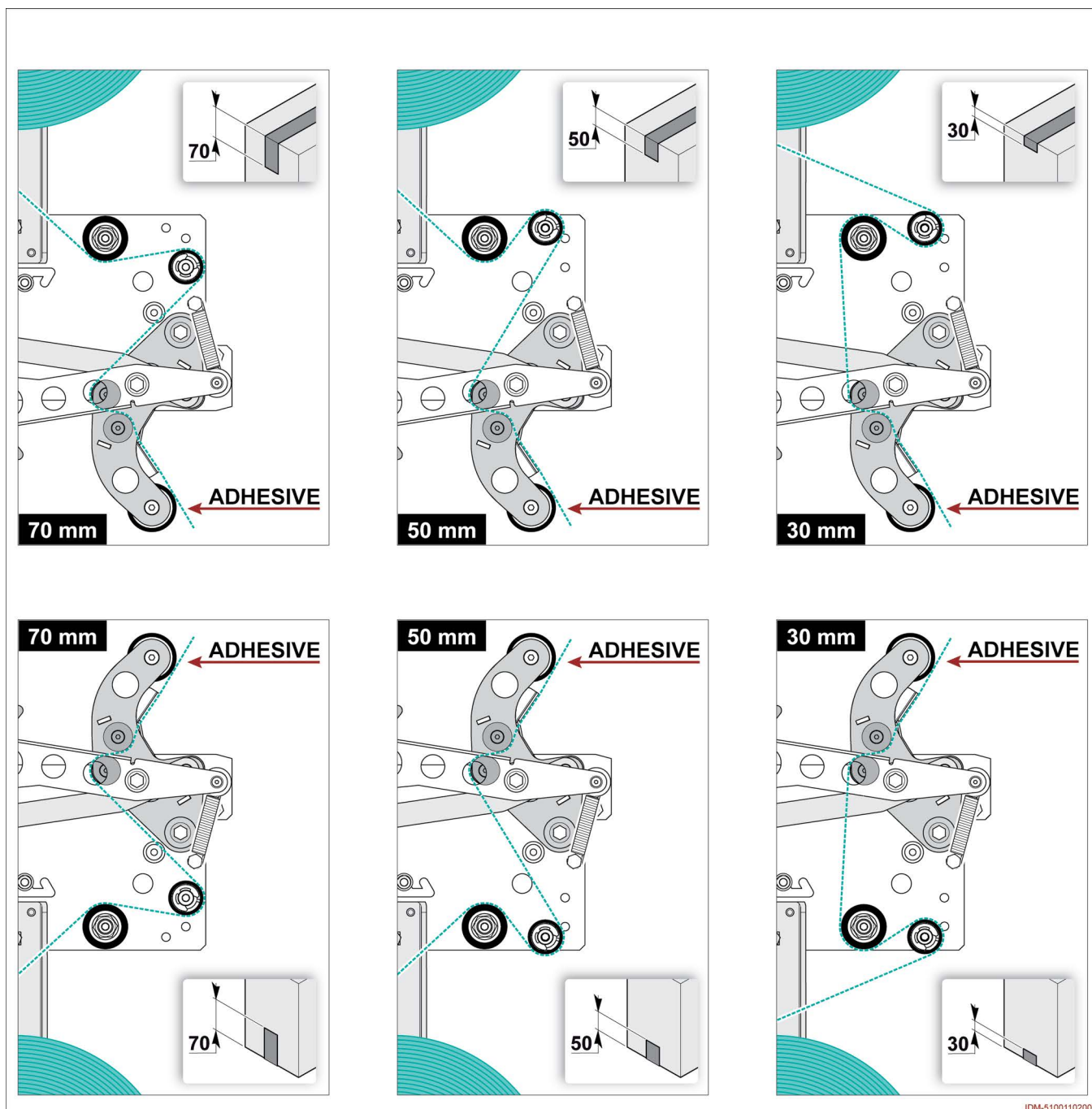
### ■ Upper sealing unit

10. Remove the adhesive tape from the sealing unit.
11. Remove the cardboard core.
12. Insert new roller.
13. Apply tape stretcher to the adhesive side of the tape.
14. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
15. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- The figure shows the path of the adhesive tape according to the length of flap.



IDM-51001102000

## Cutting blade cleaning

The figure shows the points of intervention and the description shows the procedures to be adopted.

- The intervention must be carried out with the machine stopped in safety conditions.

### **Attention Warning**

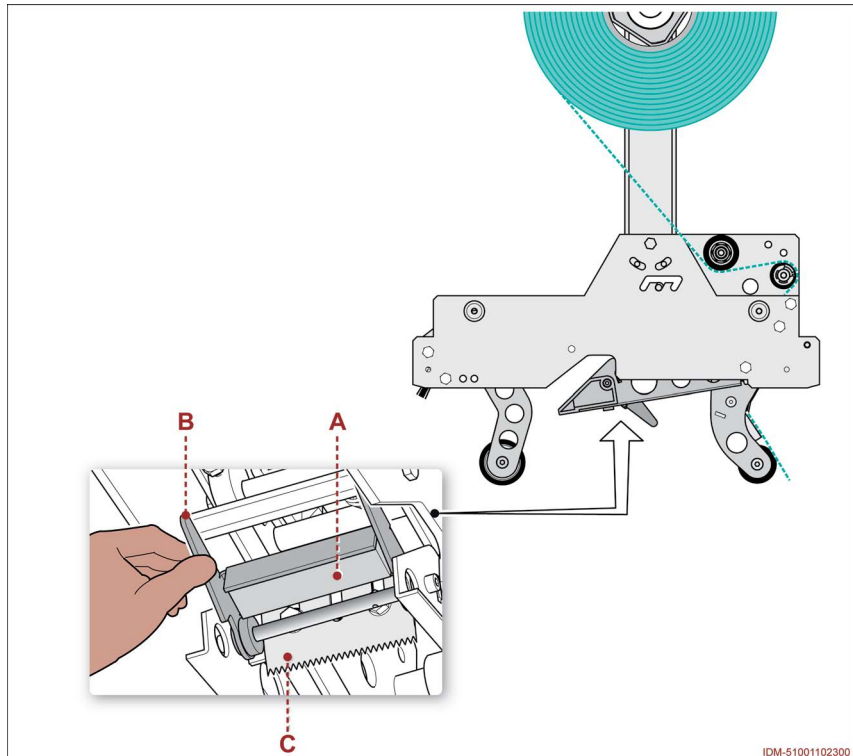
Always wear the special personal protective equipment (gloves) to avoid the risk of cutting your upper limbs.

1. Lift guard **A** and keep it in position by means of lever **B**.
2. Clean blade **(C)** from glue residues.

### **NOTE**

We recommend the using solvent , to remove glue residue.

3. Spread a thin layer of lubricant on blade **C** in order to avoid the accumulation of glue residues.
4. Release lever **(B)**.
  - Guard **(A)** returns to its position.
5. Repeat the operation on the other equal component.



IDM-51001102300

## Adhesive tape parameter check

The figure shows the points of intervention and the description shows the procedures to be adopted.

- This check is necessary to make sure that the adhesive tape is properly applied to the cases.

### ■ Adhesive tape centring check

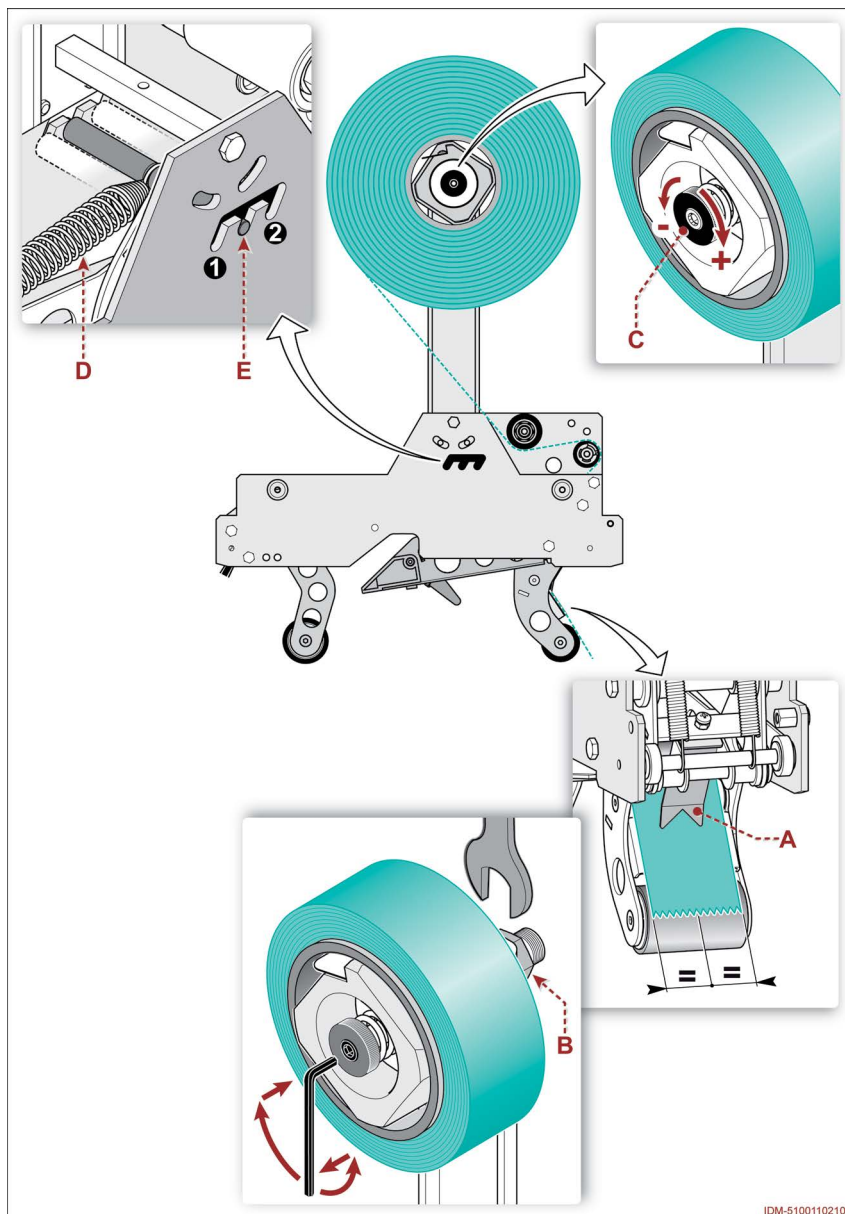
- Make sure that the adhesive tape is centred on device **A**.
- Keep to the following instructions to adjust the centring.
- Insert Allen wrench into roll holder and loosen lock nut **B**.
- Turn Allen wrench with small movements in order to move the roller to the left or to the right.
- Tighten lock nut **B**.

### ■ Adhesive tape tension check

- With PVC adhesive tape, roll holder must not be subject to any friction, but must be able to rotate freely.
- With polypropylene (PP) adhesive tape, roll holder must be subject to a light friction.
- Turn ring **C** to adjust the friction.
  - Clockwise: to friction the roll holder.
  - Counter clockwise: to eliminate the friction of the roll holder.

### ■ Adhesive tape application pressure check

- Reduce the load of spring **D** for scarcely resistant cases and increase it for very resistant cases.
- To reduce the load, insert pin **E** into position **Ē**; to decrease the load, insert the pin into position **Ê**.



IDM-51001102100



## Flap length adjustment

This action is necessary to adjust the length of the adhesive tape flap.

### NOTE

The lower and upper flap can be set with different lengths according to the production requirements.

- The intervention must be carried out with the machine stopped in safety conditions.

### ■ Upper sealing unit (flap 70 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-B-C** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

### NOTE

The part of exceeding adhesive tape must not be lower than the flap length.

- Remove components 50 mm in order to obtain a 50 mm flap.
- To obtain a 30 mm flap, request component E and replace to the one installed.

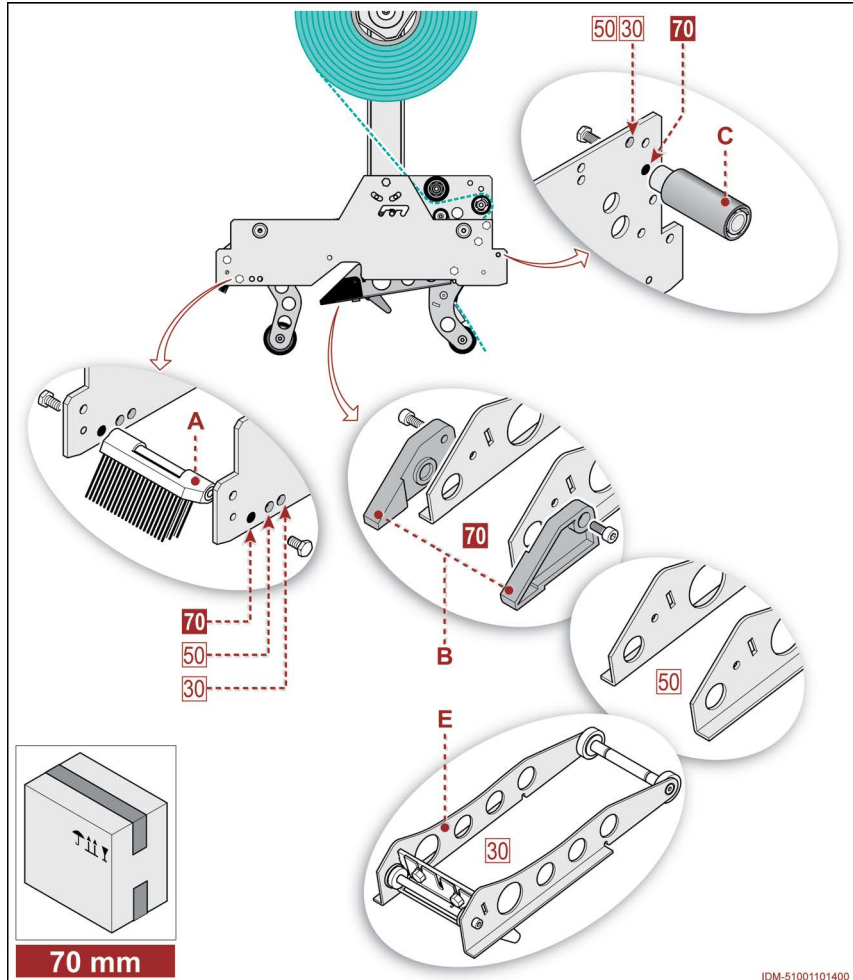
### ■ Lower sealing unit (flap 70 mm)

1. Lift upper conveyor completely.

### NOTE

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



IDM-51001101400



### ■ Upper sealing unit (flap 50 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-C** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- Request components **B** in order to obtain a 70 mm flap.
- To obtain a 30 mm flap, request component **D** and replace to the one installed.

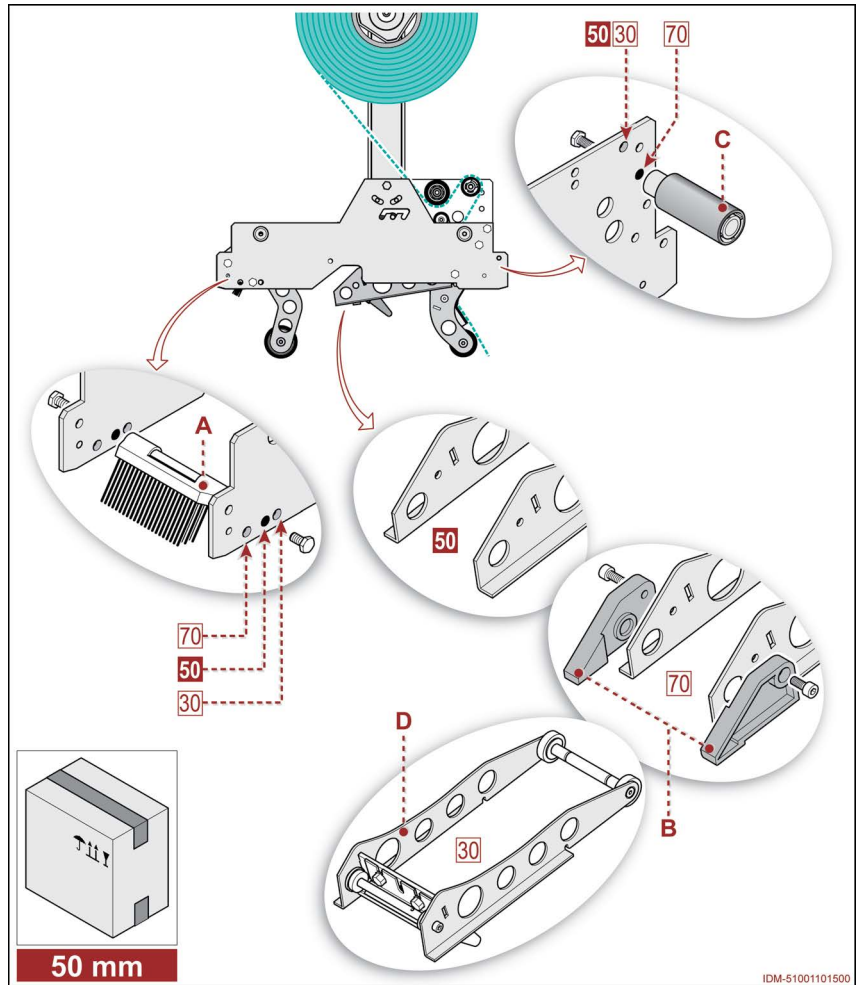
### ■ Lower sealing unit (flap 50 mm)

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



### ■ Upper sealing unit (flap 30 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-C-F** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- Request components **B-B1** in order to obtain a 70 mm flap.
- Request components **B1** in order to obtain a 50 mm flap.

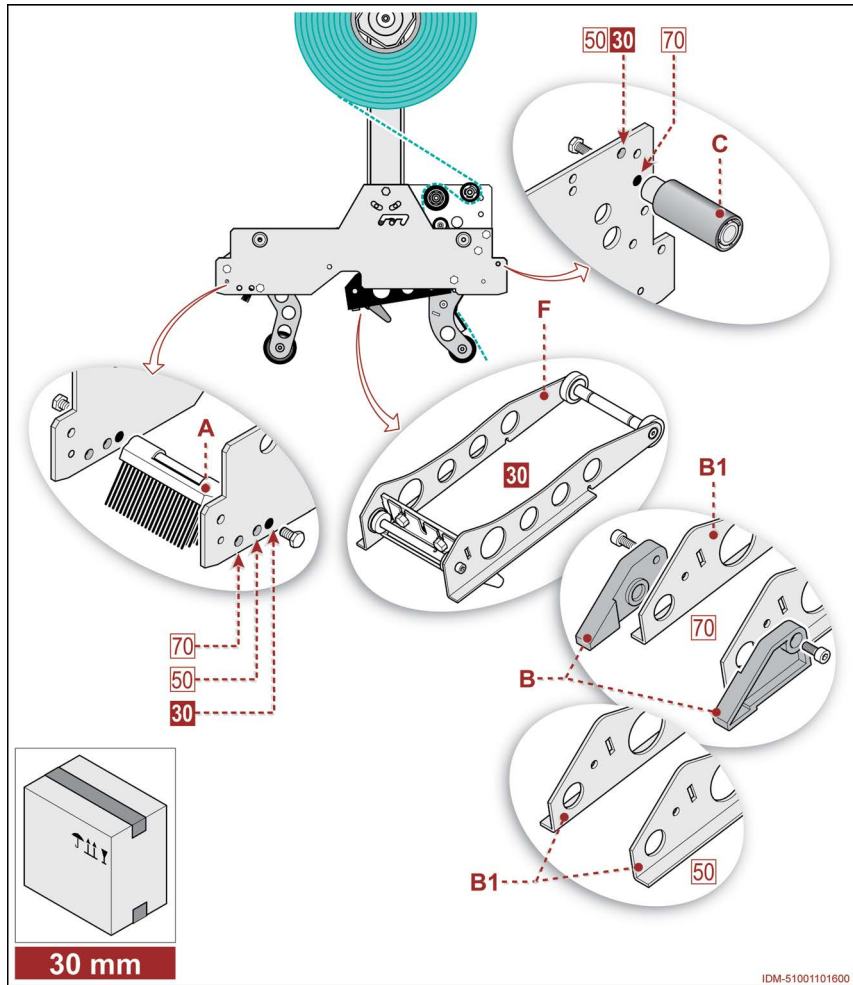
### ■ Lower sealing unit (flap 30 mm)

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



## Replacement of the cutting blade

The figure shows the points of intervention and the description shows the procedures to be adopted.

- The intervention must be carried out with the machine stopped in safety conditions.



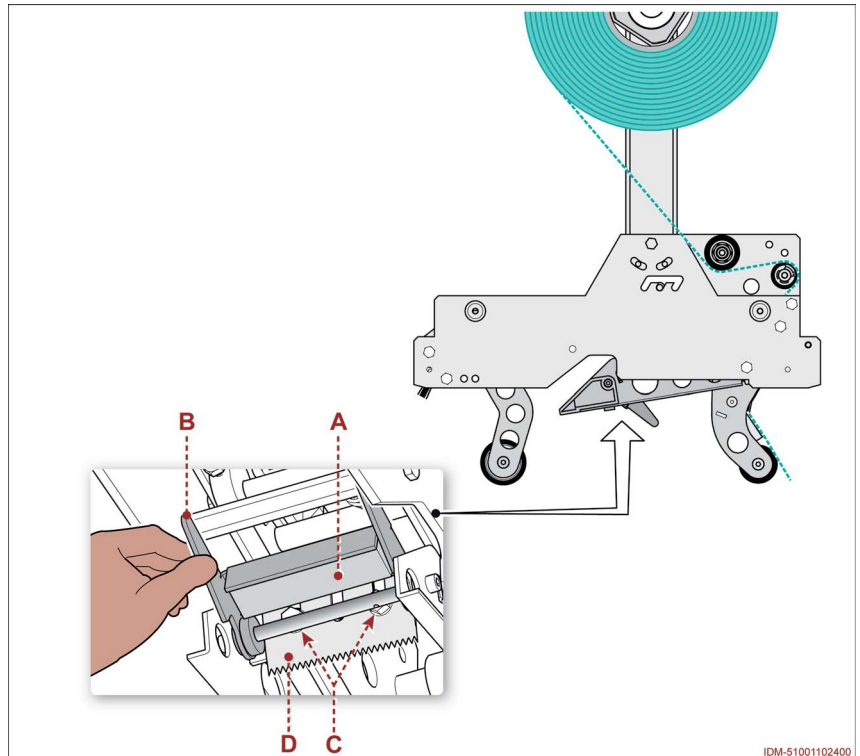
### **Attention Warning**

Always wear the special personal protective equipment (gloves) to avoid the risk of cutting your upper limbs.

1. Lift guard **A** and keep it in position by means of lever **B**.
2. Slightly loosen screws **C**.
3. Extract blade **D**.
4. Install new blade and lock it with screws **C**.

### **NOTE**

Upper sealing unit: sharp edge to the bottom.  
Lower sealing unit: sharp edge to the top.



5. Spread a thin layer of lubricant on blade in order to avoid the accumulation of glue residues.
6. Release lever **(B)**.
  - Guard **(A)** returns to its position.
7. Repeat the operation on the other equal component.



### **Important**

Replace the components **ONLY** with **GENUINE SPARE PARTS** or with other components of equivalent design and functional specifications.



## Description of sealing unit

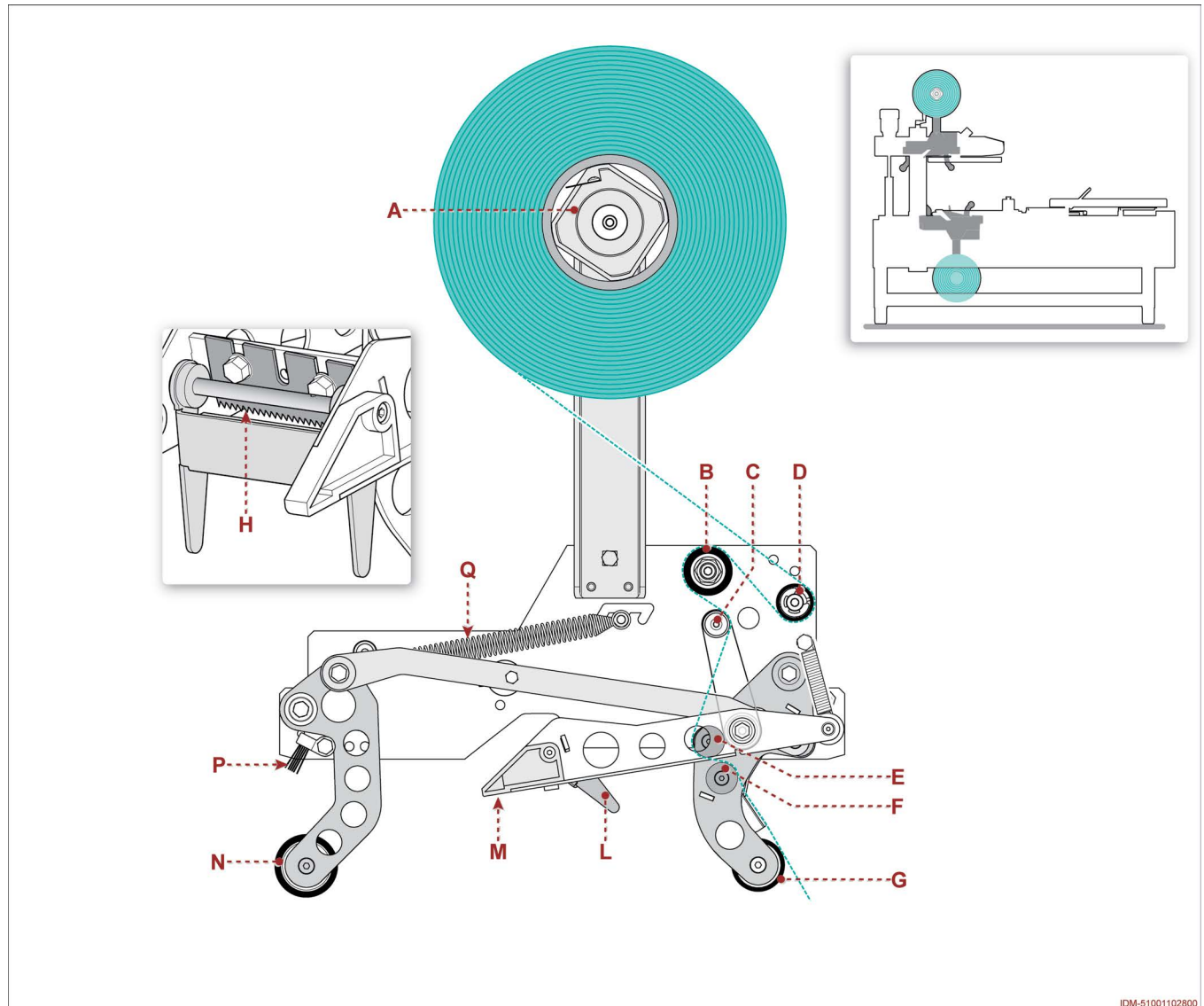
Sealing unit is fitted with an adhesive tape holder that seals the lower and upper part of the cardboard cases and/or cartons.

The K11 R version is specifically for 2" adhesive tape.

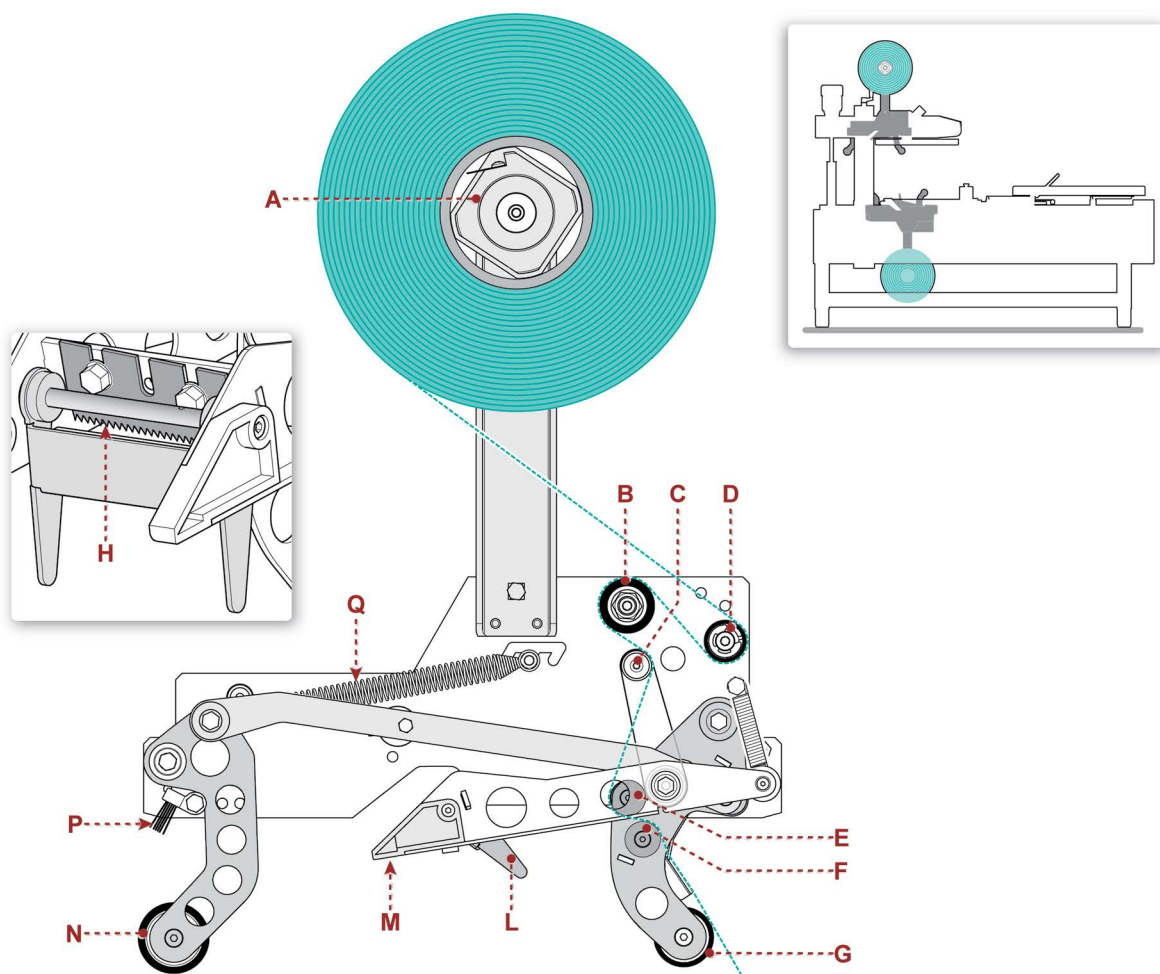
### NOTE

The versions are suitable for use with cut-resistant adhesive tape.

- Each sealing unit is equipped with devices that apply and cut the adhesive tape.
- The illustration shows the main components.



- A) Tape holder
- B) Roller with non-return device
- C) Cutting lever transmission roller
- D) Transmission roller
- E) Idle roller (knurled surface)
- F) Idle roller (smooth surface)



IDM-51001102800

**G) Case inlet roller**

**H) Cutting blade**

**L) Cutting blade protection**

**M) Cut adjustment sliding block**

**N) Case outlet roller**

**P) Adhesive tape roller smoothing brush**

**Q) Roller return spring**

- Tape stretcher is supplied; it is necessary to guide the adhesive tape for the first time.

## Sealing unit technical specifications

Table: Sealing unit technical specifications K11 R

Description	Unit of measurement	K11 R
<b>Sealing unit size</b>		
Length, width, height (LxWxH)	mm	400 x 98 x 480
Weight	kg	5,93
<b>Dimensions of adhesive tape roller</b>		
Flap length (A)	mm	70-50-30 <sup>1)</sup>
Inside Diameter (d)	mm (inch)	76 (3")
Maximum external diameter (D)	mm (inch)	410 (16")
Height (H)	mm (inch)	50 (2")
Type of adhesive tape	PVC - OPP (oriented polypropylene)	

<sup>1)</sup> Sealing unit can be requested for 70 mm or 50 mm flaps.

- For a 30 mm flap, request the components necessary to transform the version with 70 mm or 50 mm flaps.
- For more details, see “Flap length adjustment” heading.



## Supplying and guiding adhesive tape

The intervention must be carried out with the machine stopped in safety conditions.

### ■ Lower sealing unit

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
3. Remove the adhesive tape from the sealing unit.
4. Remove the cardboard core.
5. Insert new roller.
6. Apply tape stretcher to the adhesive side of the tape.
7. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
8. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

9. Insert sealing unit into its original housing.

### ■ Upper sealing unit

10. Remove the adhesive tape from the sealing unit.
11. Remove the cardboard core.
12. Insert new roller.
13. Apply tape stretcher to the adhesive side of the tape.
14. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
15. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- The figure shows the path of the adhesive tape according to the length of flap.



IDM-51001102200

## Cutting blade cleaning

The figure shows the points of intervention and the description shows the procedures to be adopted.

- The intervention must be carried out with the machine stopped in safety conditions.

### **Attention Warning**

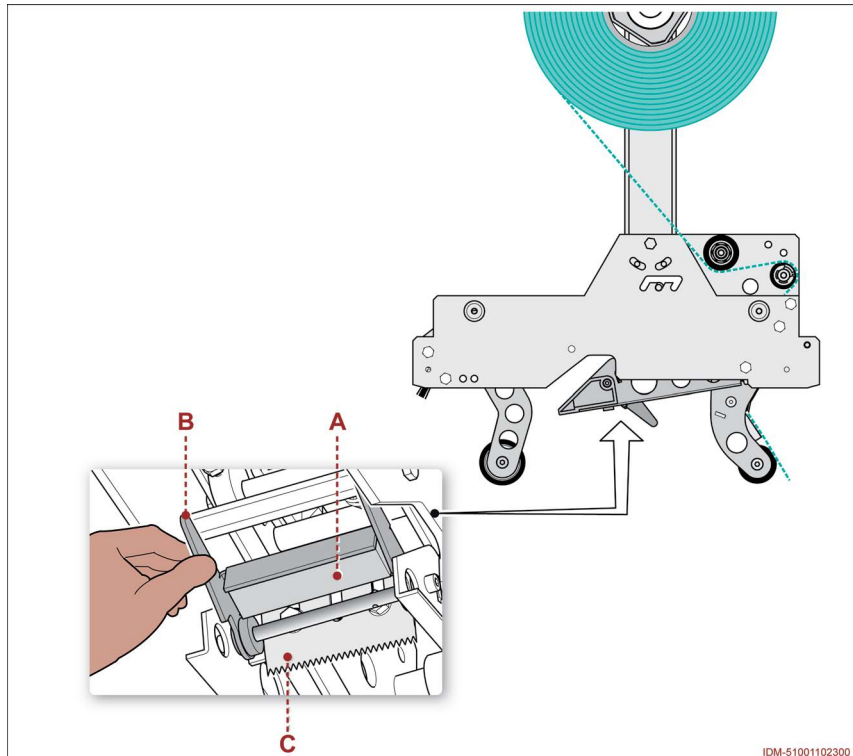
Always wear the special personal protective equipment (gloves) to avoid the risk of cutting your upper limbs.

1. Lift guard **A** and keep it in position by means of lever **B**.
2. Clean blade **(C)** from glue residues.

### **NOTE**

We recommend the using solvent , to remove glue residue.

3. Spread a thin layer of lubricant on blade **C** in order to avoid the accumulation of glue residues.
4. Release lever **(B)**.
  - Guard **(A)** returns to its position.
5. Repeat the operation on the other equal component.



IDM-51001102300

## Adhesive tape parameter check

The figure shows the points of intervention and the description shows the procedures to be adopted.

- This check is necessary to make sure that the adhesive tape is properly applied to the cases.

### ■ Adhesive tape centring check

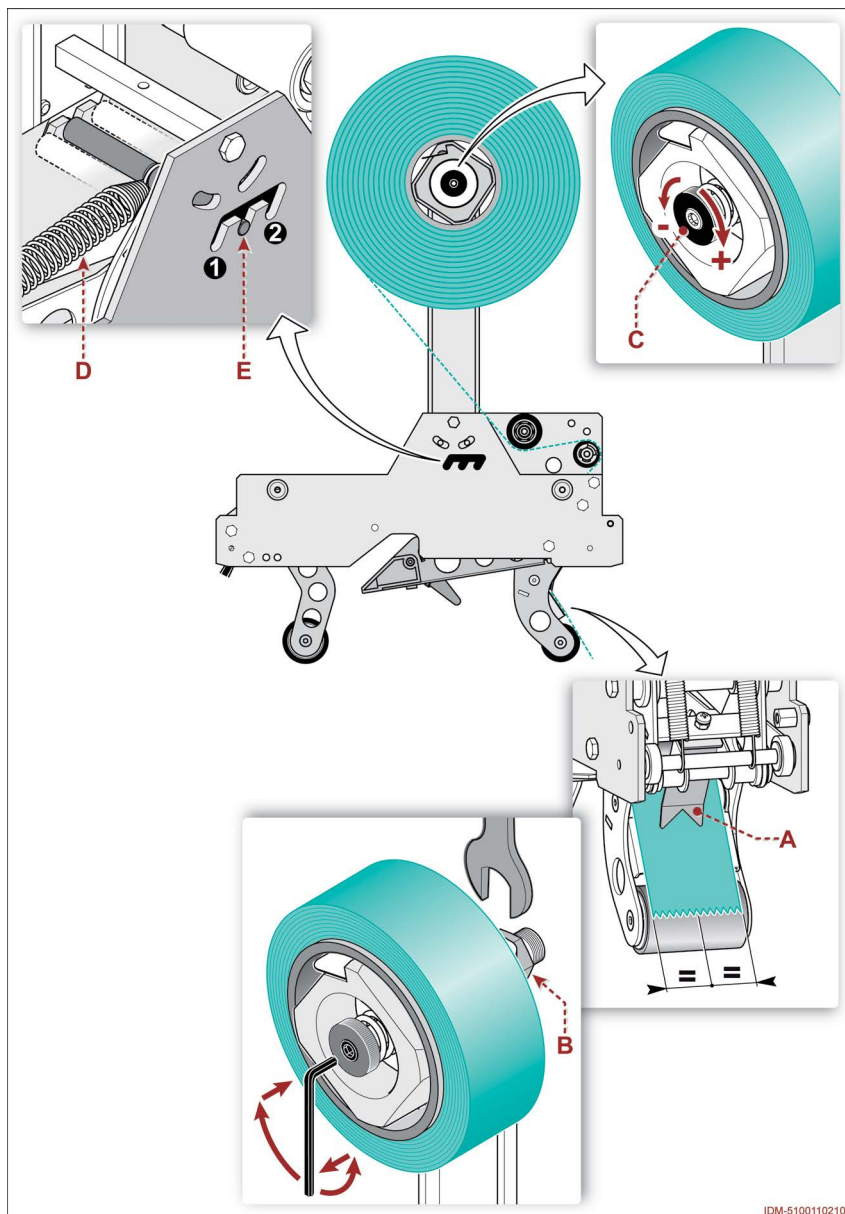
- Make sure that the adhesive tape is centred on device **A**.
- Keep to the following instructions to adjust the centring.
- Insert Allen wrench into roll holder and loosen lock nut **B**.
- Turn Allen wrench with small movements in order to move the roller to the left or to the right.
- Tighten lock nut **B**.

### ■ Adhesive tape tension check

- With PVC adhesive tape, roll holder must not be subject to any friction, but must be able to rotate freely.
- With polypropylene (PP) adhesive tape, roll holder must be subject to a light friction.
- Turn ring **C** to adjust the friction.
  - Clockwise: to friction the roll holder.
  - Counter clockwise: to eliminate the friction of the roll holder.

### ■ Adhesive tape application pressure check

- Reduce the load of spring **D** for scarcely resistant cases and increase it for very resistant cases.
- To reduce the load, insert pin **E** into position **Ē**; to decrease the load, insert the pin into position **Ê**.



IDM-51001102100

## Flap length adjustment

This action is necessary to adjust the length of the adhesive tape flap.

### NOTE

The lower and upper flap can be set with different lengths according to the production requirements.

- The intervention must be carried out with the machine stopped in safety conditions.

### ■ Upper sealing unit (flap 70 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-B-C** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

### NOTE

The part of exceeding adhesive tape must not be lower than the flap length.

- Remove components 50 mm in order to obtain a 50 mm flap.
- To obtain a 30 mm flap, request component E and replace to the one installed.

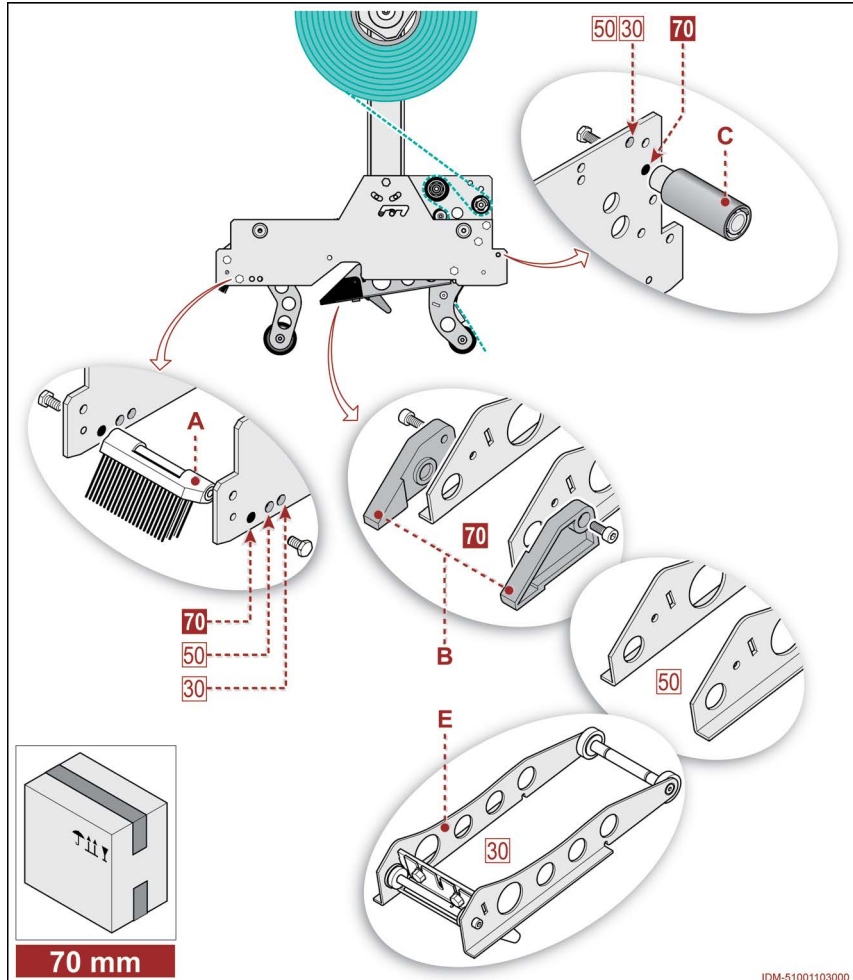
### ■ Lower sealing unit (flap 70 mm)

1. Lift upper conveyor completely.

### NOTE

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



IDM-51001103000



### ■ Upper sealing unit (flap 50 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-C** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- Request components **B** in order to obtain a 70 mm flap.
- To obtain a 30 mm flap, request component **D** and replace to the one installed.

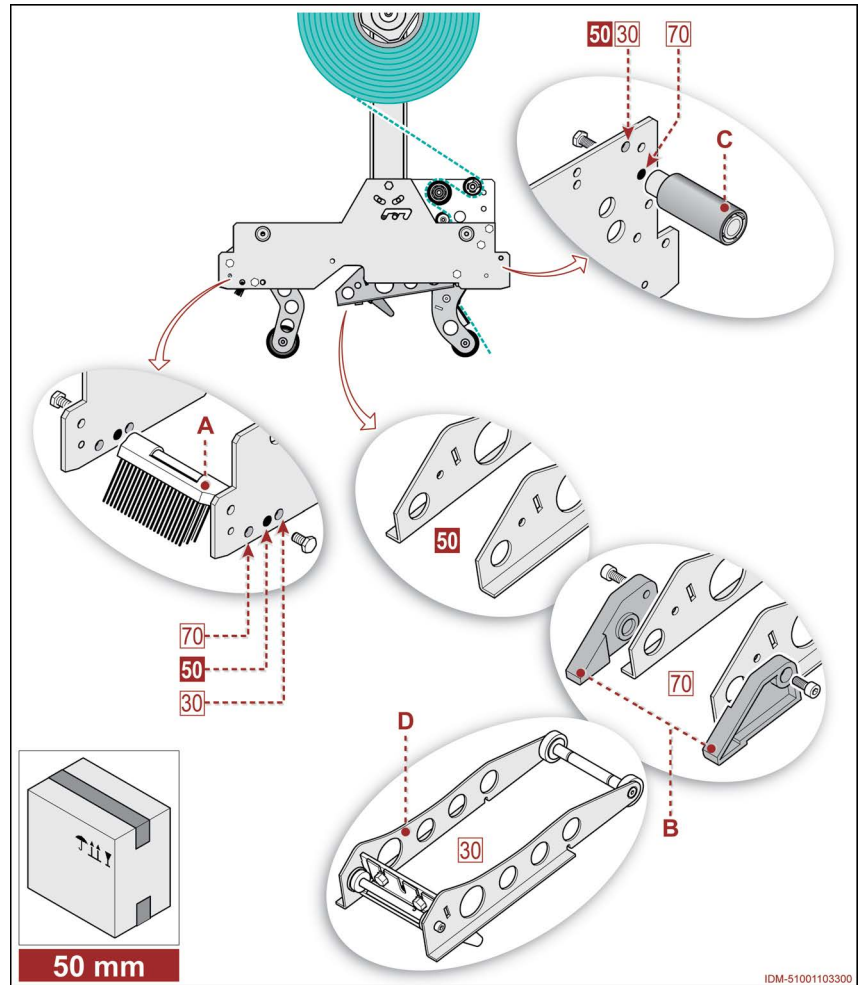
### ■ Lower sealing unit (flap 50 mm)

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.





### ■ Upper sealing unit (flap 30 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-C-F** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- Request components **B-B1** in order to obtain a 70 mm flap.
- Request components **B1** in order to obtain a 50 mm flap.

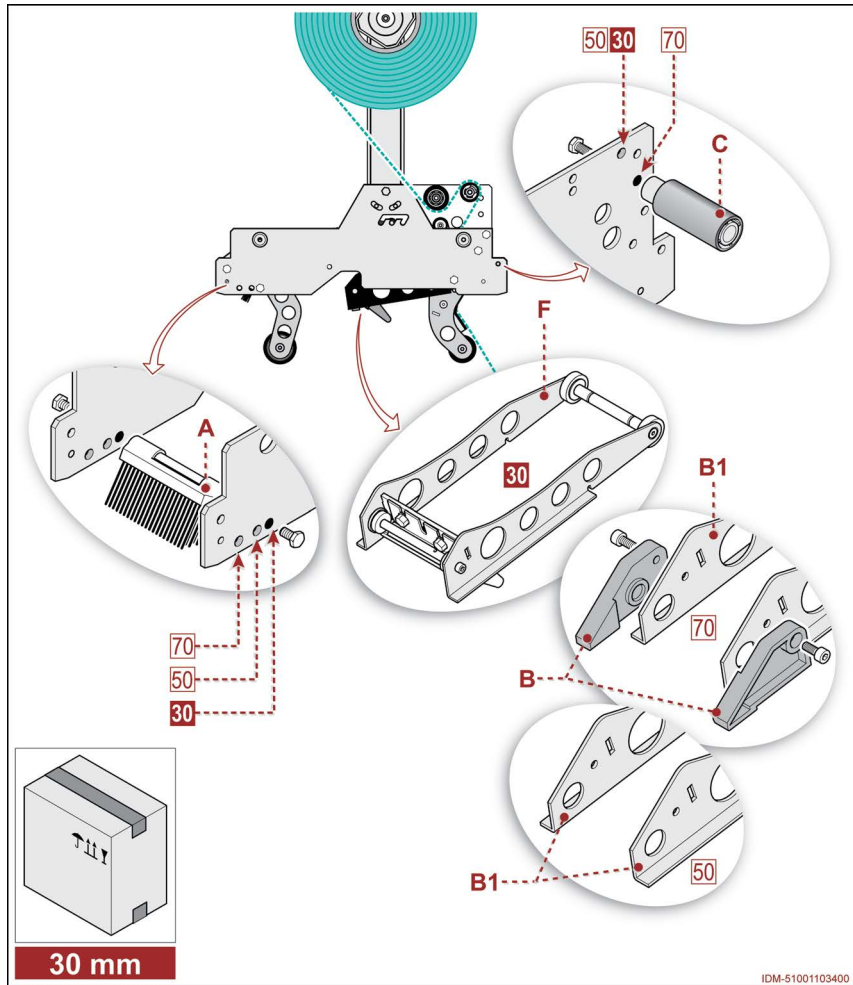
### ■ Lower sealing unit (flap 30 mm)

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



## Replacement of the cutting blade

The figure shows the points of intervention and the description shows the procedures to be adopted.

- The intervention must be carried out with the machine stopped in safety conditions.



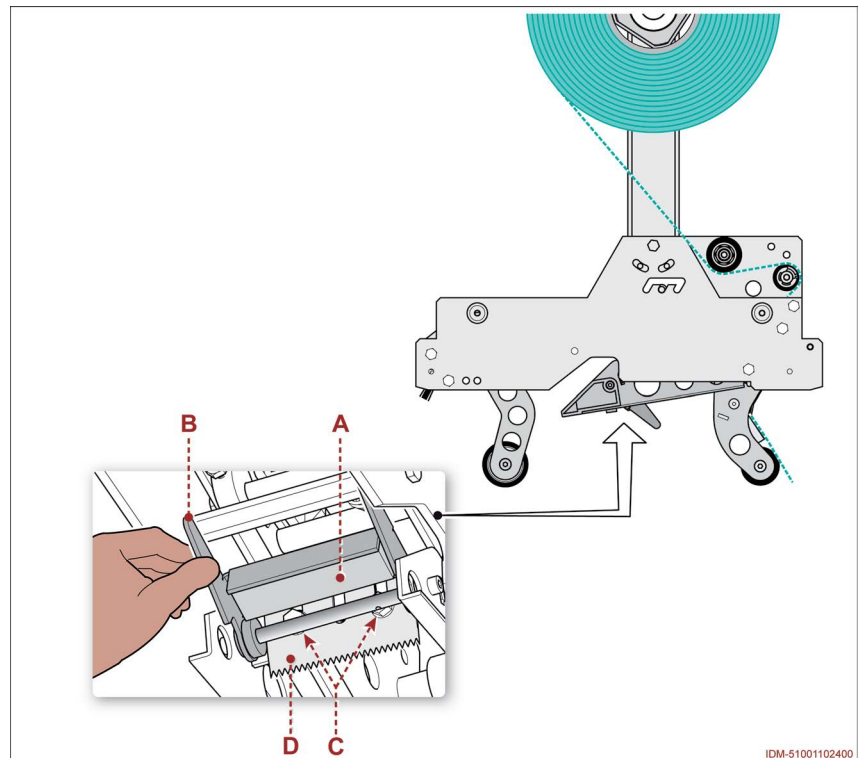
### **Attention Warning**

Always wear the special personal protective equipment (gloves) to avoid the risk of cutting your upper limbs.

1. Lift guard **A** and keep it in position by means of lever **B**.
2. Slightly loosen screws **C**.
3. Extract blade **D**.
4. Install new blade and lock it with screws **C**.

### **NOTE**

Upper sealing unit: sharp edge to the bottom.  
Lower sealing unit: sharp edge to the top.



5. Spread a thin layer of lubricant on blade in order to avoid the accumulation of glue residues.
6. Release lever **(B)**.
  - Guard **(A)** returns to its position.
7. Repeat the operation on the other equal component.



### **Important**

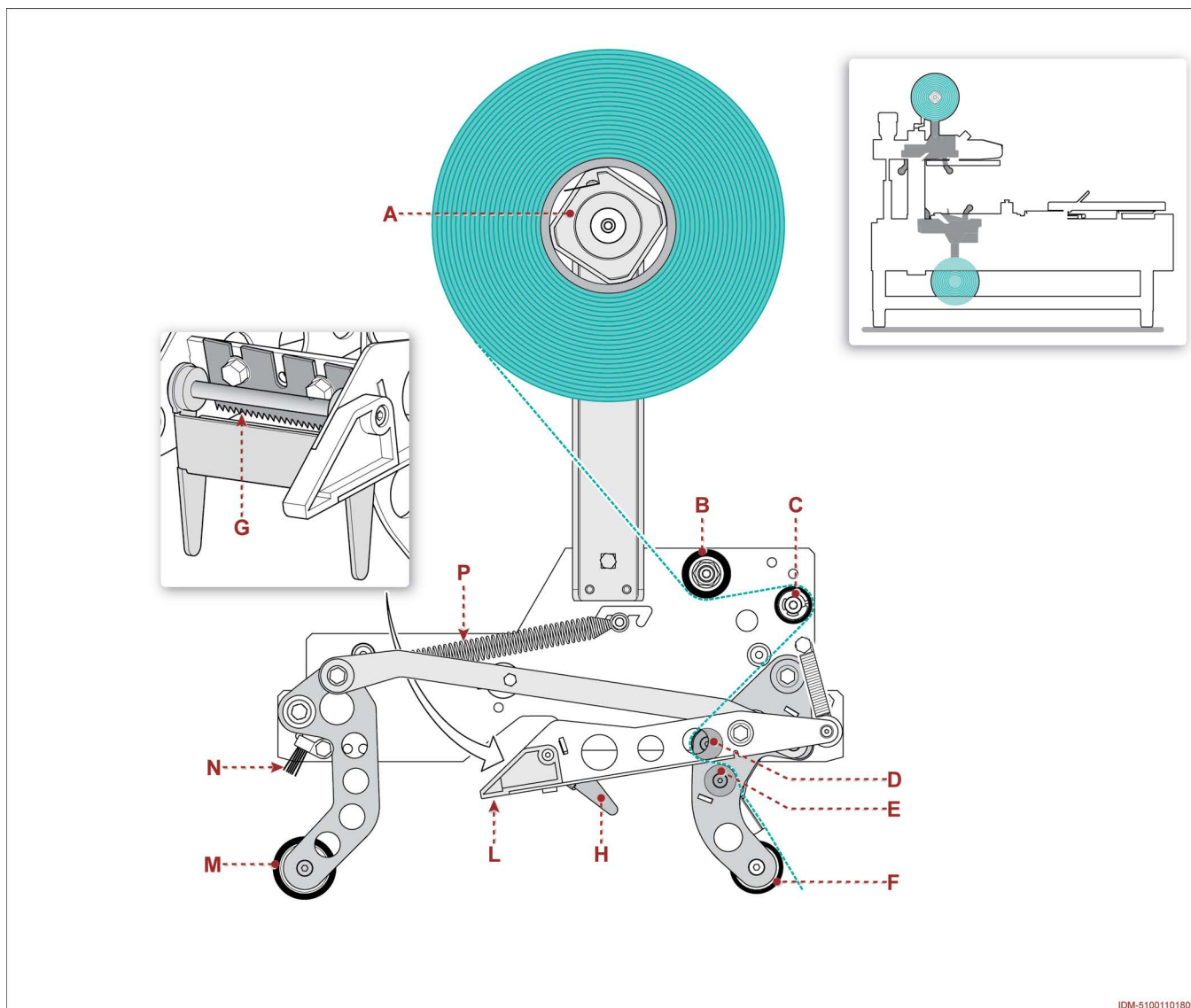
Replace the components **ONLY** with **GENUINE SPARE PARTS** or with other components of equivalent design and functional specifications.



## Description of sealing unit

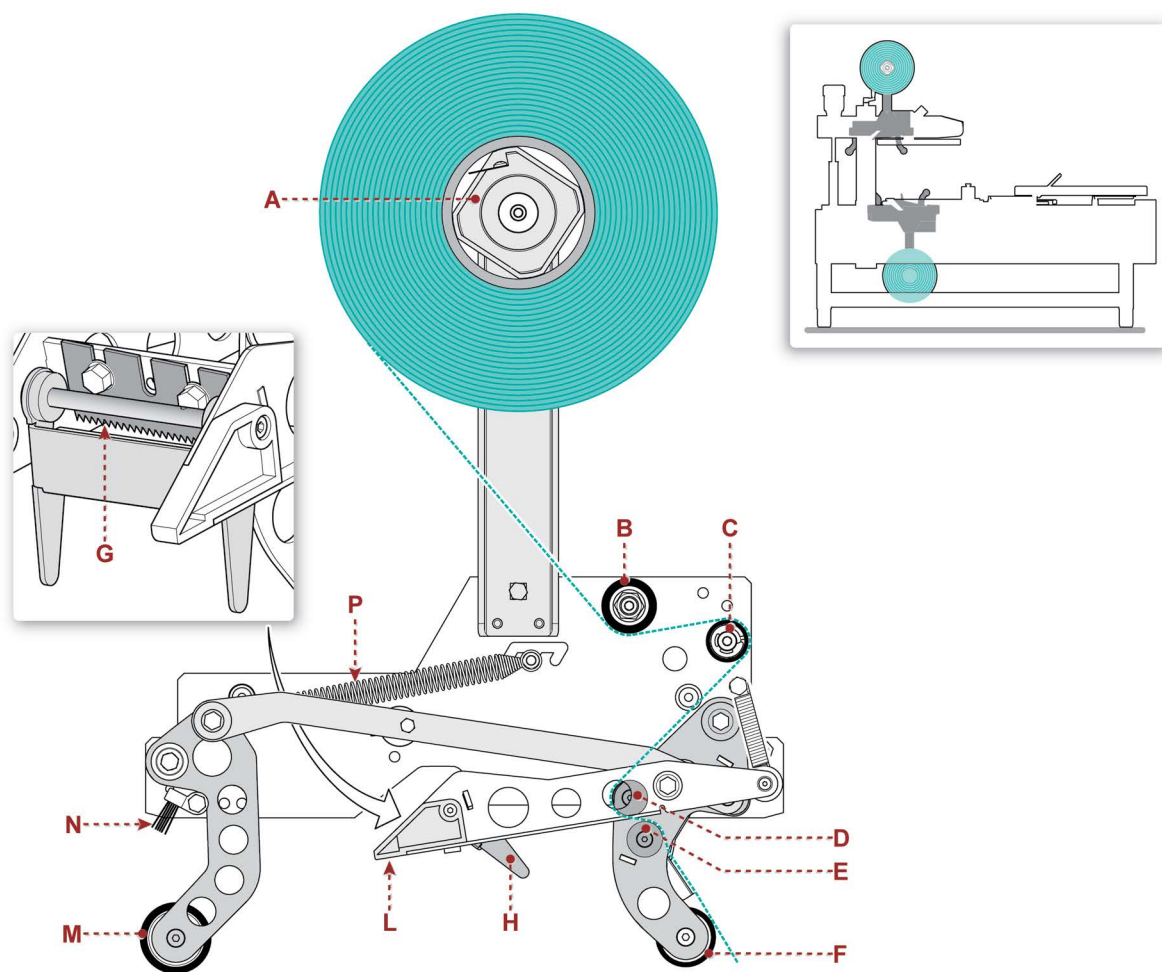
Sealing unit is fitted with an adhesive tape holder that seals the lower and upper part of the cardboard cases and/or cartons.

- The K12 version is specifically for 3" adhesive tape.
- Each sealing unit is equipped with devices that apply and cut the adhesive tape.
- The illustration shows the main components.



IDM-51001101800

- A) Tape holder
- B) Roller with non-return device
- C) Transmission roller
- D) Idle roller (knurled surface)
- E) Idle roller (smooth surface)
- F) Case inlet roller
- G) Cutting blade
- H) Cutting blade protection



IDM-51001101800

**L) Cut adjustment sliding block**

**M) Case outlet roller**

**N) Adhesive tape roller smoothing brush**

**P) Roller return spring**

- Tape stretcher is supplied; it is necessary to guide the adhesive tape for the first time.

## Sealing unit technical specifications

Table: Sealing unit technical specifications K12

Description	Unit of measurement	K12
<b>Sealing unit size</b>		
Length, width, height (LxWxH)	mm	400 x 123 x 480
Weight	kg	6,25
<b>Dimensions of adhesive tape roller</b>		
Flap length ( <b>A</b> )	mm	70-50-30 <sup>1)</sup>
Inside Diameter ( <b>d</b> )	mm (inch)	76 (3")
Maximum external diameter ( <b>D</b> )	mm (inch)	410 (16")
Height ( <b>H</b> )	mm (inch)	76 (3")
Type of adhesive tape	PVC - OPP (oriented polypropylene)	

<sup>1)</sup> Sealing unit can be requested for 70 mm or 50 mm flaps.

- For a 30 mm flap, request the components necessary to transform the version with 70 mm or 50 mm flaps.
- For more details, see “Flap length adjustment” heading.



## Supplying and guiding adhesive tape

The intervention must be carried out with the machine stopped in safety conditions.

### ■ Lower sealing unit

1. Lift upper conveyor completely.

**NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
3. Remove the adhesive tape from the sealing unit.
4. Remove the cardboard core.
5. Insert new roller.
6. Apply tape stretcher to the adhesive side of the tape.
7. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
8. Cut the adhesive tape close to tape stretcher.

**NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

9. Insert sealing unit into its original housing.

### ■ Upper sealing unit

10. Remove the adhesive tape from the sealing unit.
11. Remove the cardboard core.
12. Insert new roller.
13. Apply tape stretcher to the adhesive side of the tape.
14. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
15. Cut the adhesive tape close to tape stretcher.

**NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- The figure shows the path of the adhesive tape according to the length of flap.



IDM-51001102000

## Cutting blade cleaning

The figure shows the points of intervention and the description shows the procedures to be adopted.

- The intervention must be carried out with the machine stopped in safety conditions.

### **Attention Warning**

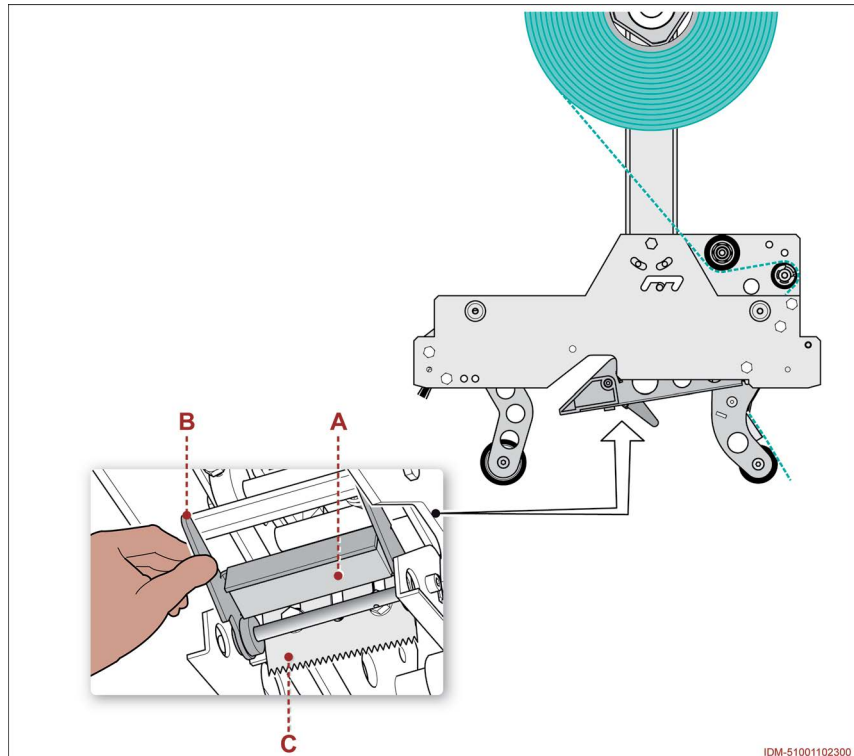
Always wear the special personal protective equipment (gloves) to avoid the risk of cutting your upper limbs.

1. Lift guard **A** and keep it in position by means of lever **B**.
2. Clean blade **(C)** from glue residues.

### **NOTE**

We recommend the using solvent , to remove glue residue.

3. Spread a thin layer of lubricant on blade **C** in order to avoid the accumulation of glue residues.
4. Release lever **(B)**.
  - Guard **(A)** returns to its position.
5. Repeat the operation on the other equal component.



## Adhesive tape parameter check

The figure shows the points of intervention and the description shows the procedures to be adopted.

- This check is necessary to make sure that the adhesive tape is properly applied to the cases.

### ■ Adhesive tape centring check

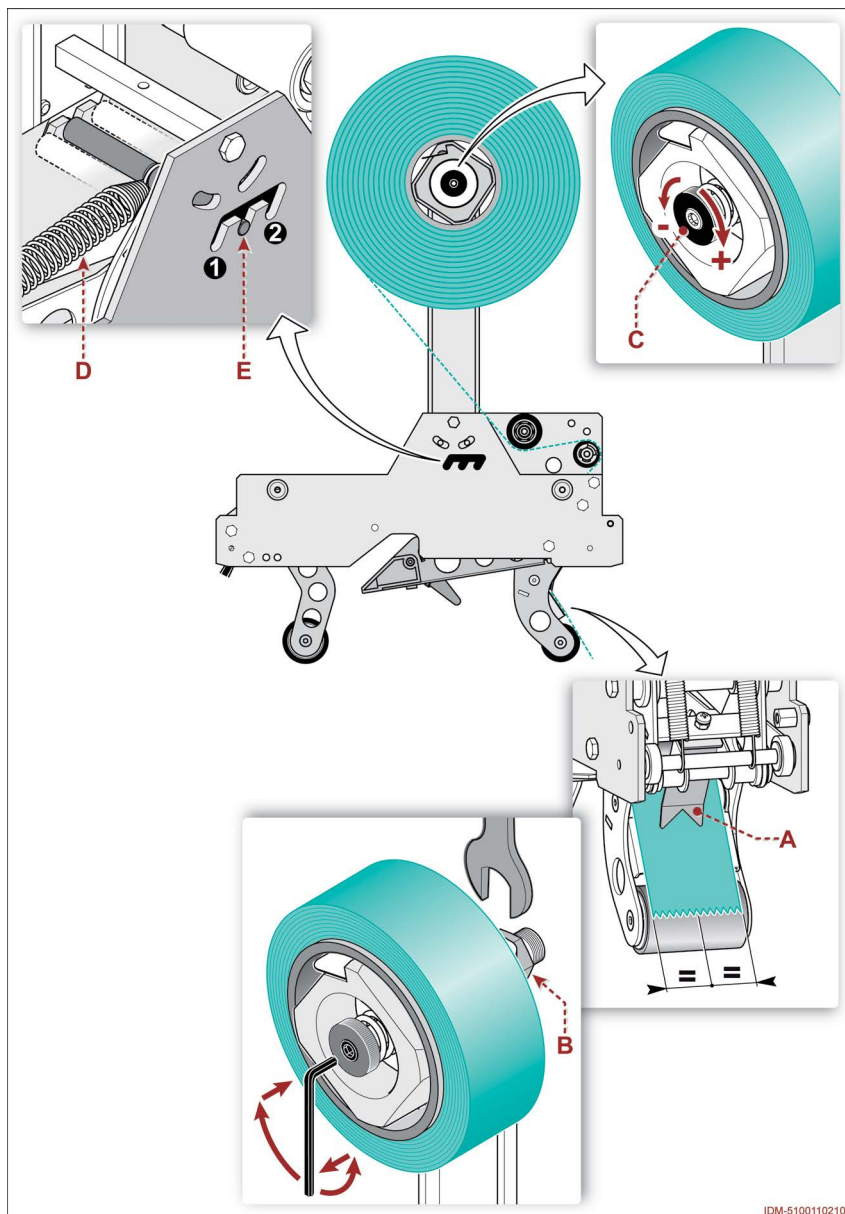
- Make sure that the adhesive tape is centred on device **A**.
- Keep to the following instructions to adjust the centring.
- Insert Allen wrench into roll holder and loosen lock nut **B**.
- Turn Allen wrench with small movements in order to move the roller to the left or to the right.
- Tighten lock nut **B**.

### ■ Adhesive tape tension check

- With PVC adhesive tape, roll holder must not be subject to any friction, but must be able to rotate freely.
- With polypropylene (PP) adhesive tape, roll holder must be subject to a light friction.
- Turn ring **C** to adjust the friction.
  - Clockwise: to friction the roll holder.
  - Counter clockwise: to eliminate the friction of the roll holder.

### ■ Adhesive tape application pressure check

- Reduce the load of spring **D** for scarcely resistant cases and increase it for very resistant cases.
- To reduce the load, insert pin **E** into position **Ė**; to decrease the load, insert the pin into position **Ė̃**.



## Flap length adjustment

This action is necessary to adjust the length of the adhesive tape flap.

### NOTE

The lower and upper flap can be set with different lengths according to the production requirements.

- The intervention must be carried out with the machine stopped in safety conditions.

### ■ Upper sealing unit (flap 70 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-B-C** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

### NOTE

The part of exceeding adhesive tape must not be lower than the flap length.

- Remove components 50 mm in order to obtain a 50 mm flap.
- To obtain a 30 mm flap, request component E and replace to the one installed.

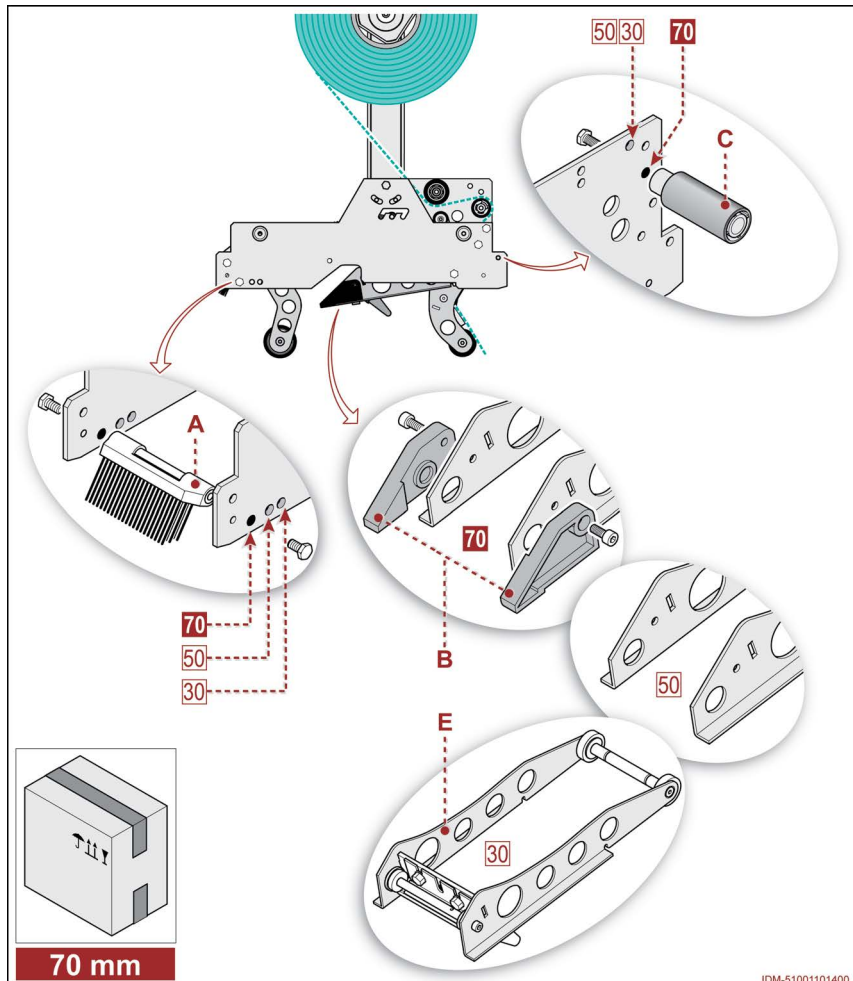
### ■ Lower sealing unit (flap 70 mm)

1. Lift upper conveyor completely.

### NOTE

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



IDM-S1001101400



### ■ Upper sealing unit (flap 50 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-C** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- Request components **B** in order to obtain a 70 mm flap.
- To obtain a 30 mm flap, request component **D** and replace to the one installed.

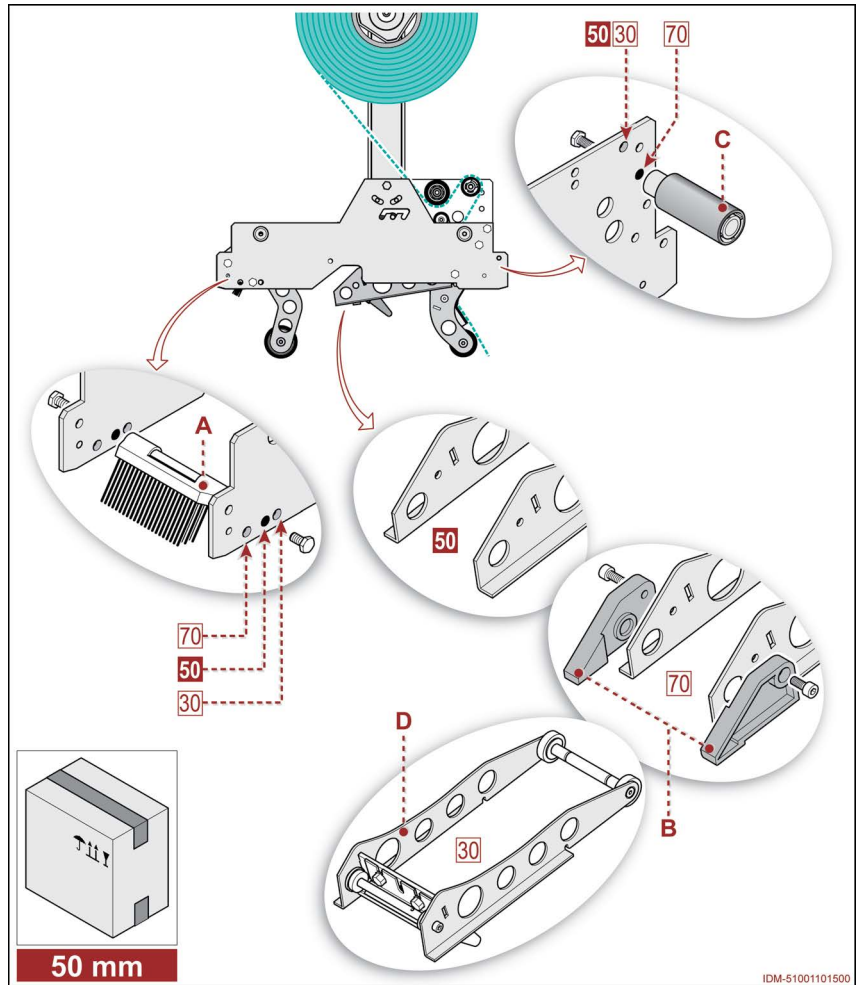
### ■ Lower sealing unit (flap 50 mm)

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.





### ■ Upper sealing unit (flap 30 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-C-F** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- Request components **B-B1** in order to obtain a 70 mm flap.
- Request components **B1** in order to obtain a 50 mm flap.

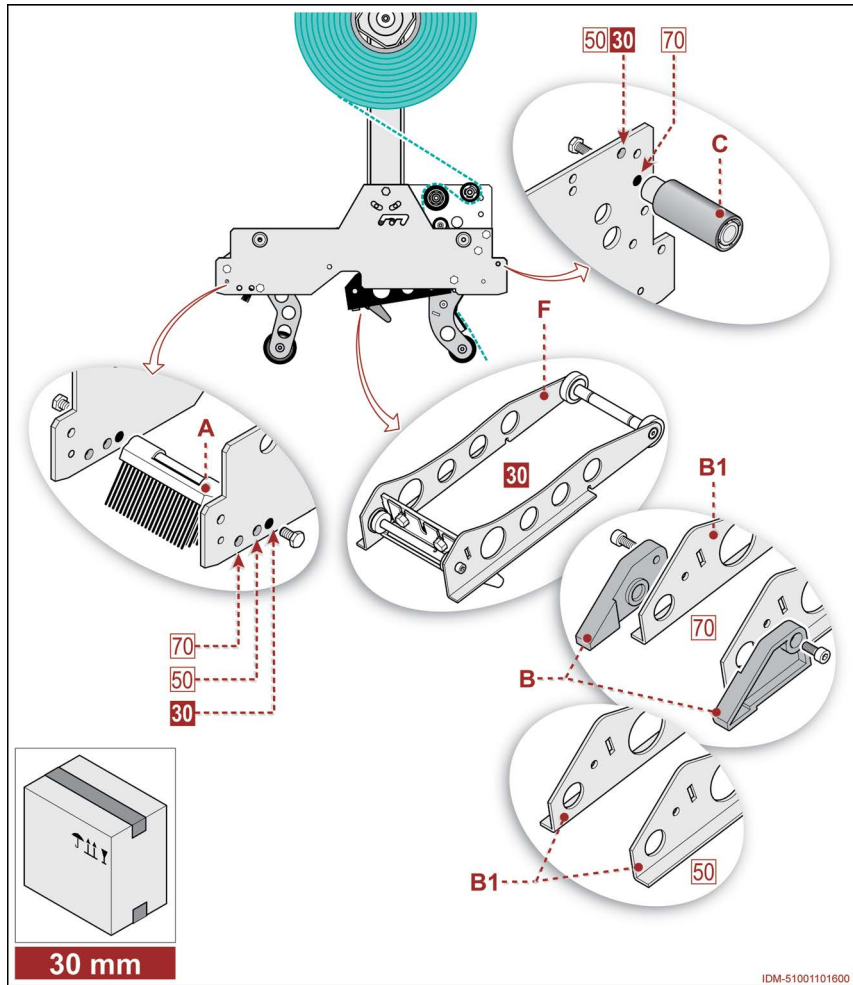
### ■ Lower sealing unit (flap 30 mm)

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



IDM-51001101600

## Replacement of the cutting blade

The figure shows the points of intervention and the description shows the procedures to be adopted.

- The intervention must be carried out with the machine stopped in safety conditions.



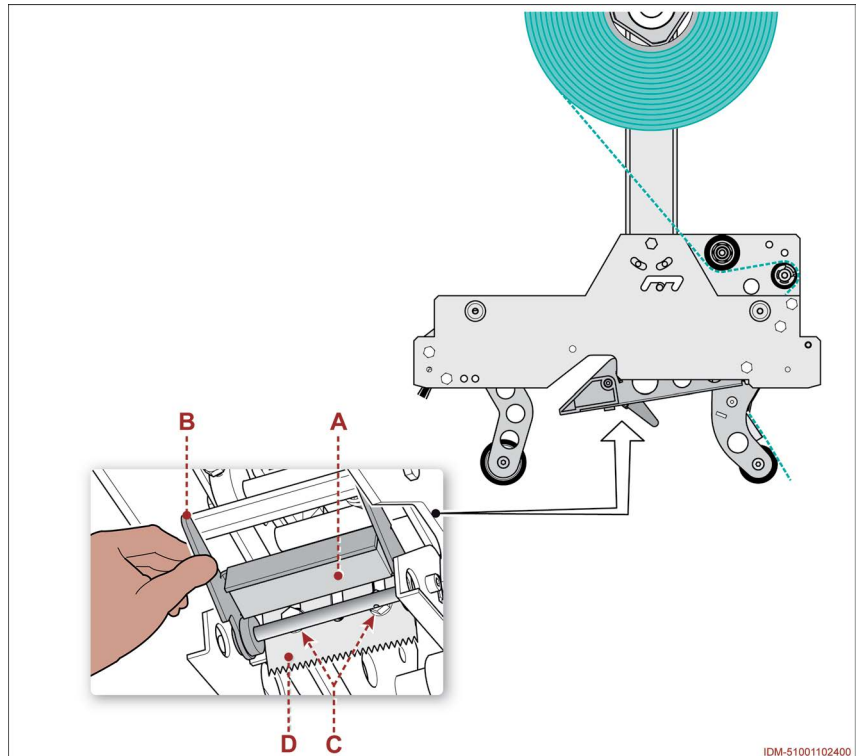
### **Attention Warning**

Always wear the special personal protective equipment (gloves) to avoid the risk of cutting your upper limbs.

1. Lift guard **A** and keep it in position by means of lever **B**.
2. Slightly loosen screws **C**.
3. Extract blade **D**.
4. Install new blade and lock it with screws **C**.

### **NOTE**

Upper sealing unit: sharp edge to the bottom.  
Lower sealing unit: sharp edge to the top.



5. Spread a thin layer of lubricant on blade in order to avoid the accumulation of glue residues.
6. Release lever **(B)**.
  - Guard **(A)** returns to its position.
7. Repeat the operation on the other equal component.



### **Important**

Replace the components **ONLY** with **GENUINE SPARE PARTS** or with other components of equivalent design and functional specifications.



## Description of sealing unit

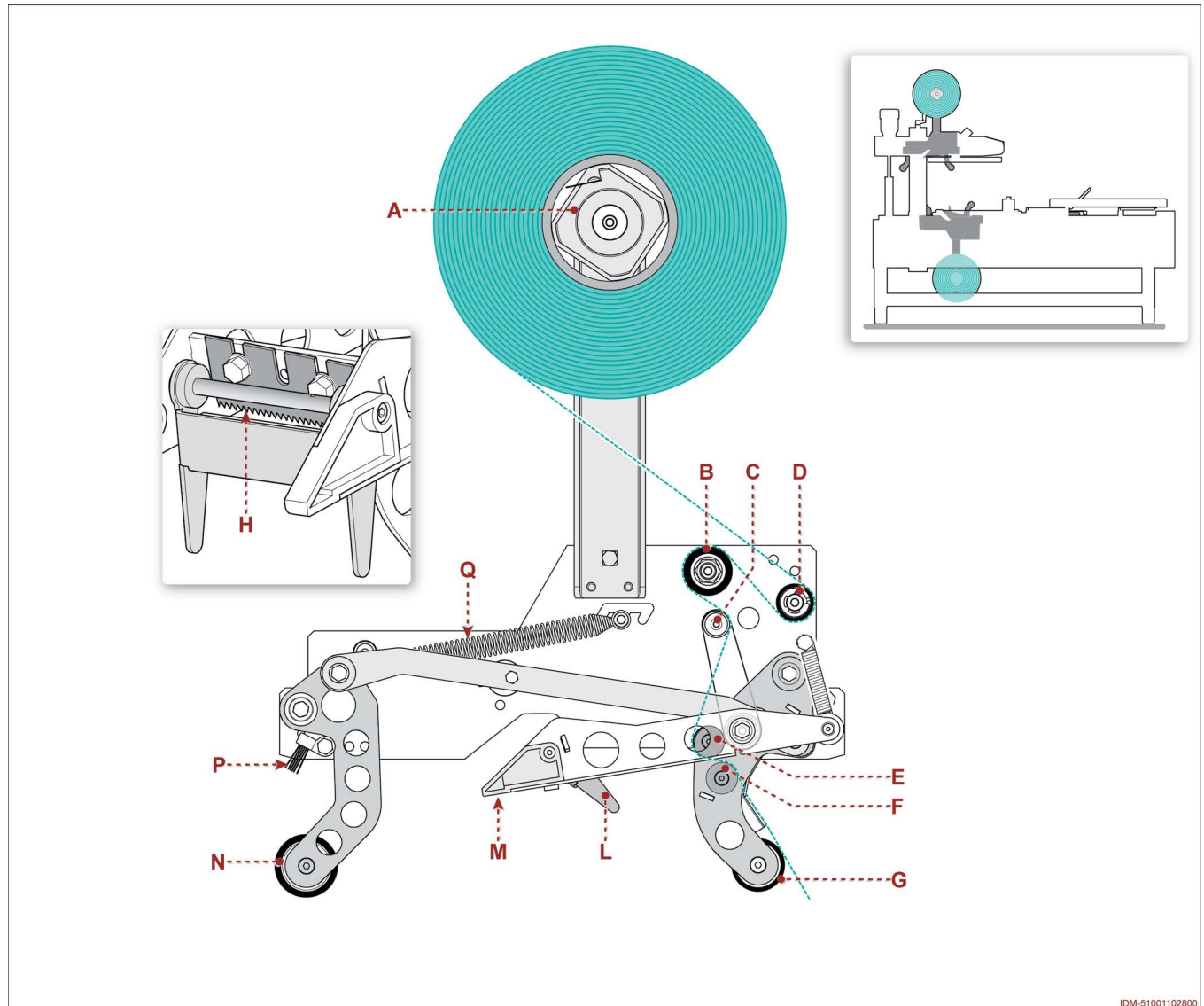
Sealing unit is fitted with an adhesive tape holder that seals the lower and upper part of the cardboard cases and/or cartons.

The K12 R version is specifically for 3" adhesive tape.

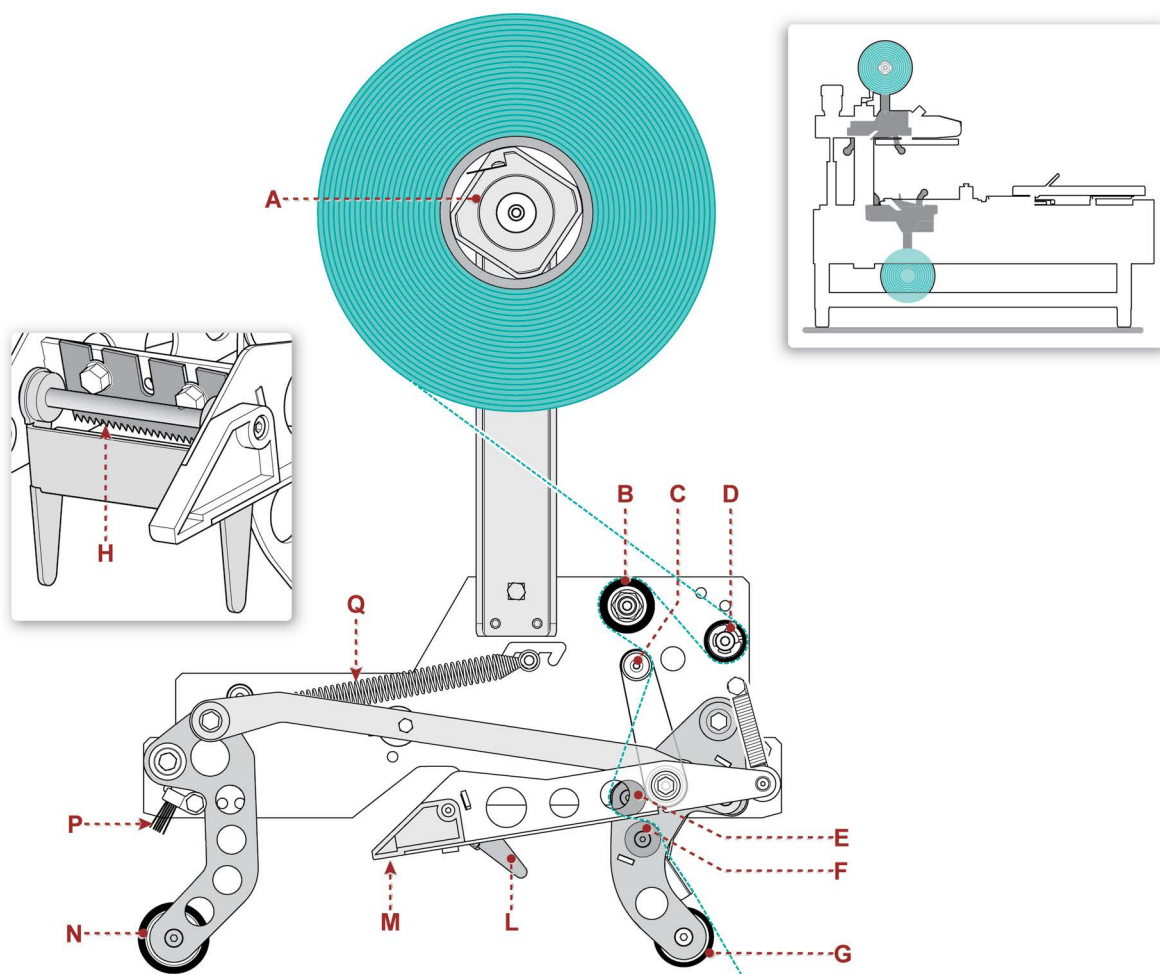
### NOTE

The versions are suitable for use with cut-resistant adhesive tape.

- Each sealing unit is equipped with devices that apply and cut the adhesive tape.
- The illustration shows the main components.



- A) Tape holder
- B) Roller with non-return device
- C) Cutting lever transmission roller
- D) Transmission roller
- E) Idle roller (knurled surface)
- F) Idle roller (smooth surface)



IDM-51001102800

**G) Case inlet roller**

**H) Cutting blade**

**L) Cutting blade protection**

**M) Cut adjustment sliding block**

**N) Case outlet roller**

**P) Adhesive tape roller smoothing brush**

**Q) Roller return spring**

- Tape stretcher is supplied; it is necessary to guide the adhesive tape for the first time.

## Sealing unit technical specifications

Table: Sealing unit technical specifications K12 R

Description	Unit of measurement	K12 R
<b>Sealing unit size</b>		
Length, width, height (LxWxH)	mm	400 x 123 x 480
Weight	kg	6,44
<b>Dimensions of adhesive tape roller</b>		
Flap length (A)	mm	70-50-30 <sup>1)</sup>
Inside Diameter (d)	mm (inch)	76 (3")
Maximum external diameter (D)	mm (inch)	410 (16")
Height (H)	mm (inch)	76 (3")
Type of adhesive tape	PVC - OPP (oriented polypropylene)	

<sup>1)</sup> Sealing unit can be requested for 70 mm or 50 mm flaps.

- For a 30 mm flap, request the components necessary to transform the version with 70 mm or 50 mm flaps.
- For more details, see “Flap length adjustment” heading.



## Supplying and guiding adhesive tape

The intervention must be carried out with the machine stopped in safety conditions.

### ■ Lower sealing unit

1. Lift upper conveyor completely.

**NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
3. Remove the adhesive tape from the sealing unit.
4. Remove the cardboard core.
5. Insert new roller.
6. Apply tape stretcher to the adhesive side of the tape.
7. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
8. Cut the adhesive tape close to tape stretcher.

**NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

9. Insert sealing unit into its original housing.

### ■ Upper sealing unit

10. Remove the adhesive tape from the sealing unit.
11. Remove the cardboard core.
12. Insert new roller.
13. Apply tape stretcher to the adhesive side of the tape.
14. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
15. Cut the adhesive tape close to tape stretcher.

**NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- The figure shows the path of the adhesive tape according to the length of flap.



IDM-51001102200

## Cutting blade cleaning

The figure shows the points of intervention and the description shows the procedures to be adopted.

- The intervention must be carried out with the machine stopped in safety conditions.

### **Attention Warning**

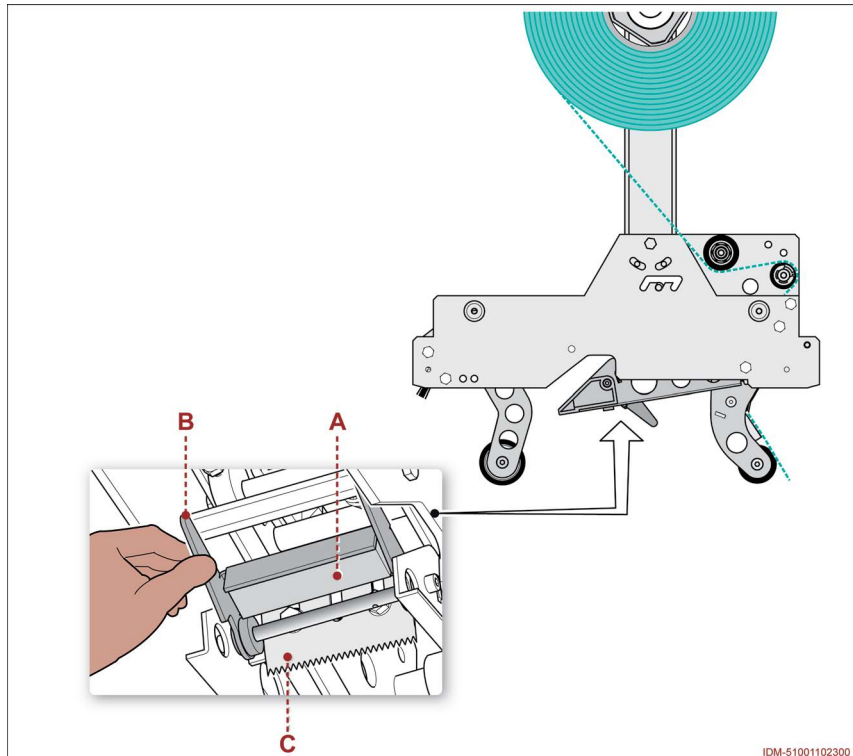
Always wear the special personal protective equipment (gloves) to avoid the risk of cutting your upper limbs.

1. Lift guard **A** and keep it in position by means of lever **B**.
2. Clean blade **(C)** from glue residues.

### **NOTE**

We recommend the using solvent , to remove glue residue.

3. Spread a thin layer of lubricant on blade **C** in order to avoid the accumulation of glue residues.
4. Release lever **(B)**.
  - Guard **(A)** returns to its position.
5. Repeat the operation on the other equal component.



IDM-51001102300

## Adhesive tape parameter check

The figure shows the points of intervention and the description shows the procedures to be adopted.

- This check is necessary to make sure that the adhesive tape is properly applied to the cases.

### ■ Adhesive tape centring check

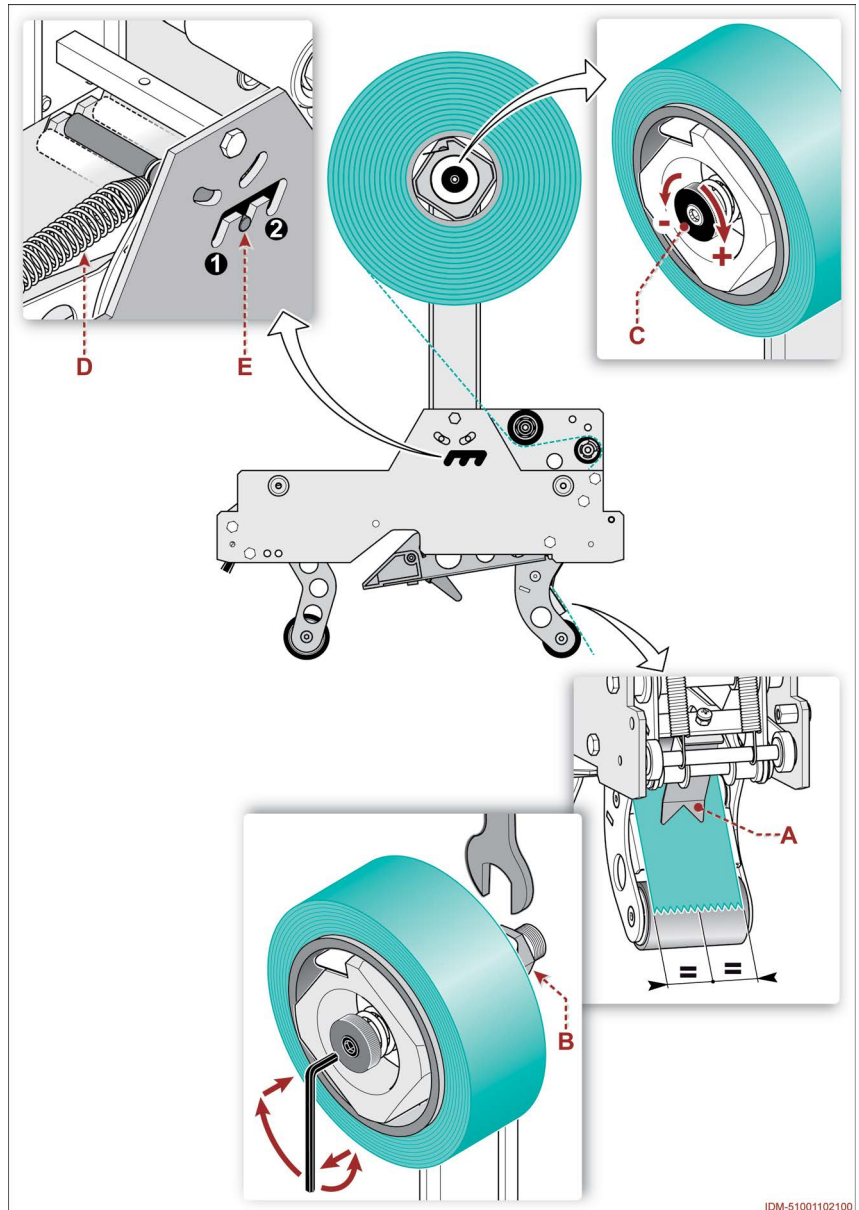
- Make sure that the adhesive tape is centred on device **A**.
- Keep to the following instructions to adjust the centring.
- Insert Allen wrench into roll holder and loosen lock nut **B**.
- Turn Allen wrench with small movements in order to move the roller to the left or to the right.
- Tighten lock nut **B**.

### ■ Adhesive tape tension check

- With PVC adhesive tape, roll holder must not be subject to any friction, but must be able to rotate freely.
- With polypropylene (PP) adhesive tape, roll holder must be subject to a light friction.
- Turn ring **C** to adjust the friction.
  - Clockwise: to friction the roll holder.
  - Counter clockwise: to eliminate the friction of the roll holder.

### ■ Adhesive tape application pressure check

- Reduce the load of spring **D** for scarcely resistant cases and increase it for very resistant cases.
- To reduce the load, insert pin **E** into position **Ē**; to decrease the load, insert the pin into position **Ê**.



IDM-51001102100

## Flap length adjustment

This action is necessary to adjust the length of the adhesive tape flap.

### NOTE

The lower and upper flap can be set with different lengths according to the production requirements.

- The intervention must be carried out with the machine stopped in safety conditions.

### ■ Upper sealing unit (flap 70 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-B-C** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

### NOTE

The part of exceeding adhesive tape must not be lower than the flap length.

- Remove components 50 mm in order to obtain a 50 mm flap.
- To obtain a 30 mm flap, request component E and replace to the one installed.

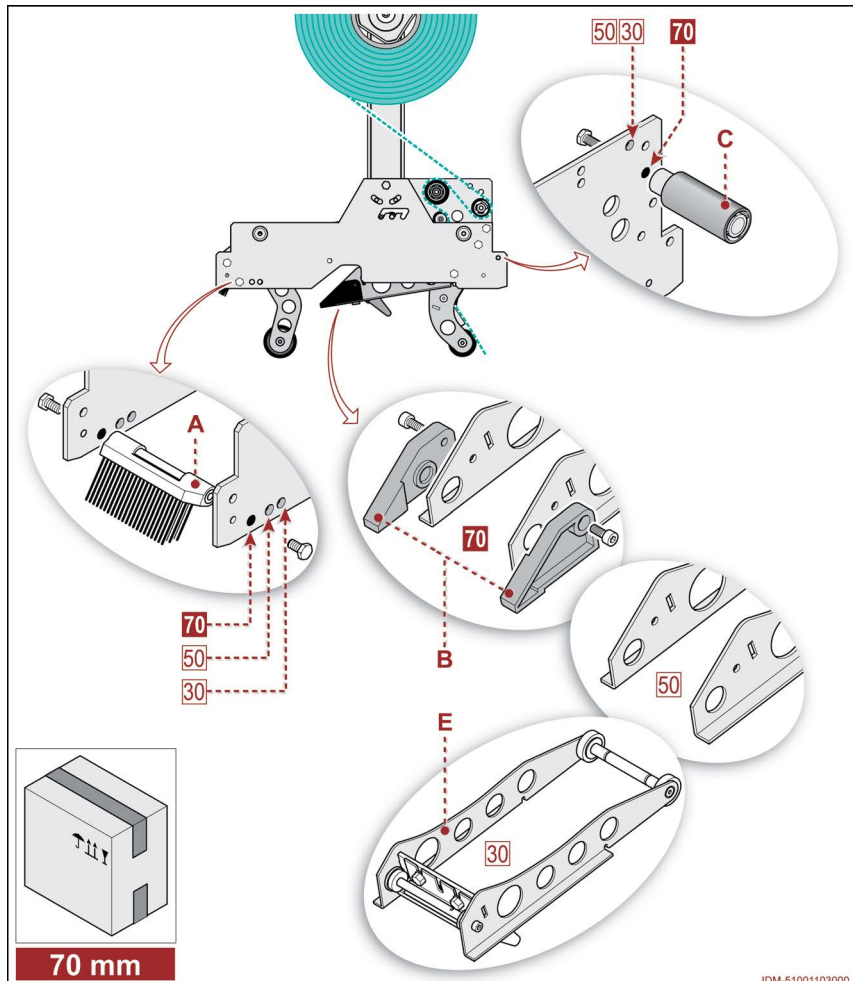
### ■ Lower sealing unit (flap 70 mm)

1. Lift upper conveyor completely.

### NOTE

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



IDM-51001103000



### ■ Upper sealing unit (flap 50 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-C** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- Request components **B** in order to obtain a 70 mm flap.
- To obtain a 30 mm flap, request component **D** and replace to the one installed.

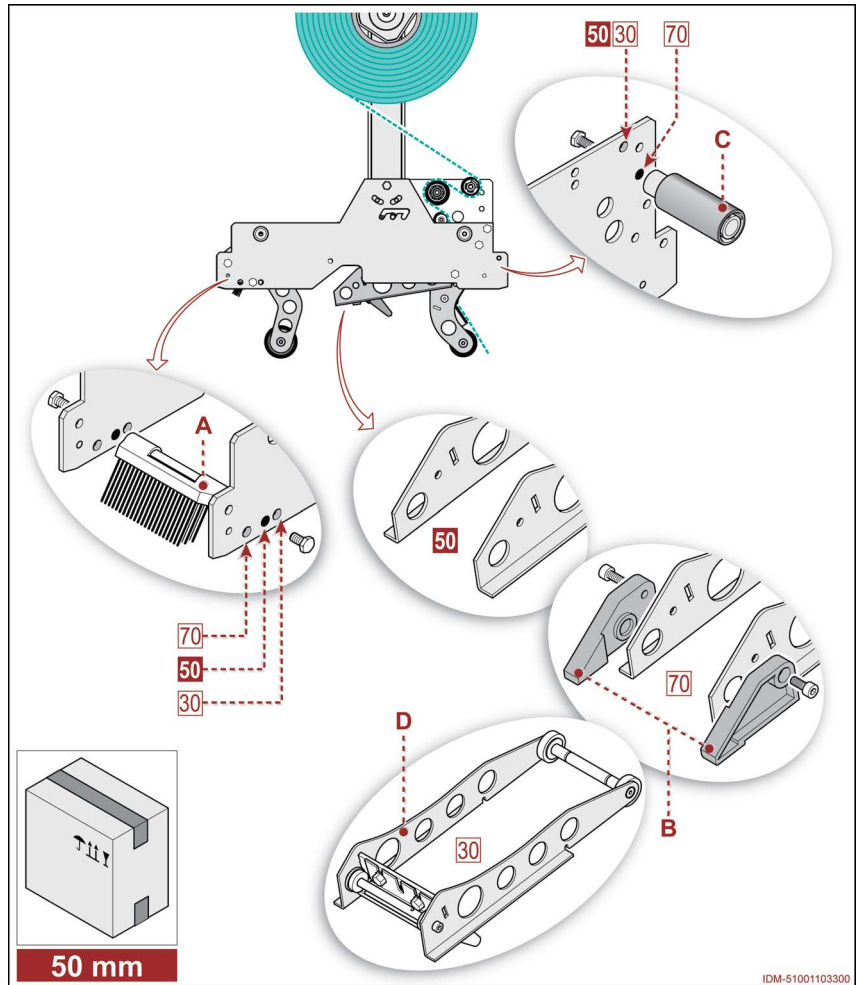
### ■ Lower sealing unit (flap 50 mm)

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.





### ■ Upper sealing unit (flap 30 mm)

1. Remove the adhesive tape from the sealing unit.
2. Components **A-C-F** must be installed as shown in the figure.
3. Apply tape stretcher to the adhesive side of the tape.
4. Guide tape stretcher until the tape stretcher is beyond the point of tangency of case inlet roller.
5. Cut the adhesive tape close to tape stretcher.

#### **NOTE**

The part of exceeding adhesive tape must not be lower than the flap length.

- Request components **B-B1** in order to obtain a 70 mm flap.
- Request components **B1** in order to obtain a 50 mm flap.

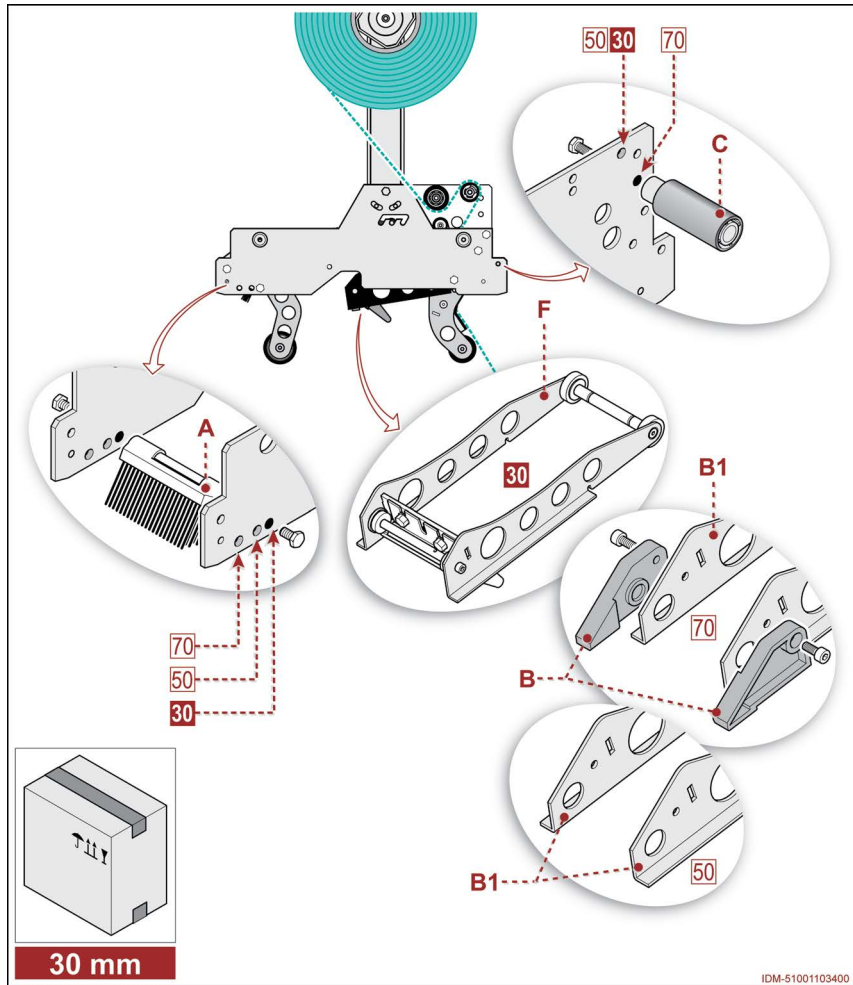
### ■ Lower sealing unit (flap 30 mm)

1. Lift upper conveyor completely.

#### **NOTE**

This operation is necessary to assist the operations.

2. Remove lower sealing unit
  - Repeat the operation according to the procedure described for upper sealing unit.
3. Insert sealing unit into its original housing.



## Replacement of the cutting blade

The figure shows the points of intervention and the description shows the procedures to be adopted.

- The intervention must be carried out with the machine stopped in safety conditions.



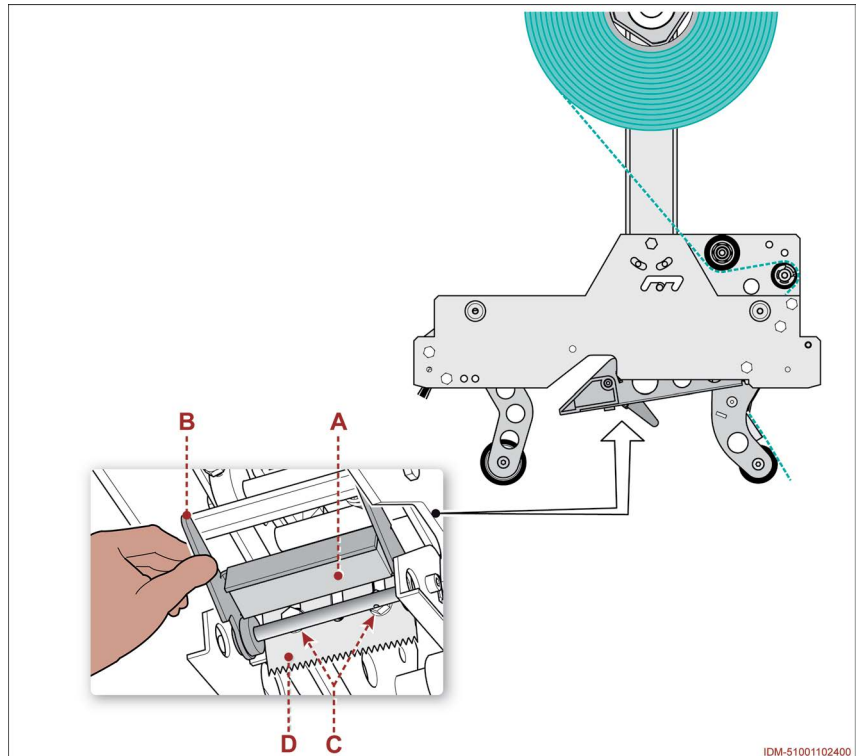
### **Attention Warning**

Always wear the special personal protective equipment (gloves) to avoid the risk of cutting your upper limbs.

1. Lift guard **A** and keep it in position by means of lever **B**.
2. Slightly loosen screws **C**.
3. Extract blade **D**.
4. Install new blade and lock it with screws **C**.

### **NOTE**

Upper sealing unit: sharp edge to the bottom.  
Lower sealing unit: sharp edge to the top.



5. Spread a thin layer of lubricant on blade in order to avoid the accumulation of glue residues.
6. Release lever **(B)**.
  - Guard **(A)** returns to its position.
7. Repeat the operation on the other equal component.



### **Important**

Replace the components **ONLY** with **GENUINE SPARE PARTS** or with other components of equivalent design and functional specifications.



## Analytical index

### A

- Adhesive tape parameter check, 51, 63, 75, 87
- Adjusting the drive chain for the centring guide, 32
- Attached documentation, 5

### C

- Cleaning and replacement of the air filter, 33
- Control description, 22
- Cutting blade cleaning, 50, 62, 74, 86

### D

- Description of optional devices, 17
- Description of outer areas, 19
- Description of sealing unit, 45, 57, 69, 81
- Description of the main components, 14
- Description of the safety devices, 17
- Diagram of the points of lubrication, 29

### E

- Emergency stop and new start-up, 24

### F

- Fitting the set of wheels for feet (AS77), 42
- Flap length adjustment, 52, 64, 76, 88
  - *Lower sealing unit (flap 30 mm)*, 54, 66, 78, 90
  - *Lower sealing unit (flap 50 mm)*, 53, 65, 77, 89
  - *Lower sealing unit (flap 70 mm)*, 52, 64, 76, 88
  - *Upper sealing unit (flap 30 mm)*, 54, 66, 78, 90
  - *Upper sealing unit (flap 50 mm)*, 53, 65, 77, 89
  - *Upper sealing unit (flap 70 mm)*, 52, 64, 76, 88

### G

- General description of the machine, 13
- General safety warnings, 5
- Glossary of the terms, 4

### L

- Lower conveyor belt adjustment, 34
- Lower conveyor belt replacement, 36
- Lubricant table, 30

### M

- Machine Disposal and Scrapping, 44
- Manufacturer and machine identification, 16

### P

- Position of information and safety plates, 20
- Preparing the machine for use, 25
  - *Setting up the pressure of the centring guide bars*, 25
  - *Setting up the pressure of the upper conveyor*, 25
  - *Setting up the upper conveyor limit switch*, 26
- Problems, causes, remedies, 30
- Purpose of the manual, 3

### R

- Recommendations for maintenance interventions, 27
- Recommendations on Operation and Use, 21
- Replacement of the cutting blade, 55, 67, 79, 91
- Replacement of upper conveyor belts, 38
- Replacing the Set of 600 mm high legs (AS80), 40
- Residual risks, 16

### S

- Safety and information symbols, 11
- Safety Warnings for Handling and Installation, 6
- Safety Warnings for Maintenance and Adjustments, 9
  - *Safety Manager Obligations*, 7
- Safety warnings for the electrical equipment, 10
- Safety warnings for the environmental impact, 10
- Safety Warnings on Misuse, 8
- Safety Warnings on Residual Risks, 8
- Scheduled maintenance intervals, 28
- Sealing unit technical specifications, 47, 59, 71, 83
- Specifications, 18
- Speed adjustment of centring guide, 31
- Start and stop, 23
- Supplying and guiding adhesive tape, 48, 60, 72, 84

### U

- Upper conveyor belt adjustment, 35

