SIAT

M. J. MAILLIS GROUP

SAFETY

IT Avvertenze di sicurezza
EN Safety information
FR Informations de sécurité
ES Advertencias de seguridad
DE Sicherheitshinweise
CS Bezpečnostní předpisy
PL Zalecenia bezpieczeństwa
SK Bezpečnostné upozornenia
HU Biztonsági figyelmeztetések

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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, pets, 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 concen-

tration 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.
– Replace the components (with the exception of safety components) with original parts or components having identical design and functional characteristics.
– 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:** danger signal indicating the risk of projected material in the event of excessive operation speed or workbench 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.

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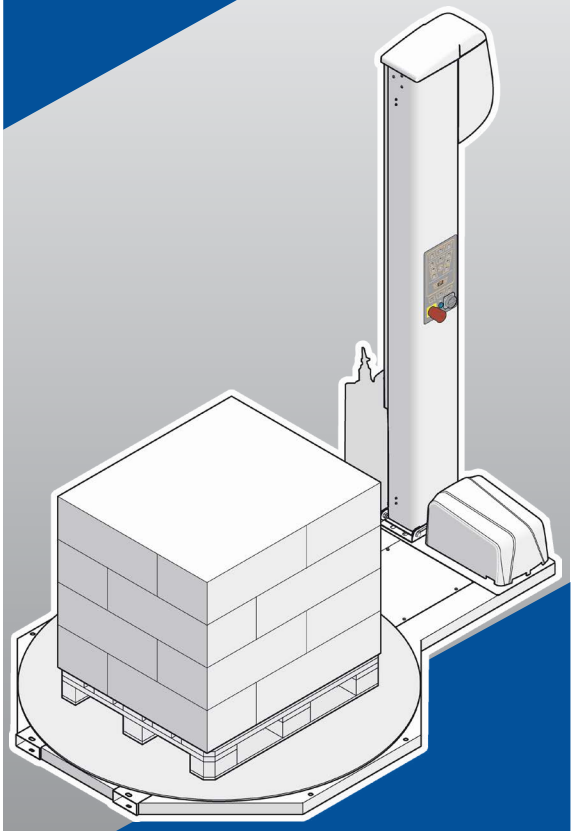
Semi-automatic pallet wrapper



OneWrap

Operation and maintenance manual

Translation of the "ORIGINAL INSTRUCTIONS"

https://goo.gl/7tfp0v

Code **SBC00031119**

English language

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Summary

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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.
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IDM 510-004-1

Glossary of the terms

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- **Training:** A process aiming at transferring the knowledge, skills and behaviours required to work in an autonomous, correct and hazard-free manner.
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- **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.
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- **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.
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- **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

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- Installation manual
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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.
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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.

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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.
- Replace the components (with the exception of safety components) with original parts or components having identical design and functional characteristics.
- 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:** danger signal indicating the risk of projected material in the event of excessive operation speed or workbench 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.

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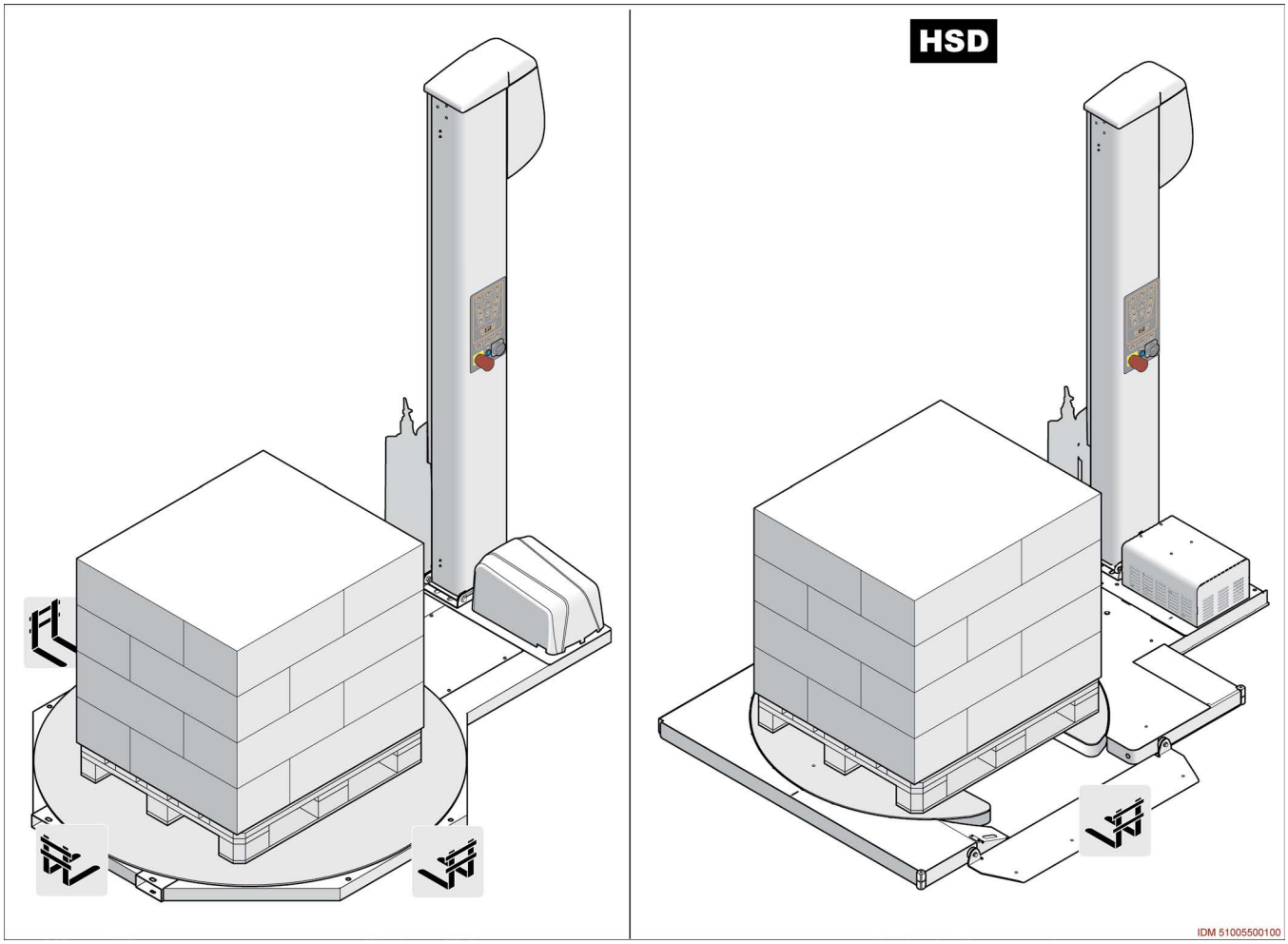
General description of the machine



- The semiautomatic wrapping machine series **"OneWrap"** is a machine designed and built to stabilise palletised products with stretch film.
- In the standard version, the product to be wrapped must always be on a pallet, while in version **HSD** it can also be without a pallet.
- The products to be wrapped must be contained in packages (cases, containers for liquids, etc.) having a regular shape or in any case, such as to allow for stable palletising.
- The containers of liquids or fluids should be hermetically sealed and with suitable characteristics to avoid spilling any content.
- To wrap loads, commercially available reels of stretch film are used.
- The products to be wrapped must ALWAYS be positioned in the middle of the rotating platform, in order to allow safe and proper wrapping.
- To avoid collision risks, the products must NOT protrude from the rotating platform.
- Product loading and unloading should be carried out by using fork-lift equipment of suitable capacity, with an operator working from ground level.
- Loading should ONLY be carried out from the orthogonal sides of the support base (see figure).
- The machine has been designed, built and equipped by applying integrated safety principles.

– 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 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.

Description of the main components

A) Rotating platform: area on which to load the pallet to be wrapped.

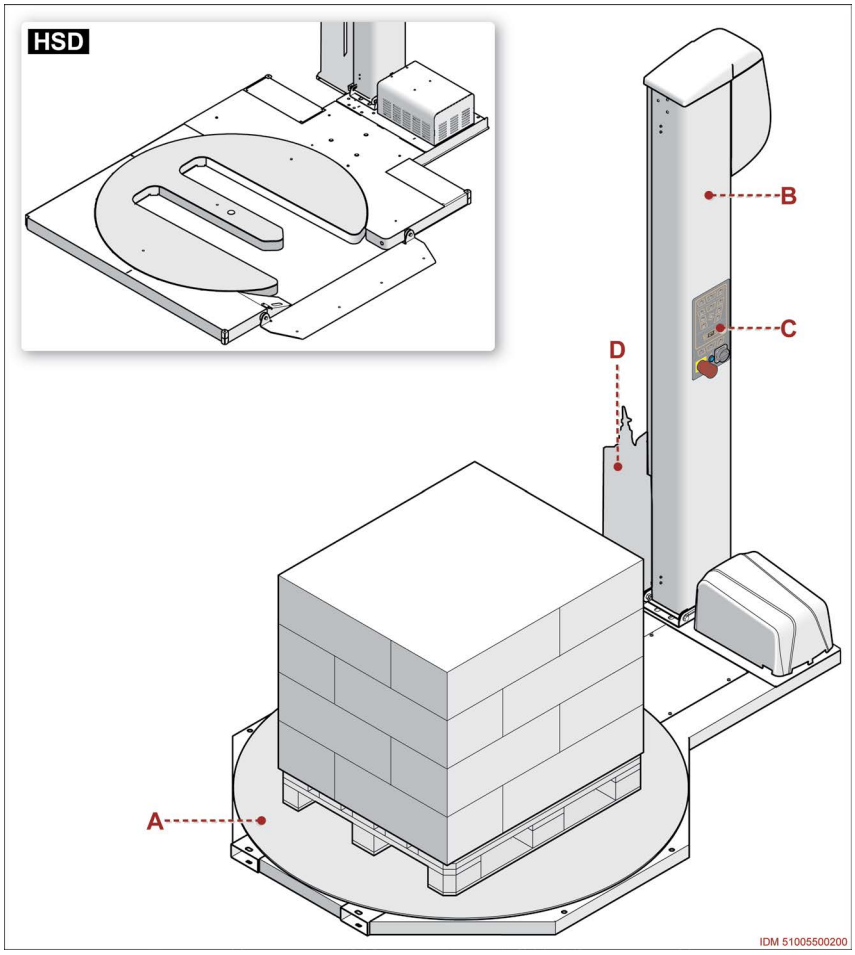
– The rotating platform is driven by a gear-motor with a chain drive.

B) Slide column: for the vertical handling of the reel carriage **D**.

C) Control panel: it contains the devices to start and control all the operation functions.

D) Reel holding carriage

– According to production requirements, in the ordering phase the machine can be equipped with one of the listed carriages.
– **Reel holder carriage (type EM):** suitable for wrapping with manual adjustment of the film tension by means of the special control installed on the roller.
– **Reel holder carriage (type M):** suitable for wrapping with manual adjustment of the film tension by means of the ring of the mechanical clutch.



– **Reel holder carriage (type FM):** suitable for wrapping with adjustment of the film tension by means of the special potentiometer.
– **Reel holder carriage (type SM):** suitable for wrapping with film prestretch adjustment by changing the gear transmission ratio.
– **Reel holder carriage (type LP):** suitable for wrapping with motor-driven film prestretch and electronic tension adjustment by means of the special potentiometer.
– **Net-type reel holder carriage:** suitable for wrapping with manual tension adjustment by means of the ring of the mechanical clutch.

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

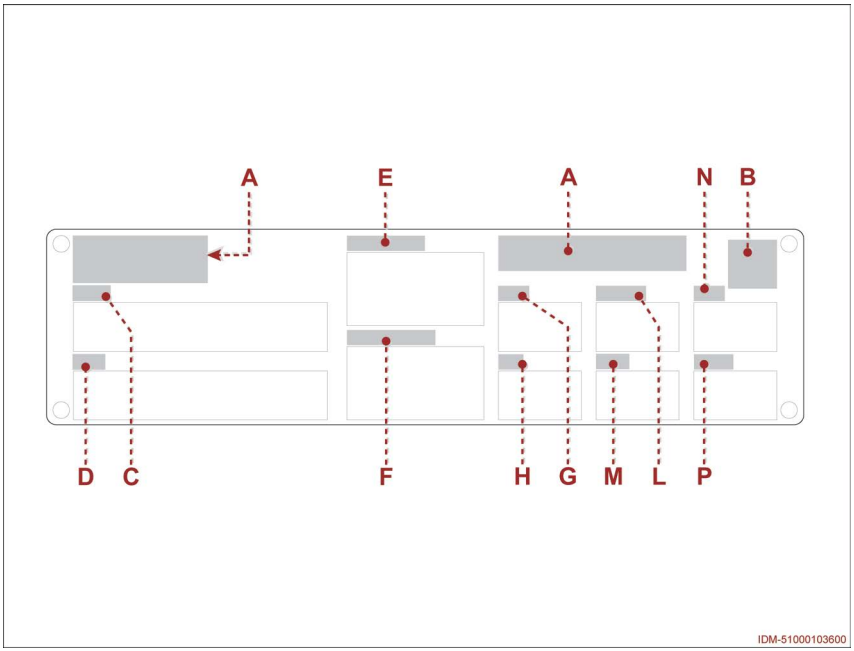
H) Power supply voltage

L) Electrical power consumption

M) Power supply frequency

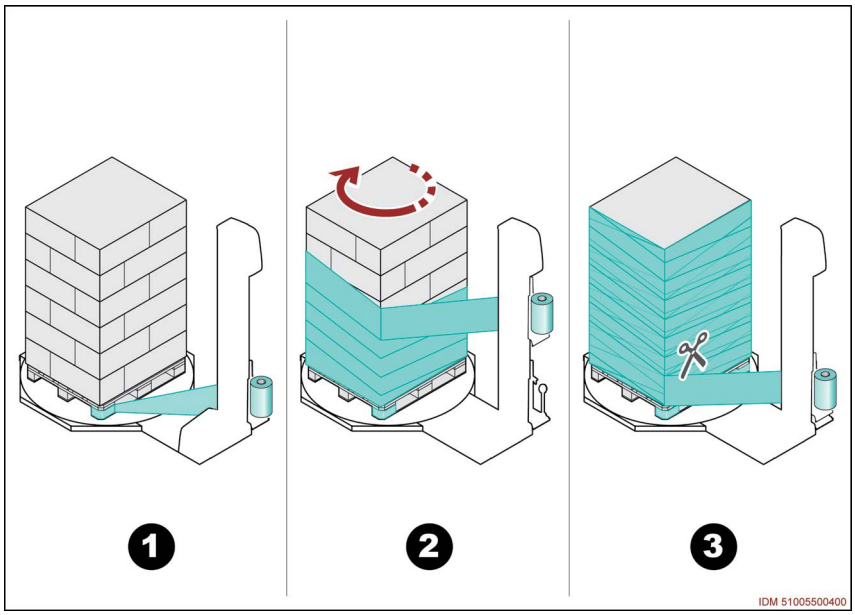
N) Absorbed power

P) Power supply phases



Cycle

The figure shows the operating cycle with a short description and the (single and double) wrapping modes.



Stage 1

– Correctly load the new product to be wrapped in the middle of rotating platform.

– Tie the trailing end of the film to the base of the product to be wrapped.

Stage 2

– Set up the (manual or automatic) wrapping cycle.

– **Manual wrapping:** start the platform and keep the special control pressed to start the wrapping process.
Release control when wrapping has reached the desired height.

– **Automatic wrapping:** set up the desired parameters and press the special control to start the cycle.

Stage 3

– Manually cut the film and cause it to adhere to the wrapped product.

– Remove the wrapped product to be able to load the next one to wrap.

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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.
- **Risk of projection of objects:** during operation there may be a risk linked with wrapping product stability characteristics in the event of excessive operation speed.
- The operator must adjust the wrapping speed according to the product features and during operation he/she shall not halt near the machine.
- **Risk of slipping:** do not climb onto or approach the platform during operation.
- Do not climb on the platform using the lifting equipment during operation.
- **Risk of body part crushing:** do not stand near and/or approach the area between the column and the product to be wrapped during operation.
- **Risk of crushing upper limbs:** do not introduce or place upper limbs in/next to any machine moving parts during operation.
- **Risk of crushing or shearing lower limbs:** keep lower limbs away from the platform during operation (fork inserting points version HSD).

Optional Accessories

Some accessories designed to improve the performance and versatility of the machine are available from the manufacturer. This list contains a description of the main ones.

- **Ramp:** it makes product loading and unloading easier when a pallet truck driven by a ground-level operator is used.
- **Lifting frame:** structure under the support base to carry out pallet loading and unloading using a “stacker”-type pallet truck.
- **Burying frame:** structure used to bury the support base of the machine.
- **Weighing Unit:** device used to weigh the palletised product located on the rotating platform.
- **Lifting disc:** device to increase the height of the rotating platform **HSD** above the floor.
- **External guard:** safety system (guards and control devices) that prevents access to the wrapping area.
- When an access to the area is detected, the monitoring devices control machine operation stop in safe conditions.
- **Heating set for control panel:** device needed when the machine has to be used in low-temperature environments.

Description of the safety devices

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

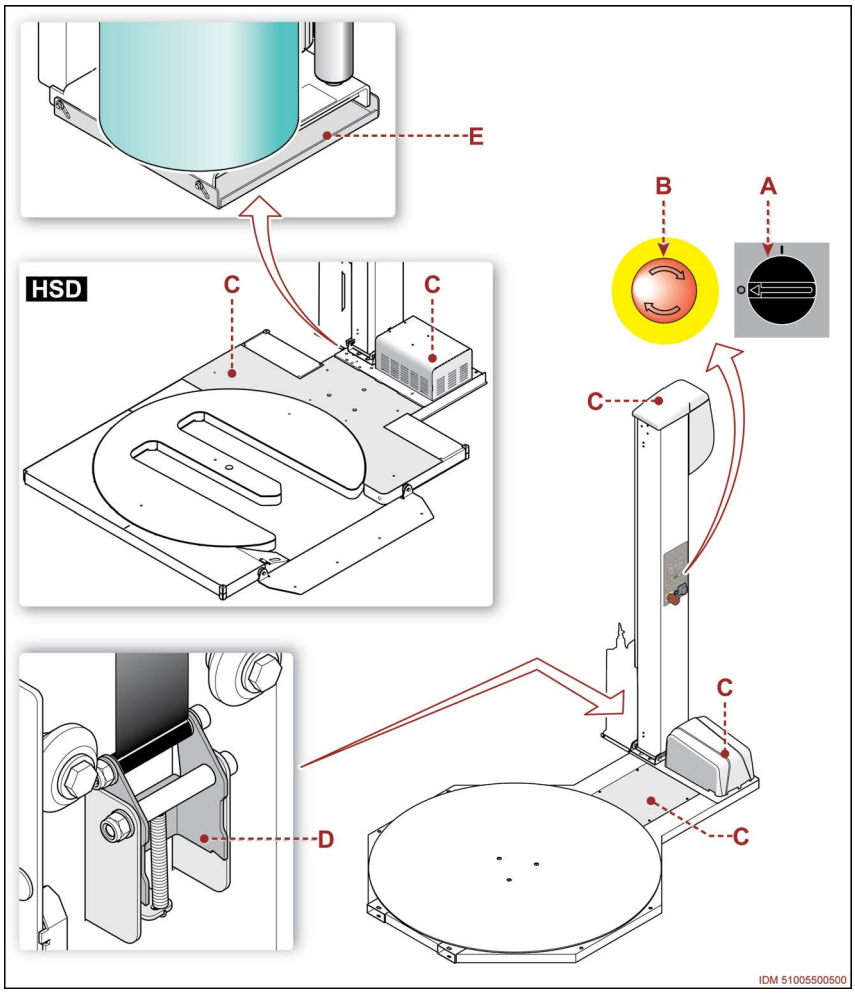
A) Isolator switch: safety control to disconnect electric power supply.

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

C) Fixed guards: safety devices preventing access to parts the operation of which could imply safety risks.

D) Fall arrest system: safety device that prevents the risk of a fall of the carriage in the event of lifting strap breaking.

E) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.



Specifications

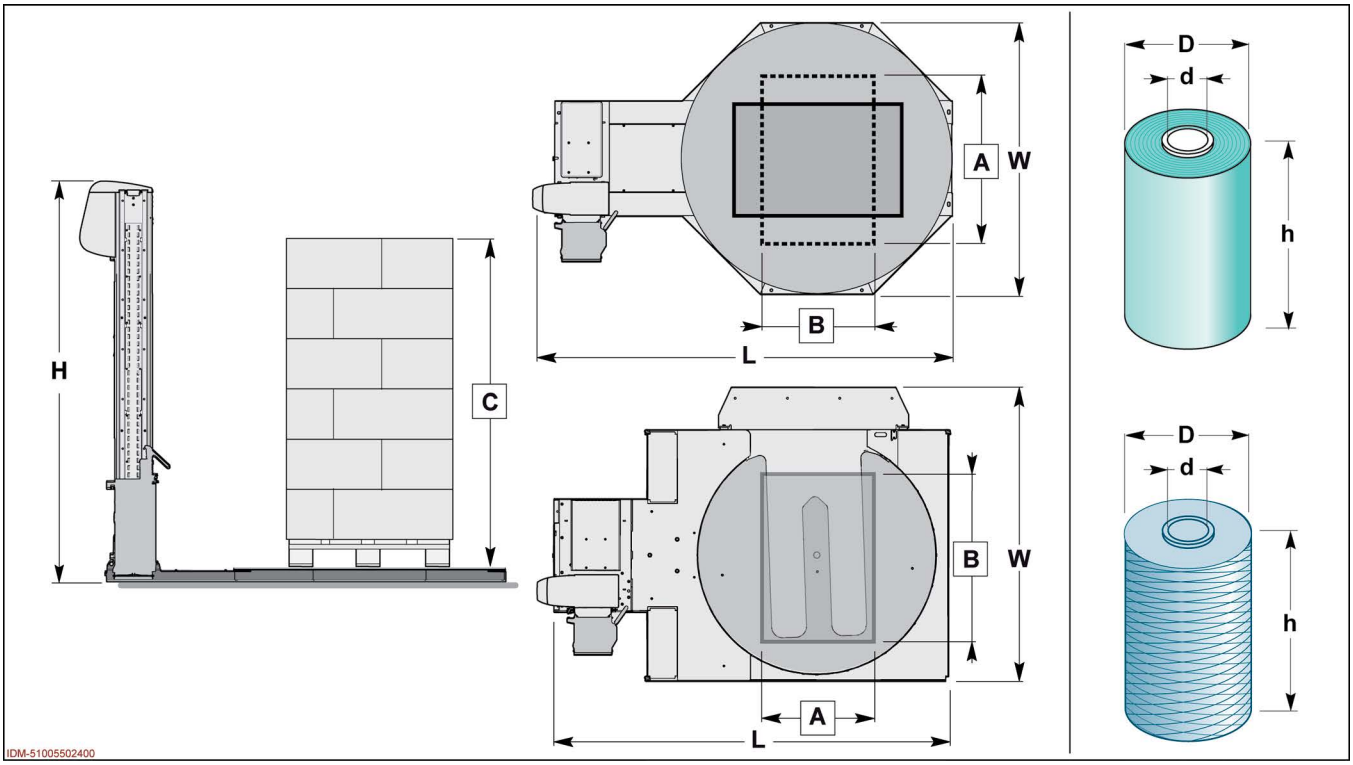


Table: Technical data of the machine

Electric supply				
The power supply specifications are those shown in the identification plate applied to the machine.				
Dimensions and weights (Standard version)				
Maximum size of the pallet AxBxC (mm)	Max weight of the pallet (kg)	Diameter of the platform (mm)	Dimensions of the machine LxWxH (mm)	Max weight of the machine (kg)
800x1200x2100	2400	1500	2440x1500x2422	400
1000x1200x2100	2400	1650	2440x1650x2422	440
1200x1200x2100	2400	1800	2440x1800x2422	480
1550x1550x2100	2400	2200	3140x2200x2422	620
800x1200x2400	2400	1500	2440x1500x2722	410
1000x1200x2400	2400	1650	2440x1650x2722	450
1200x1200x2400	2400	1800	2440x1800x2722	490
1550x1550x2400	2400	2200	3140x2200x2722	620
Height above ground of the platform 74 mm				
Dimensions and weights (version HSD)				
800x1200x2100	1200	1500	2578x1583x2438	615
800x1200x2400	1200	1500	2578x1583x2738	620
Height above ground of the platform 84 mm				
OPERATING PROPERTIES				
Rotation speed of the platform	rpm	6÷12		
Maximum level of noise	dBa	72.0		
Dimensions of film reel				
Maximum external diameter **D**	mm	250 mm		
Inside Diameter **d**	mm	75		
Maximum height **h**	mm	500		
Film thickness	µm	17÷23		
Max Weight	kg	17		

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Net reel dimensions		
Maximum external diameter **D**	mm	250 mm
Inside Diameter **d**	mm	75
Maximum height **h**	mm	500 mm
Max Weight	kg	17
Environmental conditions		
Maximum operating height (asl)	m	1000
Relative humidity (detected at a temperature included between 20°C and 40°C)	-	50%
Ambient functioning temperature	°C	+5 ÷ 40
Environmental brightness	LUX	600

Description of outer areas

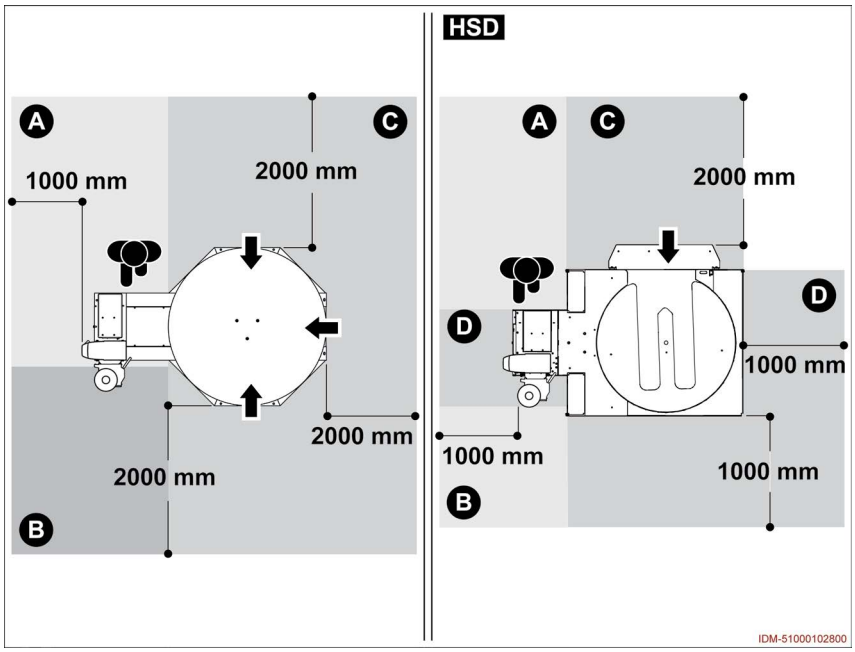
The figure shows different areas to be considered in the planning of the installation area.

A) Operator control and standing area

B) Refill area for reel

C) Loading/unloading area for pallets

D) Perimeter area



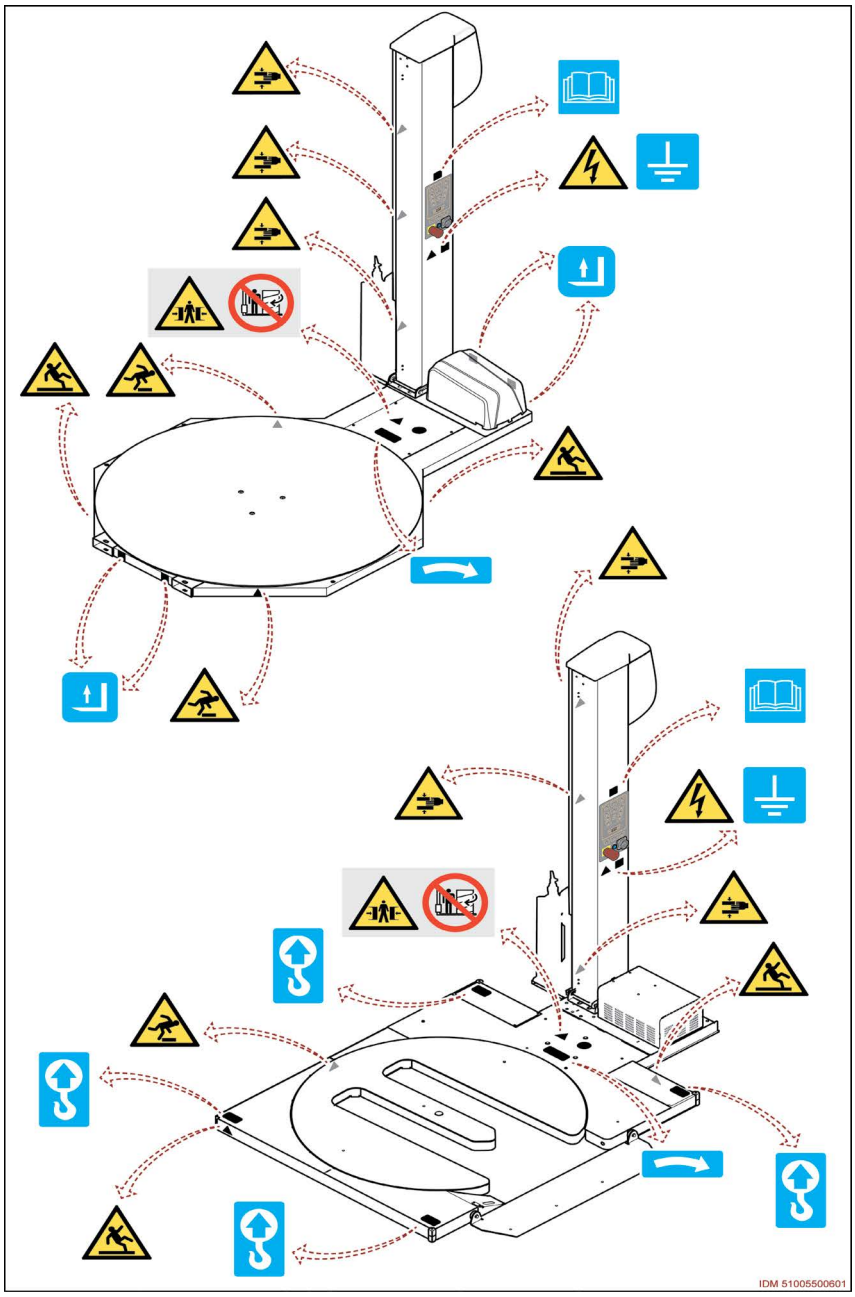
Position of information and safety plates

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

– Please keep safety signs and information legible and follow the instructions.

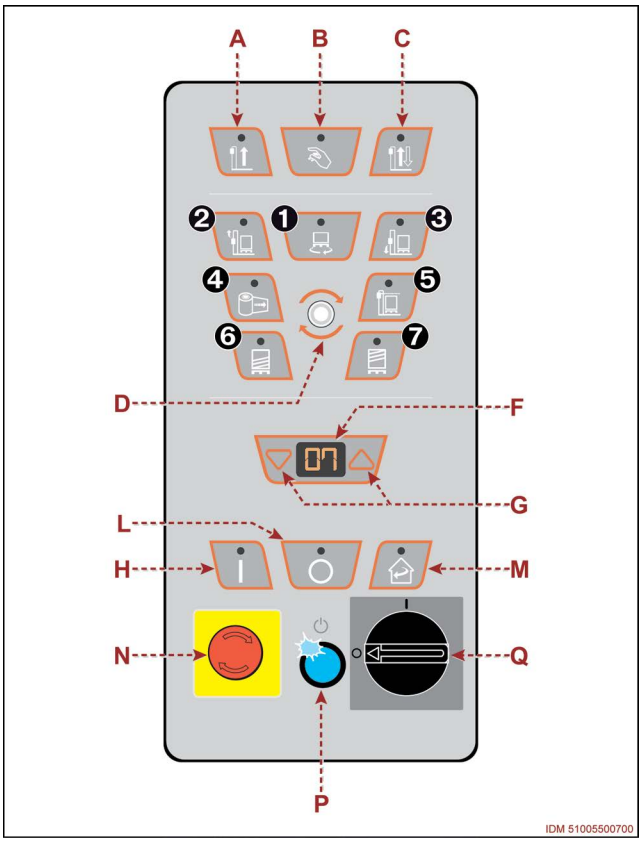
– Signals which are no longer legible must be replaced and repositioned in the same place of origin.

– For more details on the signs used, refer to the section on “Safety signs and information”.



Control description

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



A) Button: control that enables single automatic wrapping (rise of the reel holder carriage).

– **Single automatic wrapping without sheet feeder:** press control once (LED with solid light).

– **Single automatic wrapping with sheet feeder:** press control twice (blinking LED).

B) Button: control that enables manual wrapping.

C) Button: control that enables double automatic wrapping (rise and descent of the reel holder carriage).

– **Double automatic wrapping without sheet feeder:** press control once (LED with solid light).

– **Double automatic wrapping with sheet feeder:** press control twice (blinking LED).

D) Button: control that enables recipe selection and that selects the wrapping parameter to be programmed.

– **Recipe enabling:** press control and keep it pressed (about 5 seconds).

– **Parameter selection:** press control repeatedly and release it when the LED corresponding to the icon to be programmed turns on.

- ❶ **- Platform rotation:** programming of the speed of rotation of platform.
- The number shown on display **F** refers to a value scale from 0 to 10.
- ❷ **- Carriage speed:** programming of the rise speed.
- The number shown on display **F** refers to a value scale from 0 to 10.
- ❸ **- Carriage speed:** programming of the descent speed.
- The number shown on display **F** refers to a value scale from 0 to 10.
- ❹ **- Film tension:** programming of film tension.
- The number shown on display **F** refers to a value scale from 0 to 10.
- ❺ **- Photocell delay**

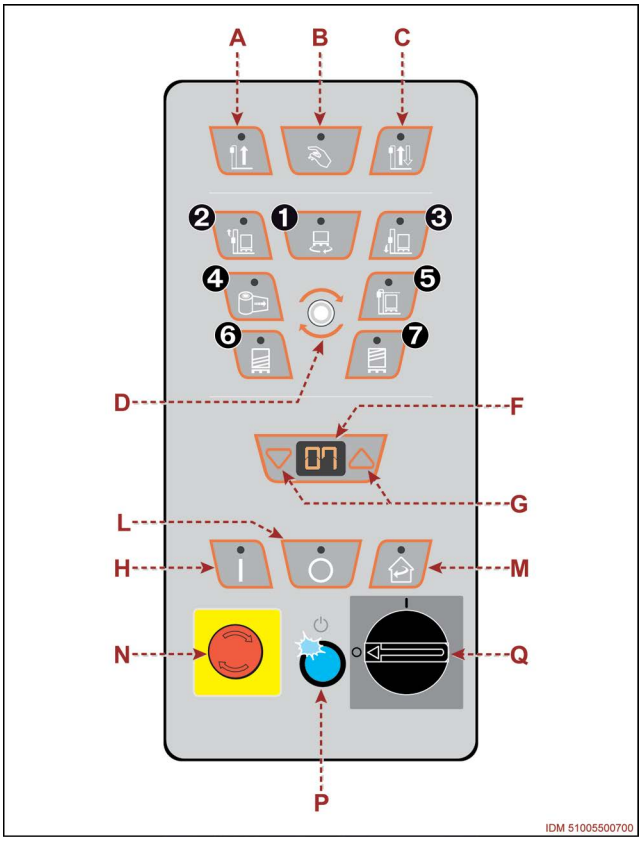
  LED on with solid light: programming of the interval (in seconds) between the detection of the pallet end and the stop of reel holder carriage.

  Blinking LED: programming of the descent (in seconds) of the reel holder carriage in order to allow the insertion of the protection sheet.
- ❻ **- Lower wrapping:** programming of the amount of wrappings for the lower reinforcing band.
- The number shown on display **F** refers to the amount of revolutions to be performed for the reinforcing wrappings.
- ❼ **- Upper wrapping:** programming of the amount of wrappings for the upper reinforcing band.
- The number shown on display **F** refers to the amount of revolutions to be performed for the reinforcing wrappings.

F) Digital display: it displays different functions (selected parameters, active alarm, selected recipe, etc.).

G) Keys: controls that increase or reduce the value shown in the display **F**.

– In manual mode (control **B** pressed), buttons **G** are used to activate (rise-descent) reel holder carriage.



H) Start button: control that carries out the listed functions.

– **Automatic wrapping:** by activating one of buttons **A-C**, control **H** starts the cycle in automatic mode (rise or descent).

– **Manual platform rotation:** by activating button **B**, control **H** starts the rotation of platform.

L) Cycle stop button: control that carries out the listed functions.

– **Automatic wrapping:** by activating one of buttons **A-C**, control **L** stops the cycle in automatic mode (rise or descent).

– **Manual platform rotation:** by activating button **B**, control **L** stops the rotation of platform.

M) Button: control that times the operating units and starts automatic wrapping.

N) 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.

P) Illuminated button (blue light): control designed to activate electric power supply.

– Control enabled only with isolator switch **Q** in position “ON”.

– Blue light on: power on supply line.

– Blue light off: activated power supply line.

Q) Isolator switch: safety control to disconnect power supply.
- “OFF” position: function deactivated.
- “ON” position: function activated.

– Control can be padlocked in order to avoid operations by non-authorised personnel.

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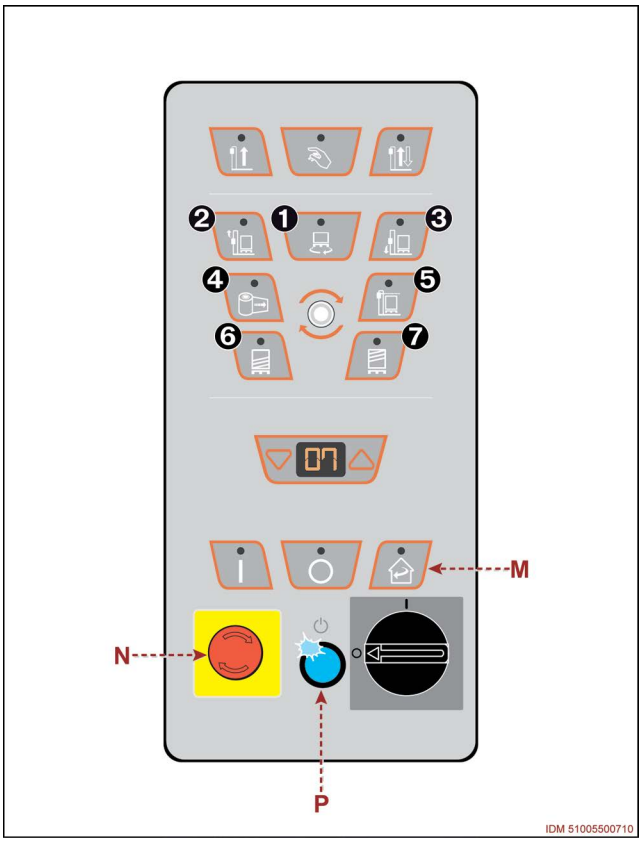
Emergency stop and new start-up

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



– In the presence of an imminent risk press the emergency stop button **N**.
– All moving devices immediately stop.
– The pilot light of button **P** turns on.
– Identify the causes that have caused the stop.
– Restore normal running conditions

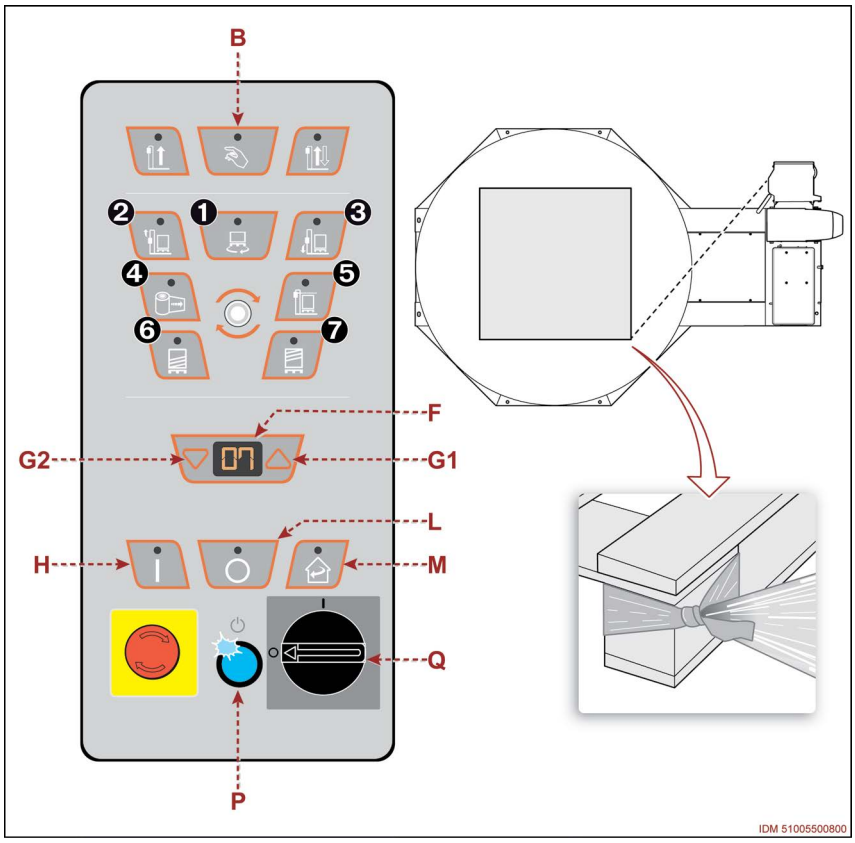
Important

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

– Manually cut the film and cause it to adhere to the wrapped product.
– Unlock the emergency stop button with a voluntary action.
– Press the push-button **P**.
– The pilot light of button **P** turns off.
– Press key **M**.
– Wait for the units to synch and become automatically timed.
– Tie the trailing end of the film to the base of the product to be wrapped.
– Start the wrapping process.

Manual wrapping

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



1. Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.

– If film characteristics appear to be different, consider whether you should adjust the film tension.

2. Rotate main disconnector **Q** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **P** turns on.

3. Press the push-button **P**.

– The pilot light of button **P** turns off.

4. Press key **M**.

5. Wait for the units to synch and become automatically timed.

6. Correctly load the new product to be wrapped in the middle of rotating platform.

Important

Remove the lifting device.

7. Tie the trailing end of the film to the base of the product to be wrapped.

8. Press key **B**.

9. Programme the speed of rotation of rotating platform by means of control ❶.

– The rotation speed must be adapted to the characteristics of the product (product type, stability of the pallet).

10. Programme the speed of rotation of reel holder carriage by means of controls ❷ - ❸.

11. Adjust the film tension according to the product to be wrapped.
See "Tension adjustment of film" for further details.

12. Press button **H** to start the wrapping cycle.

– The buzzer is activated to warn the personnel that machine operation is about to start.

– The platform begins to rotate.

– The wrapping cycle starts when performing the lower reinforcing band.

13. When the reinforcing band is completed, press and hold button **G1** to make reel holder carriage rise.

NOTE

The motion of reel holder carriage is shown on display F.

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■ **Intermediate reinforcing band**

– Release button **G1** when the reel holder carriage reaches the height of interest.

– Press and hold button **G1** to wrap the remaining part.

■ **Upper reinforcing band with reel holder carriage descent (single wrapping)**

– Release button **G1** when the reel holder carriage reaches the upper part of the product.

– Press button **L** when the reinforcement band has been completed.

– Rotating platform stops in phase.

– Manually cut the film and cause it to adhere to the wrapped product.

– Press and hold button **G2** to move reel holder carriage to the low position.

■ **Upper reinforcing band with reel holder carriage descent (double wrapping)**

– Release button **G1** when the reel holder carriage reaches the upper part of the product.

– Press and hold button **G2** when the upper reinforcement band has been completed.

– Release button **G2** to perform the intermediate reinforcement band.

– Press and hold button **G2** and release it when the upper reinforcement band has been completed.

– Press key **L**.

– Rotating platform stops in phase.

– Manually cut the film and cause it to adhere to the wrapped product.

14. Remove the wrapped product.

15. Press key **M**.

16. Wait for the units to synch and become automatically timed.

17. Correctly load the new product to be wrapped in the middle of rotating platform.

18. Wrap the new product by following the same procedures.

Important

Make sure the reel is not almost exhausted, in order to avoid any interruption of pallet wrapping because of film lacking.

Normal stop

– Manually cut the film and cause it to adhere to the wrapped product.

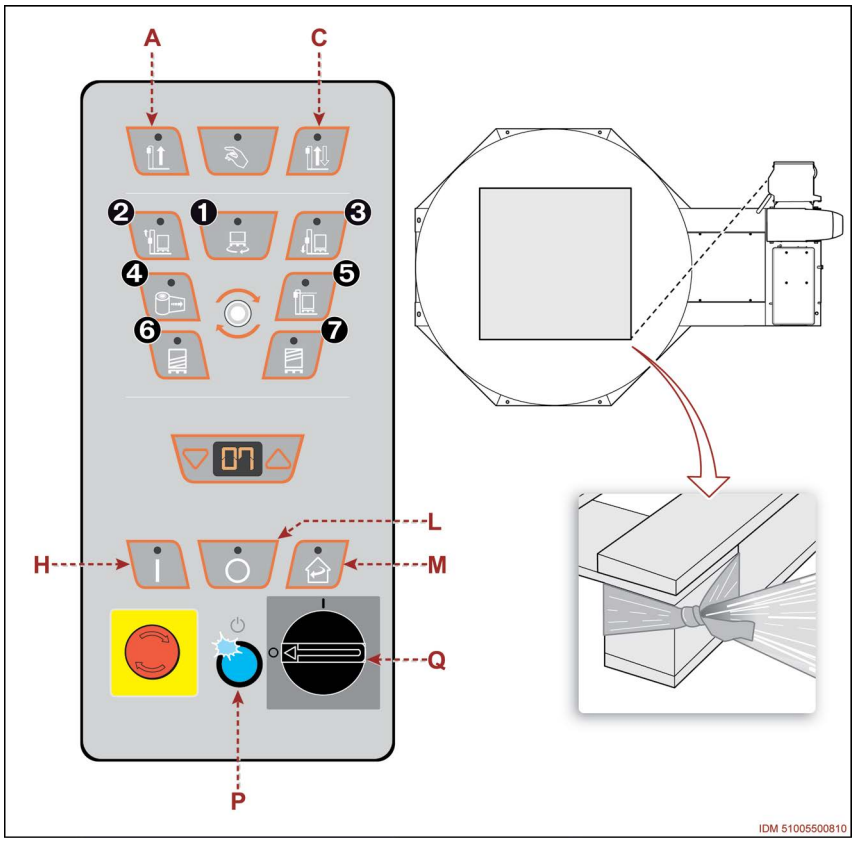
– Press and hold button **G2** to move reel holder carriage to the low position.

– Remove the wrapped product.

– Rotate electric selector **Q** to position **"O"** (OFF).

(Single or double) automatic wrapping

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



1. Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.

– If film characteristics appear to be different, consider whether you should adjust the film tension.

2. Rotate main disconnector **Q** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **P** turns on.

3. Press the push-button **P**.

– The pilot light of button **P** turns off.

4. Press key **M**.

5. Wait for the units to synch and become automatically timed.

6. Correctly load the new product to be wrapped in the middle of rotating platform.

Important

Remove the lifting device.

7. Tie the trailing end of the film to the base of the product to be wrapped.

8. Select and activate the recipe of interest.
   See "Recipe management" for further details.

9. Select the wrapping of interest by means of one of buttons **A-C**.

10. Press button **H** to start the wrapping cycle.

– The buzzer is activated to warn the personnel that machine operation is about to start.

– The machine carries out wrapping and at the end of the set-up cycle it stops automatically.

NOTE

Press button L to stop wrapping; press button H to continue.
Wrapping will start at the point where it has been stopped.

– **To perform reinforcing bands, press button H and press it again to start wrapping again.**

– **In single operating mode, when wrapping ends up, reel holder carriage is in the upper side of the pallet.**

– **Press button M to move reel holder carriage to the start of the cycle (lower part).**

11. Manually cut the film and cause it to adhere to the wrapped product.

12. Remove the wrapped product to be able to load the next one to wrap.

13. Correctly load the new product to be wrapped in the middle of rotating platform.

– With a product having the same features, press button **H** to start the wrapping cycle.

– Wrapping is carried out in the same modes.

Important

Make sure the reel is not almost exhausted, in order to avoid any interruption of pallet wrapping because of film lacking.

Normal stop

– Make sure that the wrapping process has been completed.

– **DO NOT control a machine stop if the wrapping cycle has not been completed.**

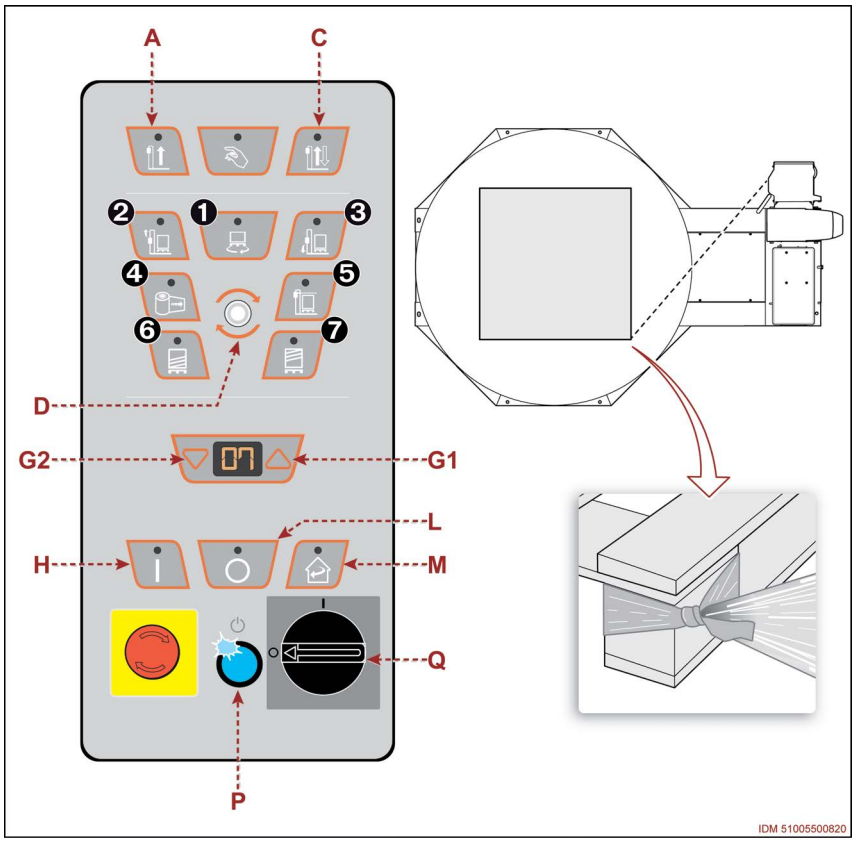
– Manually cut the film and cause it to adhere to the wrapped product.

– Remove the wrapped product.

– Rotate electric selector **Q** to position **"O"** (OFF).

(Single or double) automatic wrapping with sheet feeder

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



1. Check whether the wrapping film has the same chemical-physical properties as that installed in the reel holder carriage.

– If film characteristics appear to be different, consider whether you should adjust the film tension.

2. Rotate main disconnector **Q** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **P** turns on.

3. Press the push-button **P**.

– The pilot light of button **P** turns off.

4. Press key **M**.

5. Wait for the units to synch and become automatically timed.

6. Correctly load the new product to be wrapped in the middle of rotating platform.

Important

Remove the lifting device.

7. Tie the trailing end of the film to the base of the product to be wrapped.

8. Select the wrapping of interest by means of one of buttons **A-C** and press it rapidly twice.

– LED starts to flash.

NOTE

In case of wrapping without sheet feeder, LED stays on with solid light.

9. Press button **D** twice.

– LED of parameter ❺ starts to flash.

10. Use one of controls **G1-G2** to define the descent of reel holder carriage with regard to the upper part of the product.

– The greater is the value, the greater is the movement of the reel holder carriage.

11. Press key **D** to confirm.

12. Select and activate the recipe of interest.
See "Recipe management" for further details.

13. Press button **H** to start the wrapping cycle.

– The buzzer is activated to warn the personnel that machine operation is about to start.

– Reel holder carriage performs the wrapping until it reaches the upper part of the product; it slightly lowers in order to allow for the insertion of the sheet.

14. Insert the covering sheet.

15. Press key **H**.

– The reel holder carriage completes the wrapping when the selected cycle is completed and the machine stops automatically.

NOTE

Press button L to stop wrapping; press button H to continue.
Wrapping will start at the point where it has been stopped.

Important

To perform reinforcing bands, press button H and press it again to start wrapping again.

– **In single operating mode, when wrapping ends up, reel holder carriage is in the upper side of the pallet.**

– **Press button M to move reel holder carriage to the start of the cycle (lower part).**

16. Manually cut the film and cause it to adhere to the wrapped product.

17. Remove the wrapped product to be able to load the next one to wrap.

18. Correctly load the new product to be wrapped in the middle of rotating platform.

– With a product having the same features, press button **H** to start the wrapping cycle.

– Wrapping is carried out in the same modes.

Important

Make sure the reel is not almost exhausted, in order to avoid any interruption of pallet wrapping because of film lacking.

Normal stop

– Make sure that the wrapping process has been completed.

– **DO NOT control a machine stop if the wrapping cycle has not been completed.**

– Manually cut the film and cause it to adhere to the wrapped product.

– Remove the wrapped product.

– Rotate electric selector **Q** to position **"O"** (OFF).

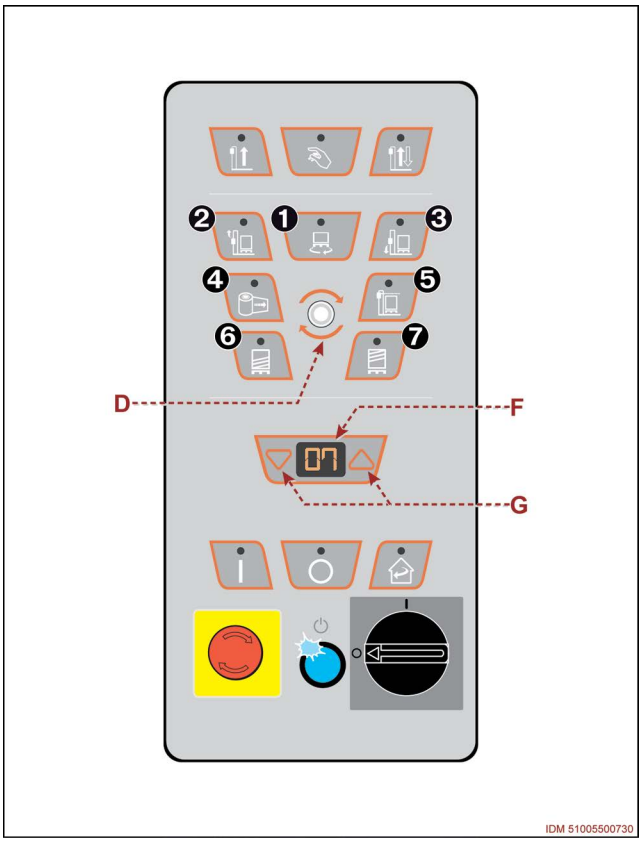
Parameter programming

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

1. Press control **D** repeatedly and release it when the LED corresponding to the icon to be programmed turns on.

– The value of the selected parameter appears on display **F**.

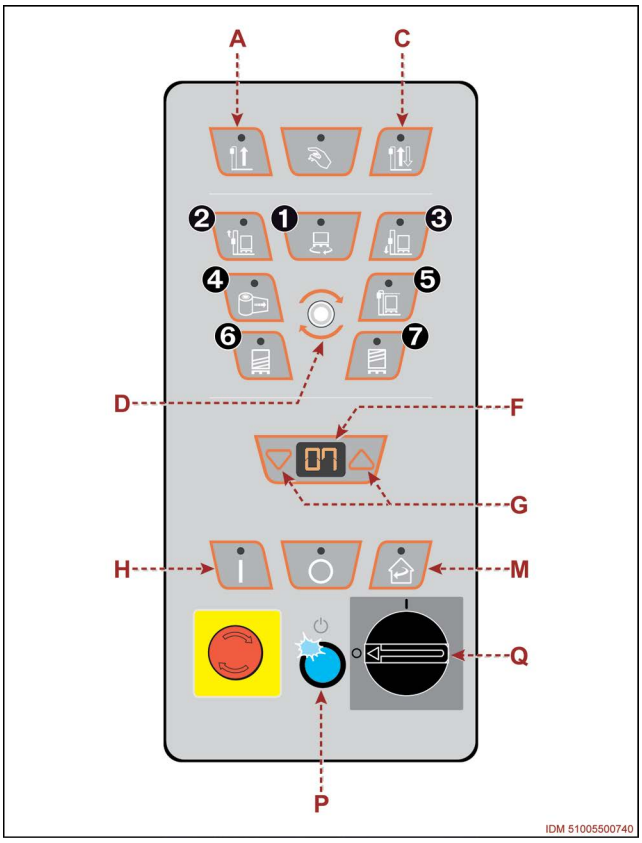
2. Press one of buttons **G** to modify the value.
   - With parameters ❶ - ❷ - ❸ - ❹ selected: the number shown refers to a value scale from 0 to 10.
   - With parameter ❺ selected: the displayed value refers to the time expressed in seconds.
   - With parameters ❻ - ❼ selected: the number shown refers to the amount of revolutions to be performed for the reinforcing wrappings.
3. Press key **D** to confirm.



Recipe management

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

– The described procedures refer to how to modify and/ or activate a recipe.



Modifying a recipe

1. Rotate main disconnector **Q** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **P** turns on.

2. Press the push-button **P**.

– The pilot light of button **P** turns off.

3. Select the wrapping of interest by means of one of buttons **A-C**.
4. Keep button **D** pressed (about 5 seconds) in order to enable programming.

– The number of the last used recipe appears on display **F**.

5. Press one of buttons **G** to select the number of the recipe to be modified.
6. Programme all the parameters of recipe , one at a time.
7. Press control **D** repeatedly and release it when the LED corresponding to the icon to be programmed turns on.

– The value of the selected parameter appears on display **F**.

8. Press one of buttons **G** to modify the value.
   - With parameters ❶ - ❷ - ❸ - ❹ selected: the number shown refers to a value scale from 0 to 10.
   - With parameter ❺ selected: the displayed value refers to the time expressed in seconds.
   - With parameters ❻ - ❼ selected: the number shown refers to the amount of revolutions to be performed for the reinforcing wrappings.
9. Press key **D** to confirm.

Loading a recipe

1. Rotate main disconnector **Q** to position **"I"** (ON) to activate the power supply.

– The pilot light of button **P** turns on.

2. Press the push-button **P**.

– The pilot light of button **P** turns off.

3. Press key **M**.
4. Wait for the units to synch and become automatically timed.
5. Correctly load the new product to be wrapped in the middle of rotating platform.

Important

Remove the lifting device.

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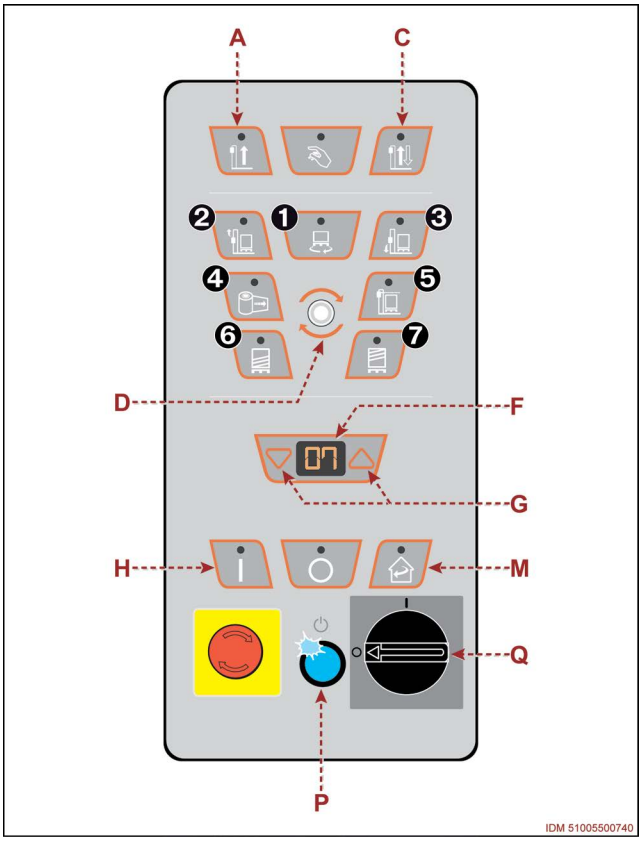
6. Tie the trailing end of the film to the base of the product to be wrapped.
7. Select the wrapping of interest by means of one of buttons **A-C**.
8. Keep button **D** pressed (about 5 seconds) in order to enable programming.

– The number of the last used recipe appears on display **F**.

9. Press one of buttons **G** to select the number of the recipe to be loaded.
10. Press button **H** to start the wrapping cycle.



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”.
– 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.
– 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 40 work hours (max 1 week)		
Component	*Operation required*	*Procedures to implement*
Reel holding carriage sliding guides	Cleaning	- Remove any impurities with a plastic scraper. - Clean with a soft cloth soaked in a non-flammable and non-corrosive detergent. - Properly dry the surfaces.
Pallet detection photocell	Cleaning	- Clean the detection area of the photocell. - Use a clean, dry (not abrasive) cloth.
Lifting belt for the reel holding carriage	Wear and tear control	- Check this component for wear.Replace the component, if it is worn out (See “Replacing the lifting belt of the carriage”).

Every 2000 work hours (max 6 months)		
Component	*Operation required*	*Procedures to implement*
Rotating platform rotation chain	Checking the tension	- Check the tension of component. - Adjust tension as required - if necessary (See “Adjustment of chain controlling the rotation of platform”).
	Lubrication	- Lubricate all the greasing points (See “Diagram of the points of lubrication”).

Every 5000 work hours (max 12 months)		
Component	*Operation required*	*Procedures to implement*
Wheels of rotating platform	Wear and tear control	- Check this component for wear. - Replace the component, if it is worn out
Vertical conveyor rollers of the reel holding carriage	Wear and tear control	- Check this component for wear. - Replace the component, if it is worn out

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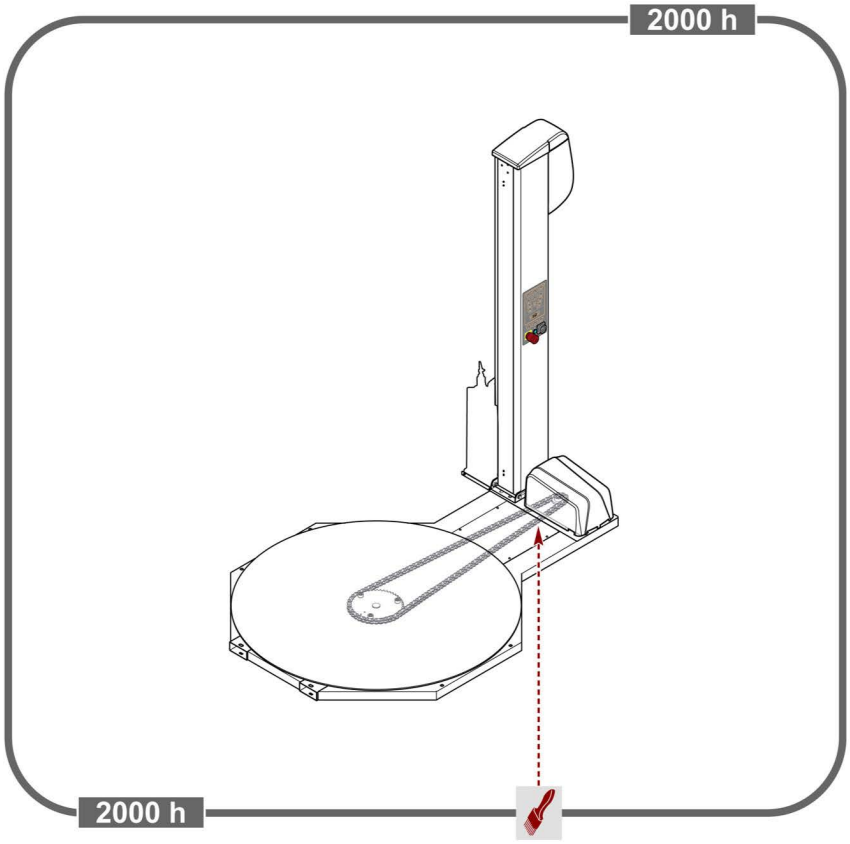
Diagram of the points of lubrication

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.**



Spread with grease

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	Fluorocarbon gel	Rotating platform rotation chain

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*
With isolator switch **Q** on ON, pilot light does not turn off when button **P** is pressed.	Emergency stop button pressed	- Identify the causes that have caused the stop. - Restore normal running conditions - Unlock the emergency stop button with a voluntary action.
When button Start **H** is pressed, the rotating platform does not start.	Pallet not detected by the photoelectric cell	- Check the functionality of the component. - The component must be adjusted (See "Pallet detecting photocell sensitivity adjustment").
	Rotating platform not correctly timed.	- Press key **M**.
The reel holding carriage will not go up.	Pallet not detected by the photoelectric cell	- Check the functionality of the component. - The component must be adjusted (See "Pallet detecting photocell sensitivity adjustment").
	Operation in "manual mode"	- Select the wrapping of interest by means of one of buttons **A-C**.
	Reel holding carriage not correctly timed.	- Press key **M**.
	Top limit stop detecting microswitch failure	- Check the functionality of the component. - The component must be adjusted.
	Failure of the inverter of the reel holding carriage	- Check the error code.
The reel holding carriage will go up but won't stop at the top of the pallet.	Pallet not detected by the photoelectric cell	- Check the functionality of the component. - The component must be adjusted (See "Pallet detecting photocell sensitivity adjustment").
The ends of the pallet are wrapped with an excessive quantity of reinforcing bands.	Top reinforcing band quantity not correctly set	- Adjust using the control ❻.
	Bottom reinforcing band quantity not correctly set	- Adjust using the control ❼.
The film is too tightly stretched or too loose.	Film tension factor not properly adjusted	- The component must be adjusted. (See " Tension adjustment of film ")
The machine stops with the reel holding carriage not correctly positioned.	Failure of lifting belt of the reel holding carriage	- Replace the component (See "Replacing the lifting belt of the carriage").
Reel holding carriage (type SM-LP) The film slips on the rollers.	Presence of residues or dust on the rollers	- Remove any residues.
Rotating platform jogging motion.	Rotating platform rotation chain not properly tensioned	- The component must be adjusted (See "Adjustment of chain controlling the rotation of platform").
	Presence of residues or dust on the wheels	- Remove any residues.

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Problem	Cause	Remedy
The noise level is too high.	Rotating platform rotation chain not properly tensioned	- The component must be adjusted (See "Adjustment of chain controlling the rotation of platform").
	Wheels of rotating platform worn out or damaged	- Replace the component.
	Failure of gearmotor driving the rotating platform	- Check the functionality of the component.
Reel holding carriage jogging motion.	Presence of residues or dust on the reel holding carriage sliding guides	- Remove any residues.

Alarm message table

The table includes the alarms that can occur during operation.

Table: Alarm list

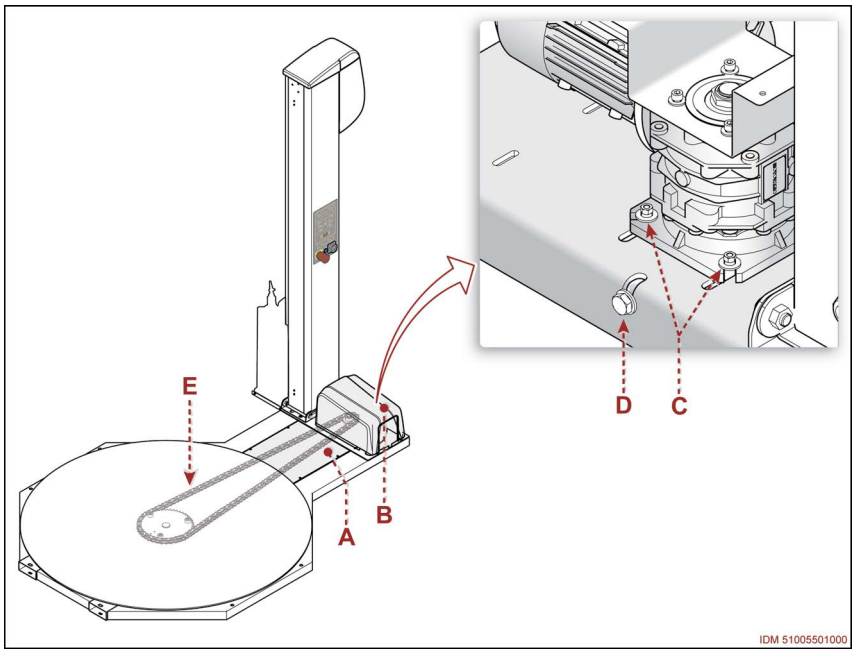
Code	Description
MACHINE	
01	PLATFORM END-OF-STROKE FAILURE
02	CARRIAGE END-OF-STROKE FAILURE/FAILURES
03	SAFETY CIRCUIT ERROR
04	
05	LOOSE CARRIAGE BELT ALARM
06	LACK OF PALLET ALARM
07	HS PLATFORM SAFETY ALARM
08	FILM END ALARM (ONLY IF PRESTRETCH OPTION AVAILABLE)
PLATFORM MOTOR INVERTER	
10	INITIALISATION ERROR
11	POWER ON ERROR
12	MOTOR SHORT-CIRCUIT
13	MOTOR THERMAL PROTECTION
14	BUS CIRCUIT TENSION ALARM
15	OVERTEMPERATURE ALARM (>85°C)
16	MAXIMUM POWER ALARM (4A)
17	COMMUNICATION TIMEOUT
CARRIAGE LIFTING MOTOR INVERTER	
20	INITIALISATION ERROR
21	POWER ON ERROR
22	MOTOR SHORT-CIRCUIT
23	MOTOR THERMAL PROTECTION
24	BUS CIRCUIT TENSION ALARM
25	OVERTEMPERATURE ALARM (>85°C)
26	MAXIMUM POWER ALARM (4A)
27	COMMUNICATION TIMEOUT
PRESTRETCH MOTOR INVERTER	
30	INITIALISATION ERROR
31	POWER ON ERROR
32	MOTOR SHORT-CIRCUIT
33	MOTOR THERMAL PROTECTION
34	BUS CIRCUIT TENSION ALARM
35	OVERTEMPERATURE ALARM (>85°C)
36	MAXIMUM POWER ALARM (4A)
37	COMMUNICATION TIMEOUT

Adjustment of chain controlling the rotation of platform

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

– **This operation must be performed when the machine is stopped in safe conditions, the engine is off and the ignition key is removed.**

1. Disassemble guards **A-B**.
2. Slightly loosen screws **C**.
3. Adjust the tension of chain **E** by means of the adjusting system **D**.
4. Tighten the screws **C**.
5. Refit the guards **A-B**.



Important

Do not tighten component excessively in order to avoid the deterioration of the rotating parts.

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

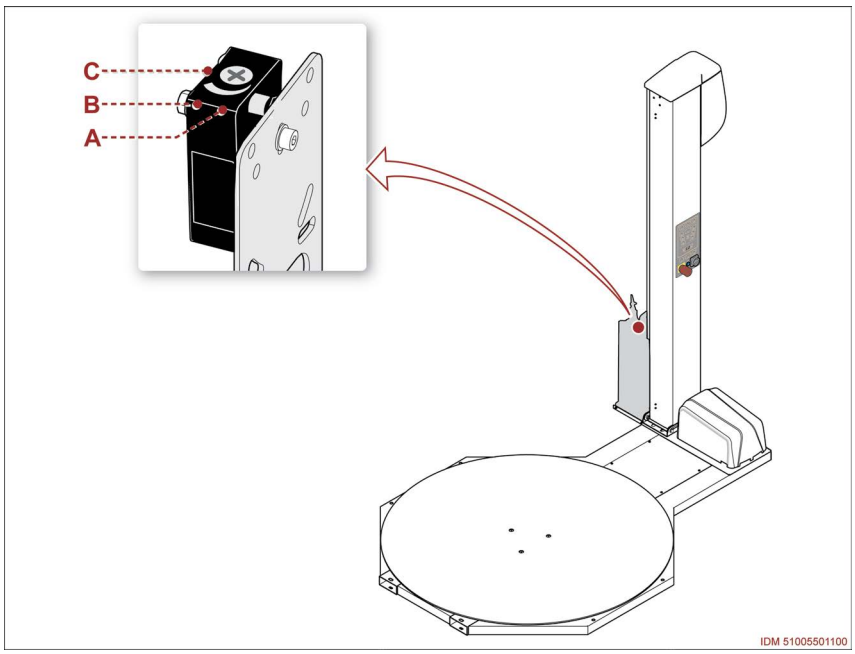
Pallet detecting photocell sensitivity adjustment

This action is necessary to adjust the sensitivity of the photocell when it fails to detect the presence of a pallet.

1. Correctly load the new product to be wrapped in the middle of rotating platform.
2. Move the reel holding carriage towards the pallet.
3. Check if the photocell detects the pallet.

– The active state is signalled by a warning light **B** (yellow light) coming on.

– When the light **B** is off, slowly rotate the control **C** until the indicator light illuminates.



– The light **A** lighting up (green light) indicates that the photocell is powered.

Replacing the lifting belt of the carriage

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

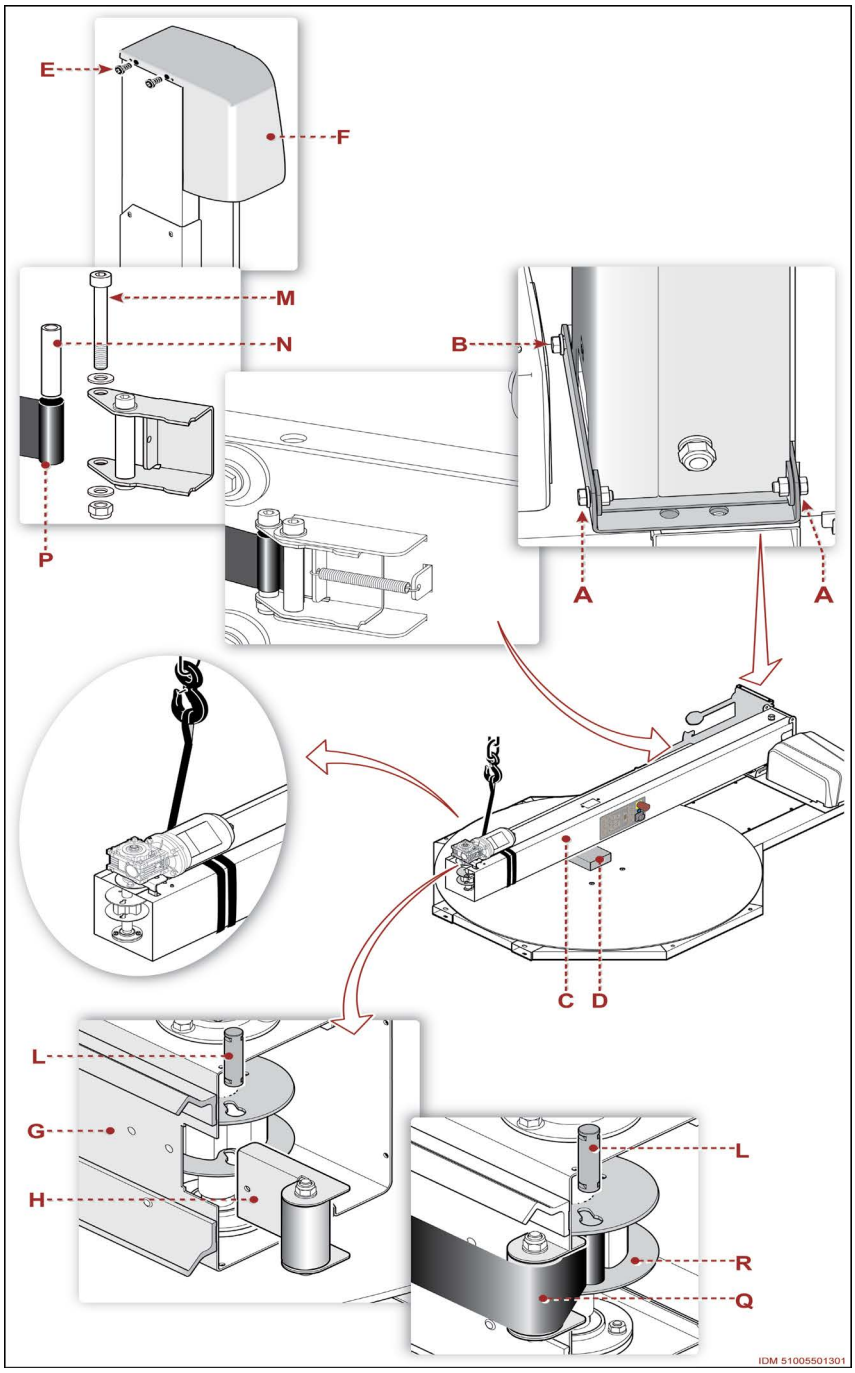
– **The intervention must be carried out with the machine stopped in safety conditions.**

1. Remove the fastening elements **E** and remove the component **F**.
2. Attach the column **C** to a lifting device.
3. Loosen the screws **A**.
4. Slightly loosen screws **B**.
5. Bring the column to a horizontal position.

– **Insert the shim D under the column to keep it horizontal.**

6. Remove the fastening elements **G** and remove the component **H**.
7. Slip out pin **L**.
8. Remove the reel holding carriage and place it on the rotating platform.
9. Remove the fasteners **M**.
10. Remove the bushing **N** and remove the damaged belt **P**.
11. Insert the bushing **N** in the new belt.
12. Secure the end of the belt (with bushing) by means of the fastening elements **M**.
13. Insert the reel holding carriage and move it towards the base of the column.
14. Install the component **H** and lock it in place with the fastening elements **G**.
15. Lead the belt over the roller **Q**.
16. Insert the pin **L** to connect the end of the belt to the pulley **R**.
17. Lift the column to its vertical position.
18. Introduce and tighten the screws **A**.
19. Tighten the screws **B**.
20. Remove the lifting device.
21. Install the component **F** and lock it in place with the fastening elements **E**.

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



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Machine Disposal and Scrapping

Machine dismantling

– Disconnect the supplies form 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.

Reel holding carriage (EM)

Main components

A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

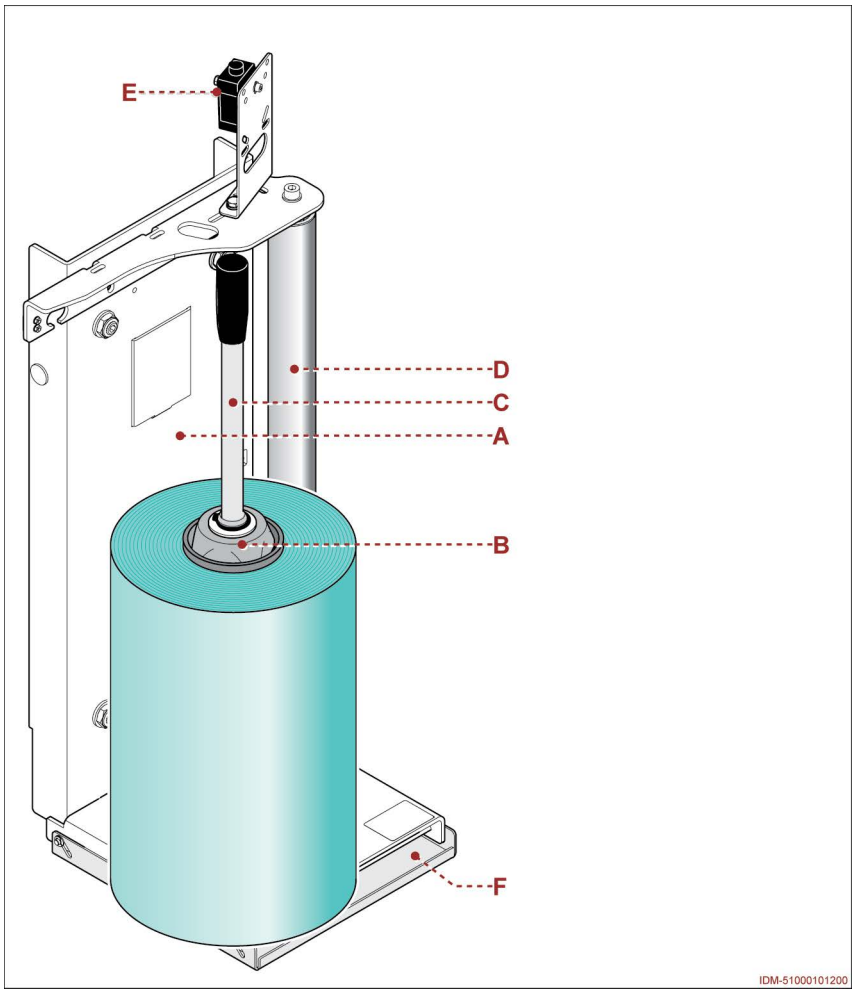
B) Reel holder: it is equipped with control **C** to adjust the film tension.

D) Roller (idle)

E) Photocell: it detects the presence of the pallet positioned on the platform and, during wrapping, it detects its upper side.

– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.

F) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.



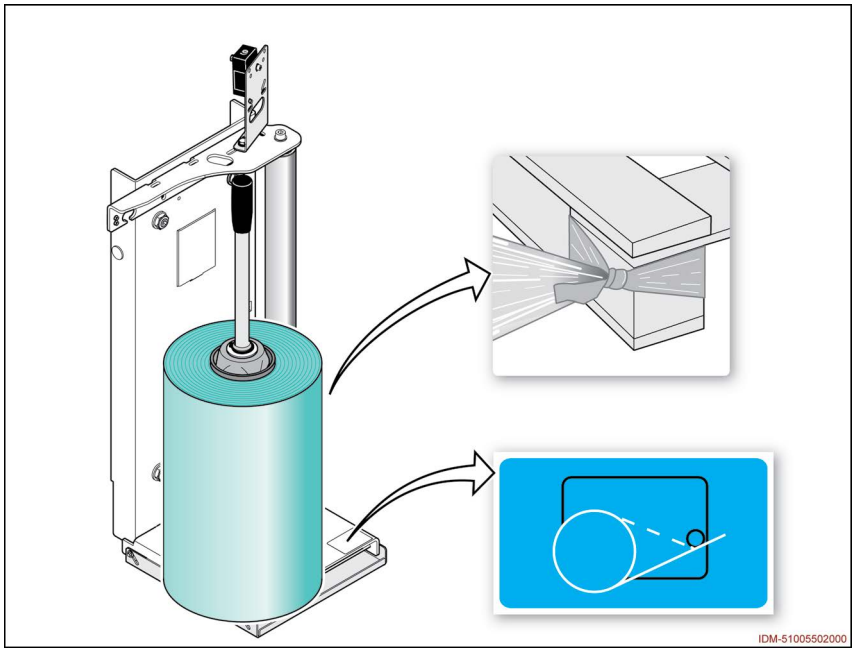
Film Coil Feeding

1. Lower the reel holding carriage until its endstroke.
2. Remove the cardboard core of the reel.
3. Insert the new reel.

Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

4. Insert film according to the required direction of the adhesive size.
5. Tie the trailing end of the film to the base of the product to be wrapped.



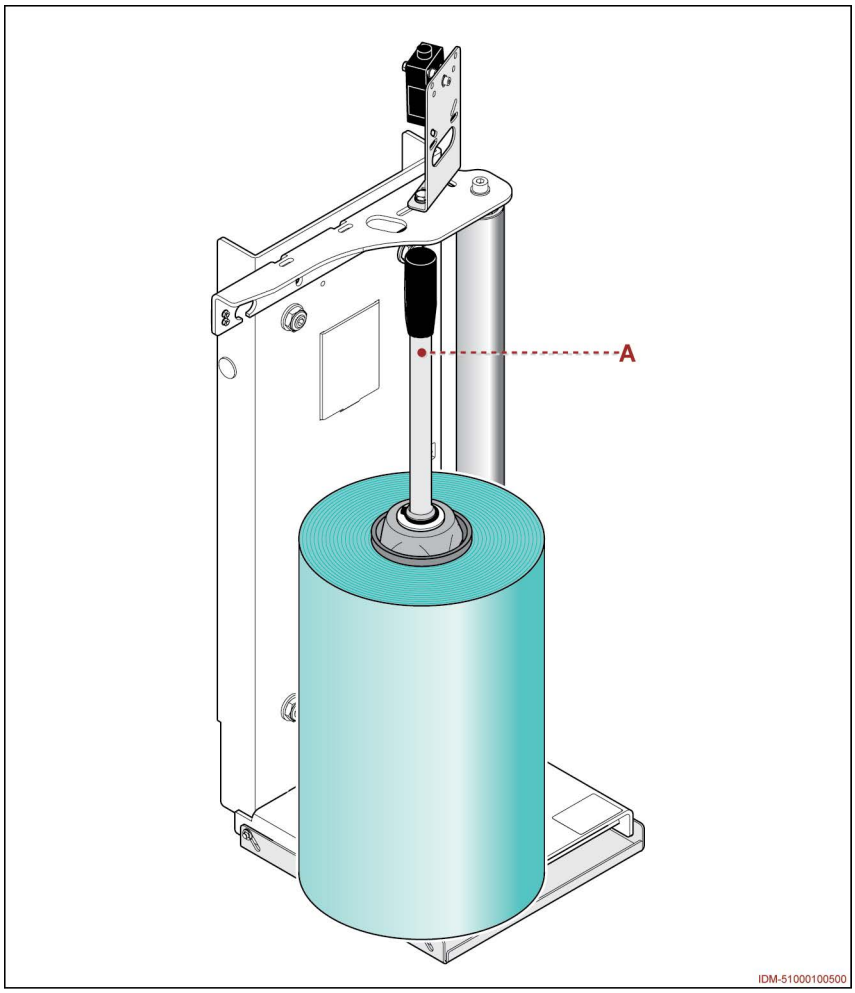
Tension adjustment of film

– **This operation is necessary in order to prevent the film from breaking during wrapping.**

1. Lower the reel holding carriage until its endstroke.
2. Adjust the film tension via the control **A**.

– **Clockwise:** the value increases.

– **Anti-clockwise:** the value decreases.



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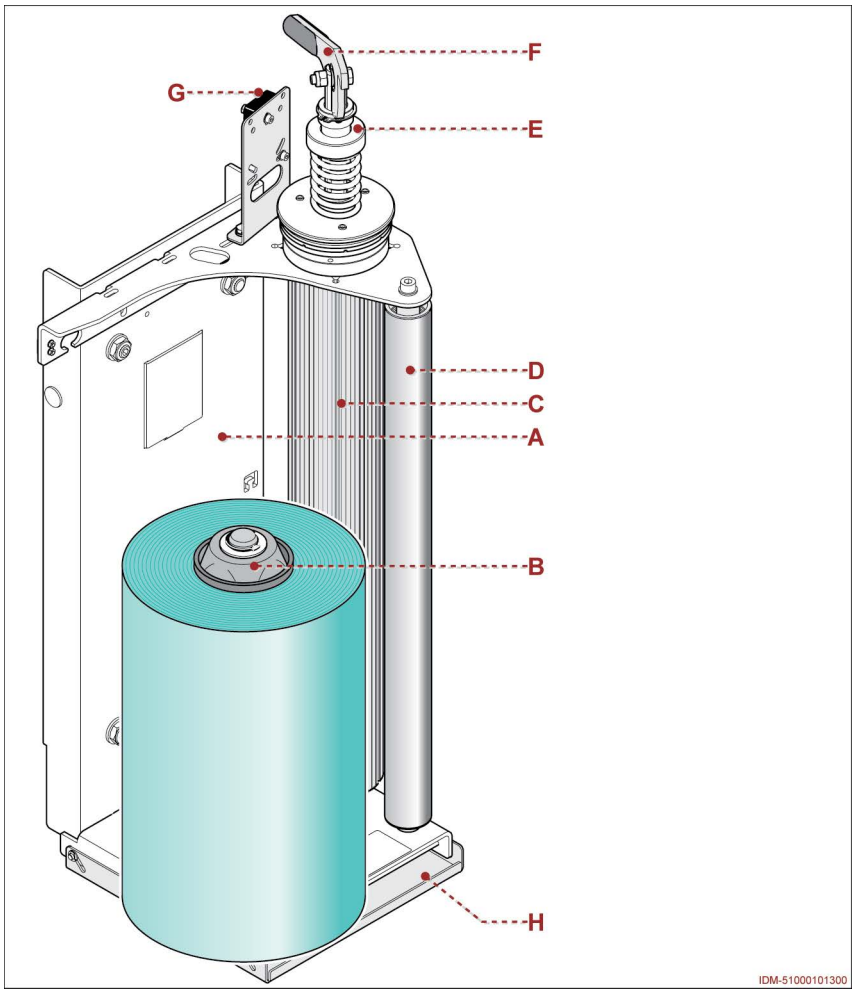
Reel holding carriage (M)

Main components



A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

B) Reel support shaft: it is equipped with a friction device to stop the reel from unravelling.

C) Roller: designed to tension the film.

– Roller is coated with inserts in order to ensure film pulling during wrapping.

D) Roller (idle)

E) Ring: device used to adjust the tension of the film.

F) Lever: device used to disengage the roller **C**.

G) Photocell: it detects the presence of the pallet positioned on the platform and, during wrapping, it detects its upper side.

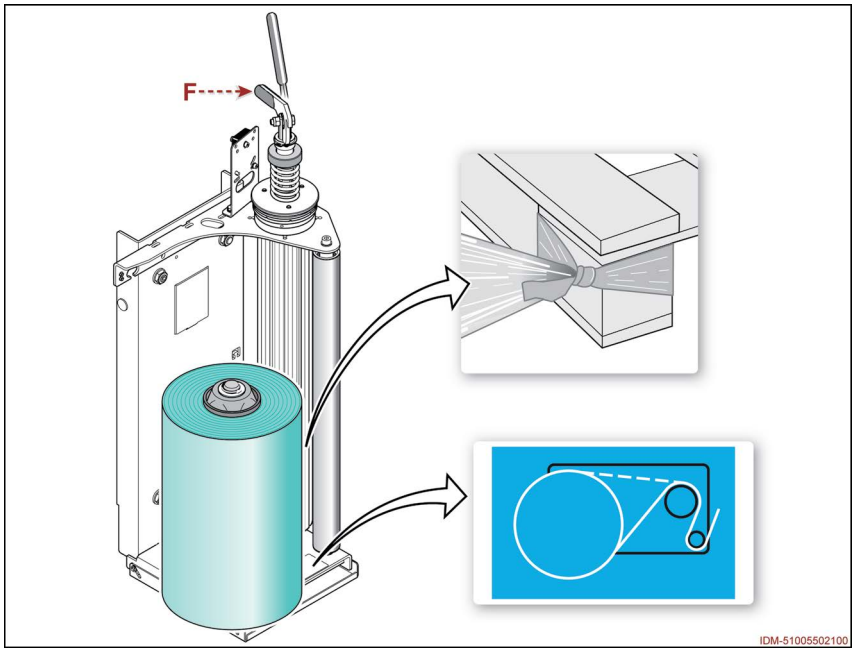
– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.

H) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

NOTE

On request, the reel holder carriage can be supplied in version for net-type wrapping.

Film Coil Feeding



1. Lower the reel holding carriage until its endstroke.
2. Lift the lever **F** to its vertical position.
3. Remove the cardboard core of the reel.
4. Insert the new reel.

Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

5. Insert film according to the required direction of the adhesive size.
6. Tie the trailing end of the film to the base of the product to be wrapped.
7. Start wrapping.
8. Lower the lever **F** to its horizontal position after the platform has completed at least one turn.

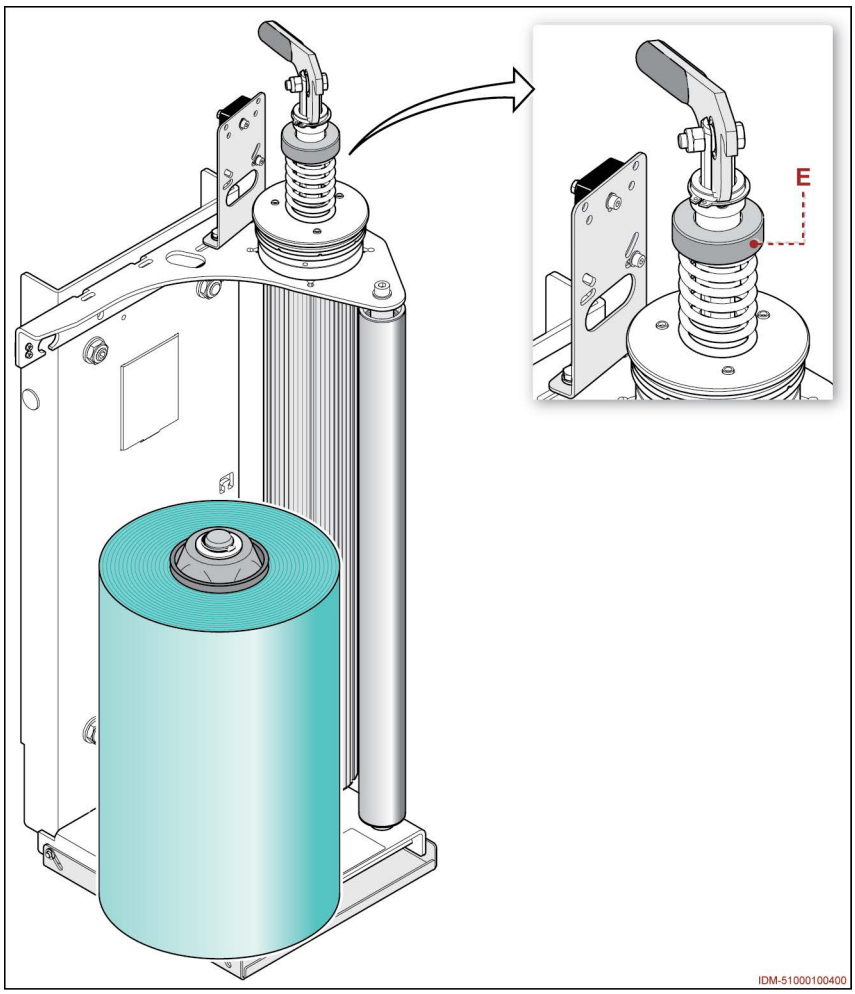
Tension adjustment of film

– **This operation is necessary in order to prevent the film from breaking during wrapping.**

1. Lower the reel holding carriage until its endstroke.
2. Lift the lever **F** to its vertical position.
3. Start wrapping.
4. Lower the lever **F** to its horizontal position after the platform has completed at least one turn.
5. Adjust the film tension via the ring **E**.

– **Clockwise:** the value increases.

– **Anti-clockwise:** the value decreases.



Cleaning and replacement of brake disc

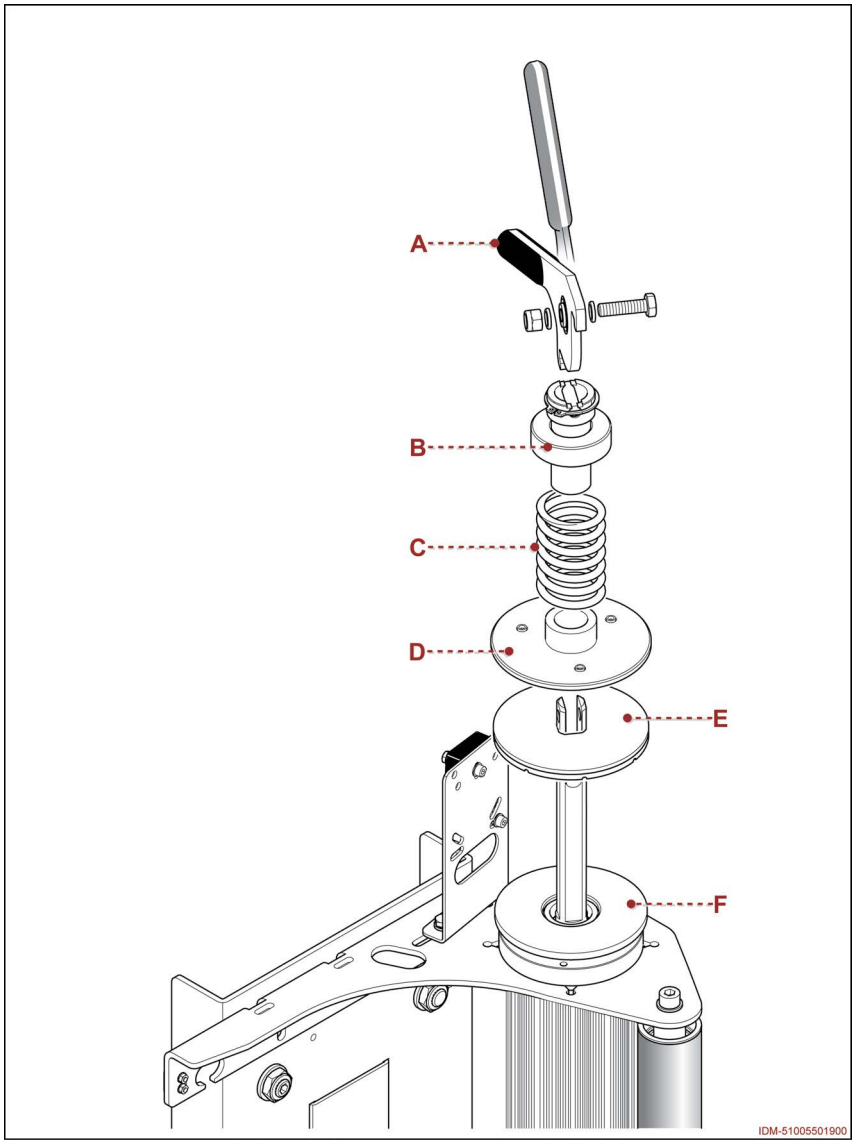
– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Lift the lever **A** to its vertical position.
2. Remove the fastening elements and remove the lever.
3. Remove in a sequence the components **B-C-D-E**.
4. Clean the matching surfaces of the friction discs **E-F**.
5. Check the wear level of the friction material of the disc **E**.

– In the case of excessive wear, replace the component.

6. Install the disc **E** with the friction material facing downwards.
7. Install in a sequence the components **D-C-B**.
8. Engage the lever **A** in a vertical position and insert the fastening elements.
9. Lower the lever to its horizontal position.

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



Replacing the outer surface of roller

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Lift the lever **A** to its vertical position.

2. Remove the fastening elements and remove the lever.

3. Remove in a sequence the components **B-C-D**.

4. Remove the component **F**.

5. Unscrew screw **G**.

6. Unscrew the nuts **H**.

7. Remove the plate **L**.

8. Remove stop ring **M**.

9. Remove the component **N**.

10. Remove all the external cylinder surface inserts **P**, one at a time.

11. Thoroughly clean the grooves of the roller.

12. Insert in a sequence, one at a time, all the new external cylinder surface inserts.

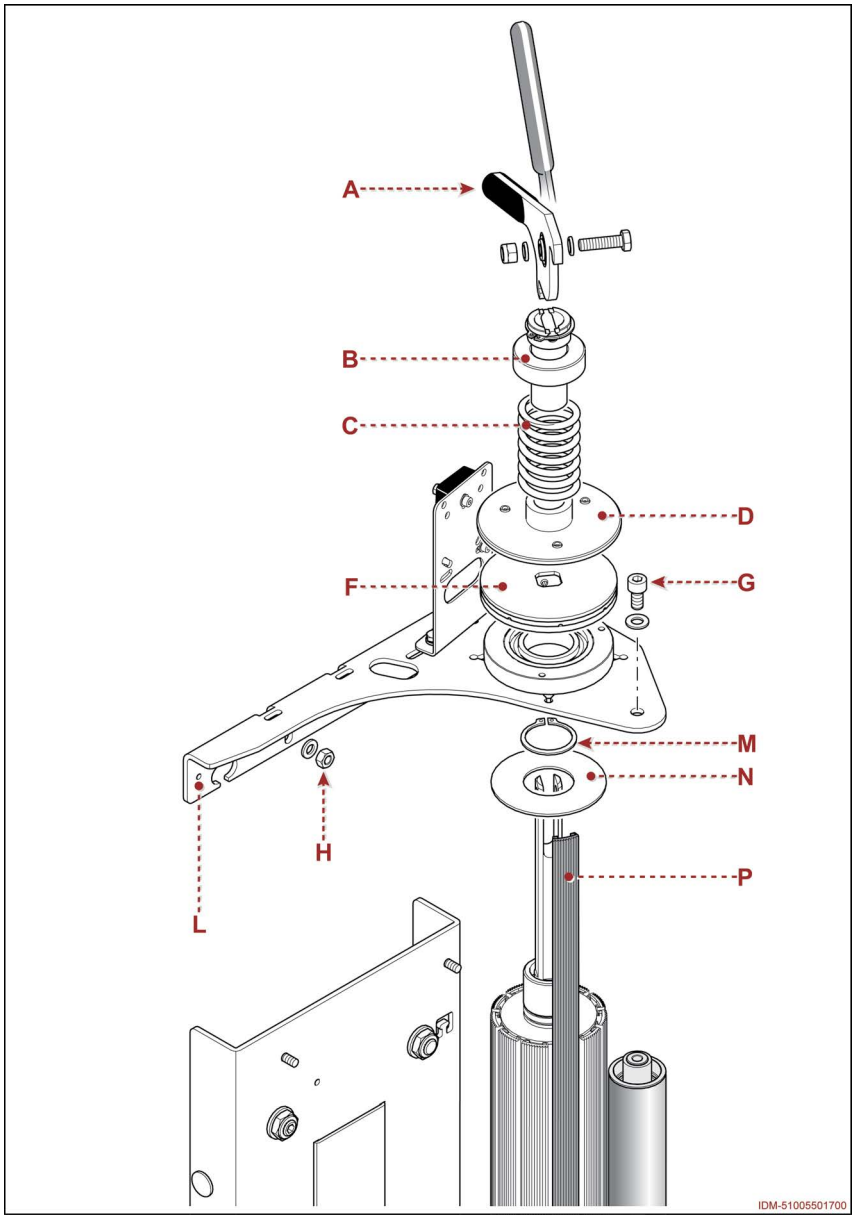
13. Install component **N**.

14. Reinstall the retainer ring **M**.

15. Fit back the plate **L** and fix it with the nuts **H** without tightening.

16. Insert screw **G** and tighten it.

17. Adjust the position of the plate **L** and tighten the nuts **H**.



18. Install component **F**.

19. Install in a sequence the components **D-C-B**.

20. Engage the lever **A** in a vertical position and insert the fastening elements.

21. Lower the lever to its horizontal position.

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

Reel holding carriage (FM)

Main components

A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

B) Reel support shaft: it is equipped with a friction device to stop the reel from unravelling.

C) Roller: designed to tension the film.

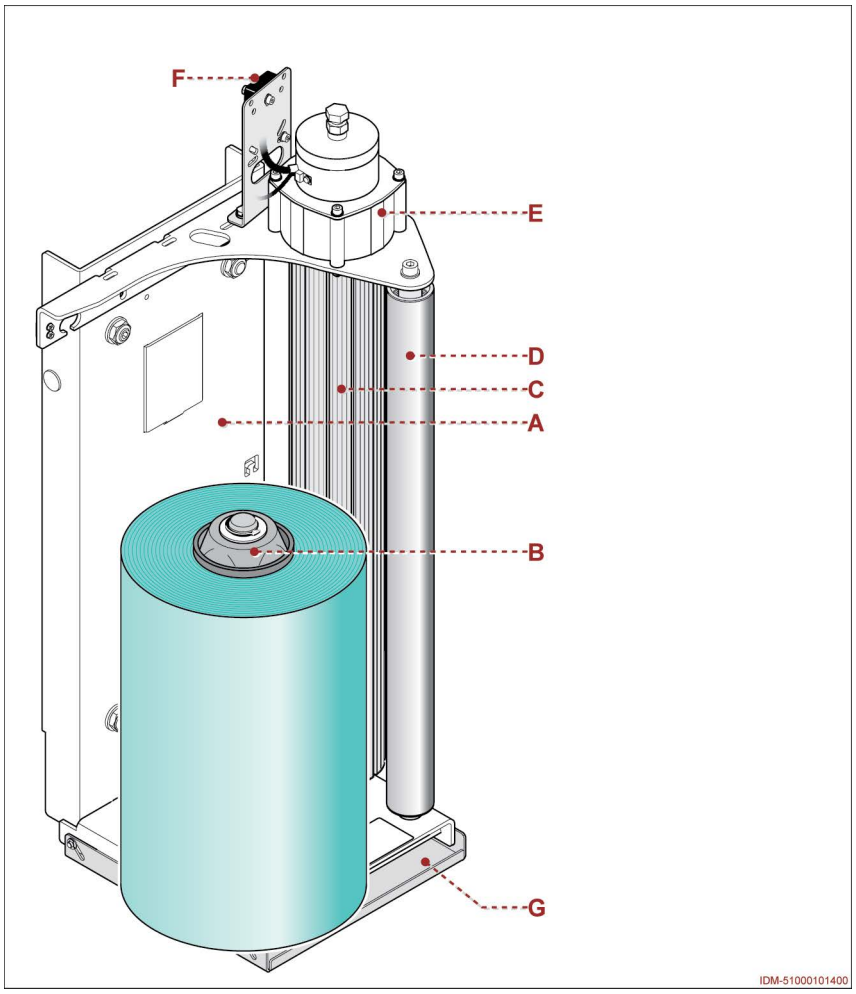
– Roller is coated with inserts in order to ensure film pulling during wrapping.

D) Roller (idle)

E) Electromechanical brake: device operated by the potentiometer to adjust the tension of film.

F) Photocell: it detects the presence of the pallet positioned on the platform and, during wrapping, it detects its upper side.

– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.



G) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

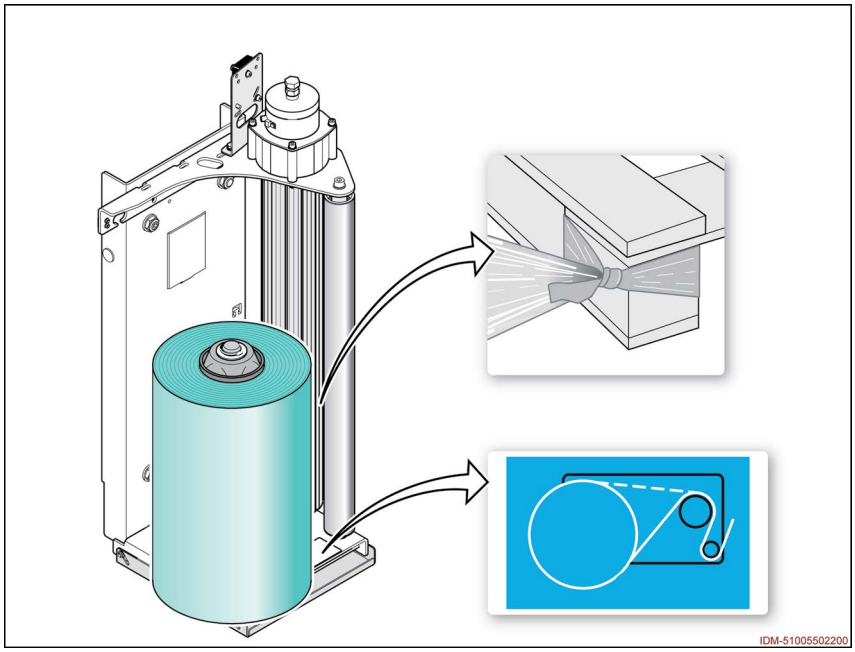
Film Coil Feeding

1. Lower the reel holding carriage until its endstroke.
2. Remove the cardboard core of the reel.
3. Insert the new reel.

Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

4. Insert film according to the required direction of the adhesive size.
5. Tie the trailing end of the film to the base of the product to be wrapped.



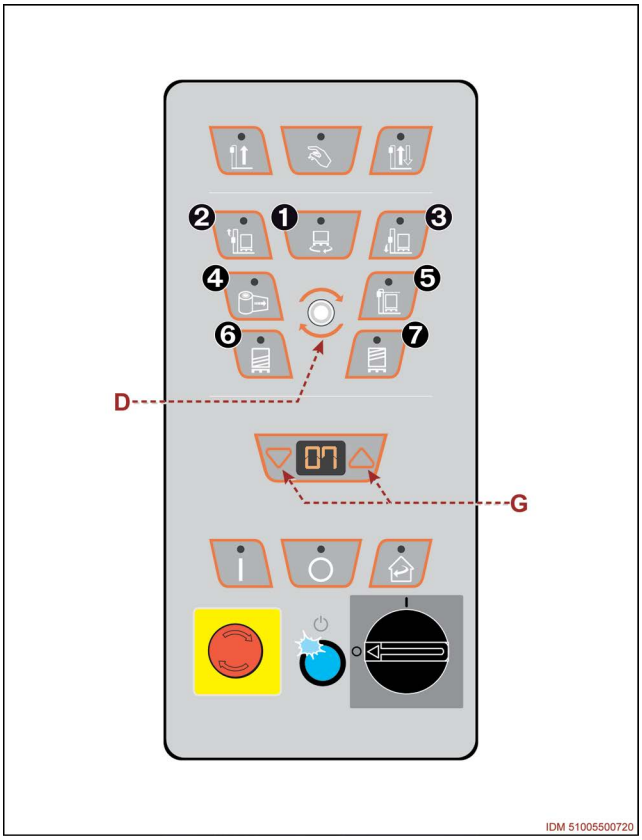
Tension adjustment of film

– **This operation is necessary in order to prevent the film from breaking during wrapping.**

1. Repeatedly press the button **D** until selecting the parameter ❹.

– LED turns on.

2. Adjust the film tension via the controls **G**.
3. Press key **D** to confirm.



Cleaning and replacement of brake disc

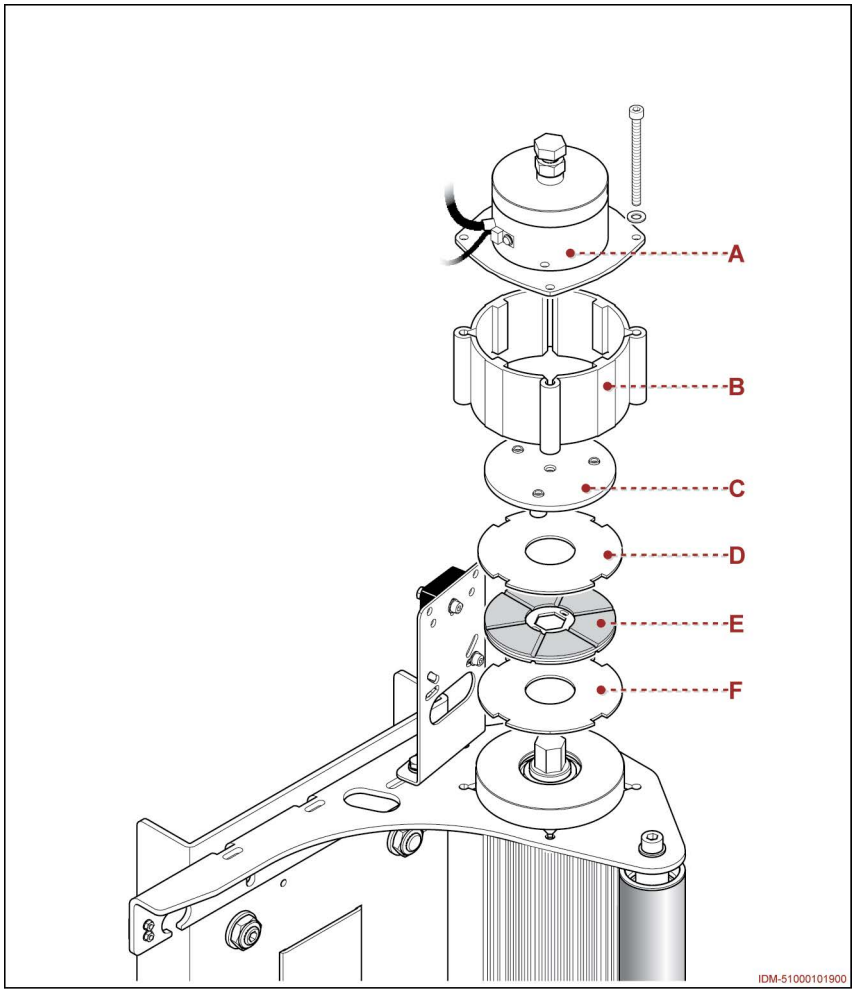
– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Remove the fastening elements and remove the actuator **A**.
2. Remove in a sequence the components **B-C-D-E-F**.
3. Clean the matching surfaces of the friction discs **D-F**.
4. Check the wear level of the friction material of the disc **E**.

– In the case of excessive wear, replace the component.

5. Install in a sequence the components **F-E-D-C-B**.
6. Install the component **A** and lock it in place with the fastening elements.

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



Replacing the outer surface of roller

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Loosen the screws **A**.

2. Remove the clutch body **B**.

3. Remove in a sequence the components **C-D-E**.

4. Unscrew screw **F**.

5. Unscrew the nuts **G**.

6. Remove the plate **H**.

7. Extract spacer **L**.

8. Remove stop ring **M**.

9. Remove the component **N**.

10. Remove all the external cylinder surface inserts **P**, one at a time.

11. Thoroughly clean the grooves of the roller.

12. Insert in a sequence, one at a time, all the new external cylinder surface inserts.

13. Install component **N**.

14. Reinstall the retainer ring **M**.

15. Install the spacer **L**.

16. Fit back the plate **H** and fix it with the nuts **G** without tightening.

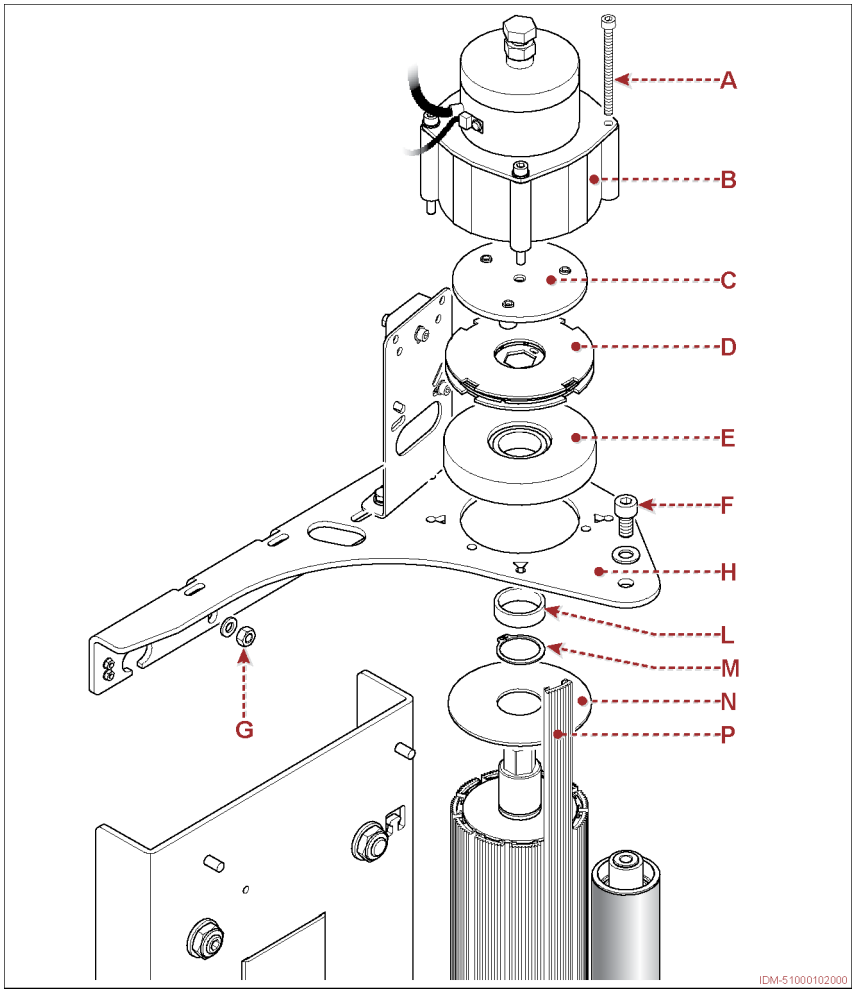
17. Insert screw **F** and tighten it.

18. Adjust the position of the plate **H** and tighten the nuts **G**.

19. Install in a sequence the components **E-D-C**.

20. Install the clutch body **B** and fix it with the screws **A**.

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



Reel holding carriage (SM)

Main components

A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

B) Reel support shaft: it is equipped with a friction device to stop the reel from unravelling.

C) Rollers: they are used to pre-stretch the film.

– The rollers are coupled with gears.

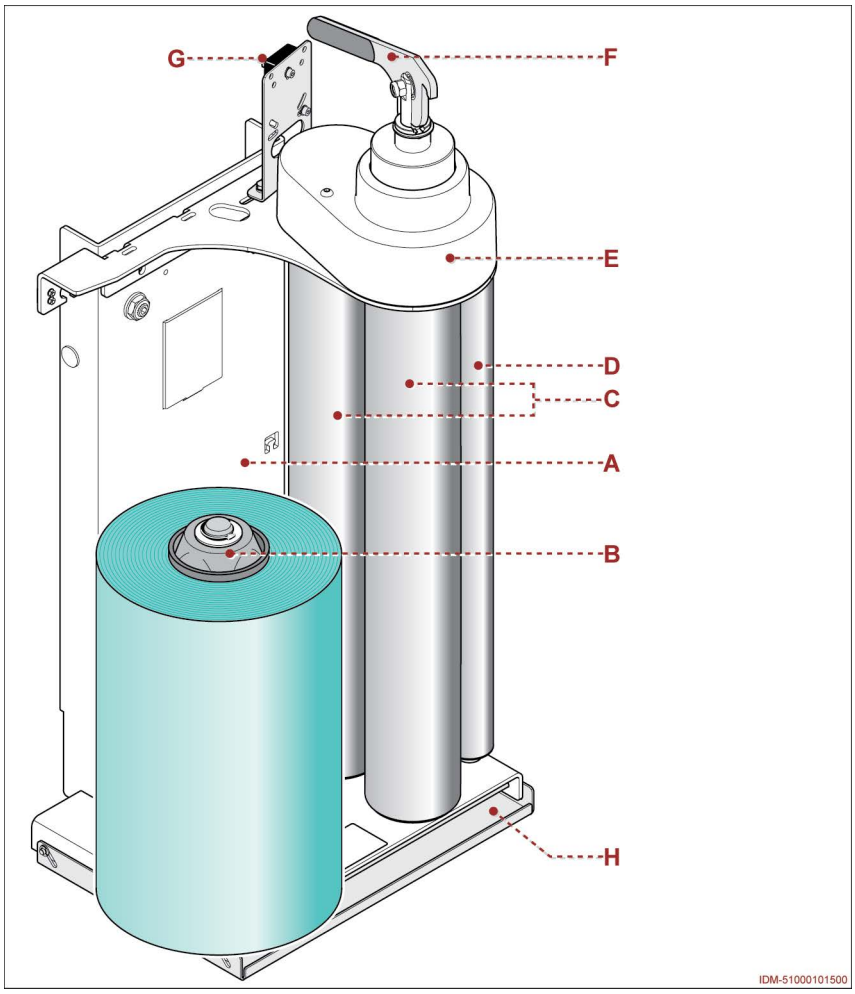
– The gears can be replaced with others with a different gear ratio to adjust the film pre-stretching.

D) Roller (idle)

E) Protective guard for the drive system of rollers

F) Lever: device used to disengage the rollers **C**.

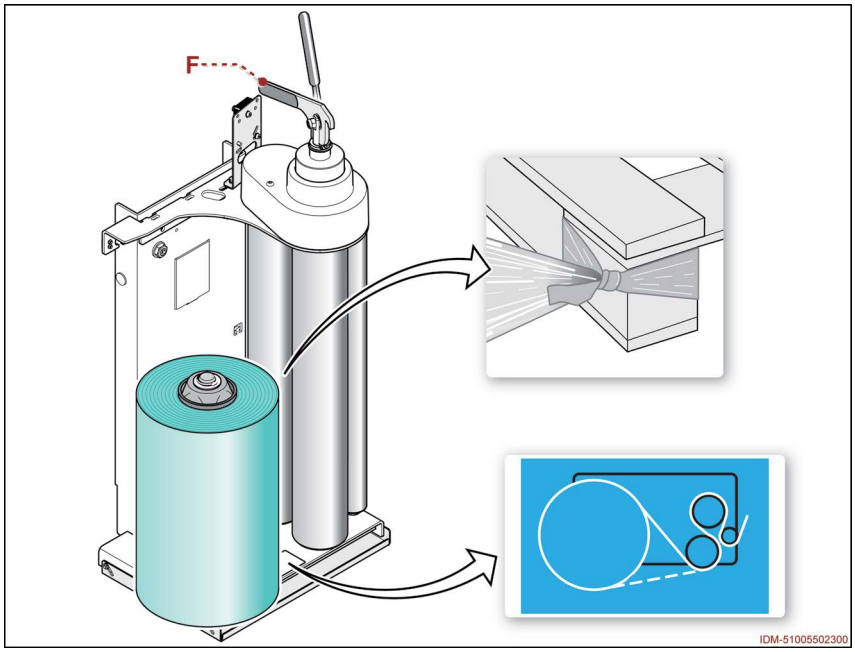
G) Photocell: it detects the presence of the pallet positioned on the platform and, during wrapping, it detects its upper side.



– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.

H) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

Film Coil Feeding



1. Lower the reel holding carriage until its endstroke.
2. Lift the lever **F** to its vertical position.
3. Remove the cardboard core of the reel.
4. Insert the new reel.

Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

5. Insert film according to the required direction of the adhesive size.
6. Tie the trailing end of the film to the base of the product to be wrapped.
7. Lower the lever **F** to its horizontal position.

Tension adjustment of film

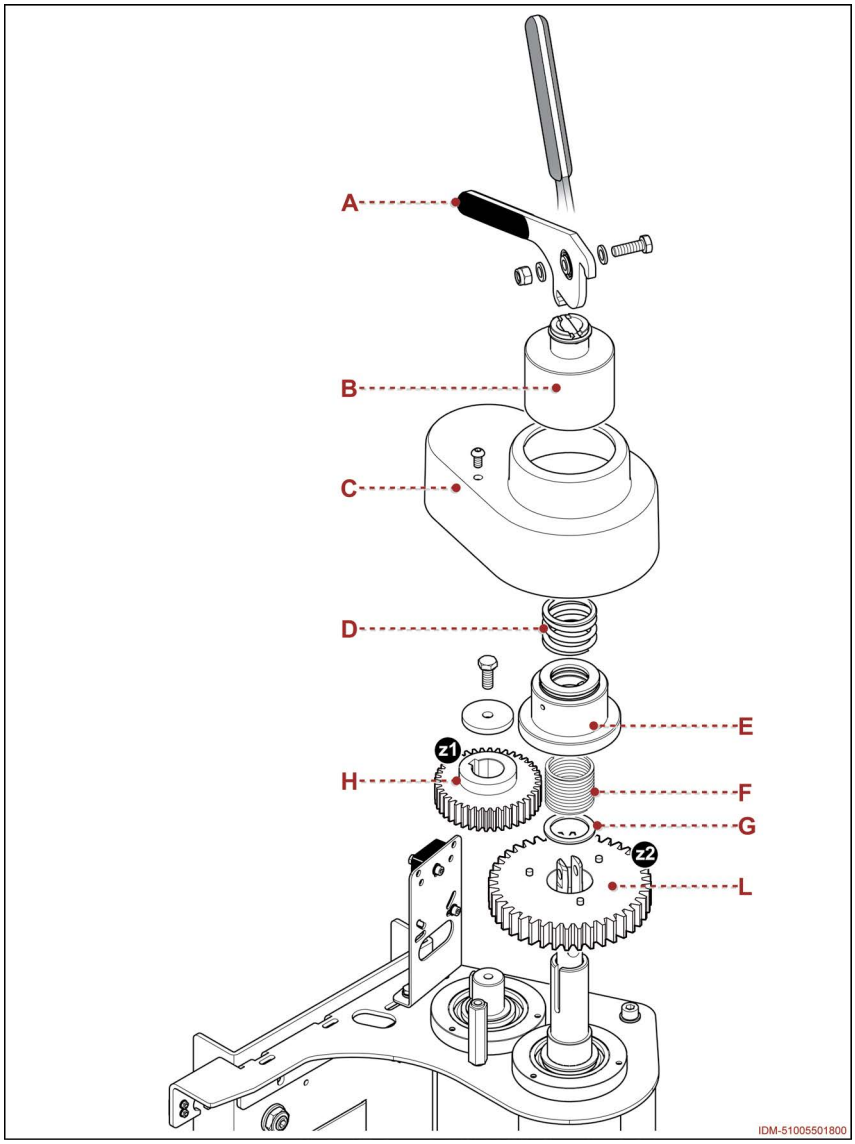
– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Lift the lever **A** to its vertical position.
2. Remove the fastening elements and remove the component **C**.
3. Remove the fastening elements and remove the lever **A**.
4. Remove the component **B**.
5. Remove in a sequence the components **D-E-F-G**.
6. Remove the fasteners of the gear **H**.
7. Remove the gears **H-L**.
8. Select the gears **(z1-z2)** for the new film pre-stretching value.

– The table shows the pre-stretching percentage values.

Pre-stretching percentage	*N. of gear teeth z1*	*N. of gear teeth z2*
30%	39	51
60%	35	55
90%	30	60

9. Install the gear **H** and lock it in place with the fastening elements.
10. Install the gear **L**.



Important

The gear must be installed with the pins facing upwards.

11. Install in a sequence the components **G-F-E-D**.
12. Install the component **C** and lock it in place with the fastening elements.
13. Install component **B**.
14. Engage the lever **A** in a vertical position and insert the fastening elements.
15. Lower the lever to its horizontal position.

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

Reel holding carriage (LP)

Main components

A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

B) Reel support shaft: it is equipped with a friction device to stop the reel from unravelling.

C) Rollers: they are used to pre-stretch the film.

– The rollers are coupled with gears.

D) Roller (idle)

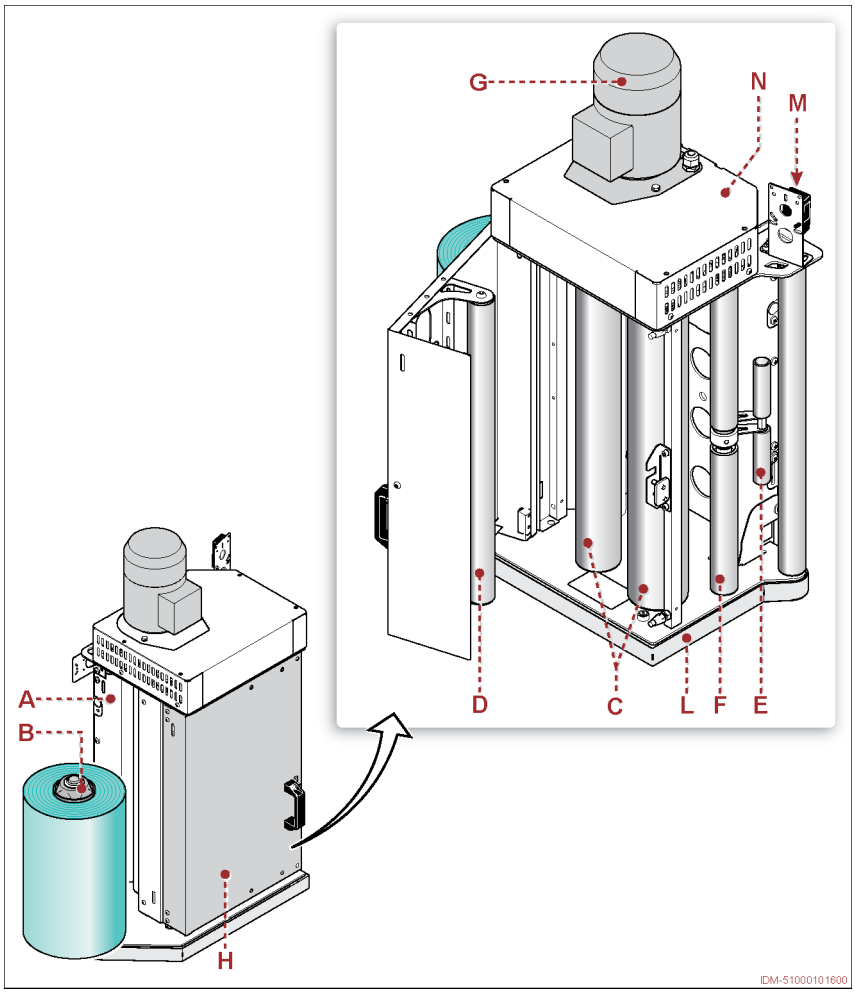
– On closing the guard , the roller **D** is positioned centrally with respect to the rollers **C**.

E) Dancer roller (idle): it is equipped with sensor to detect the film tension.

– The roller is equipped with a sensor that interfaces with the electric motor **G** to adjust the speed of the rollers **C**.

F) Roller (idle)

G) Electric motor: it drives the pre-stretch rollers.



H) Interlocked mobile guard: safety device to prevent access to the components whose operation may represent a risk.

– When opening the guard, the machine stops in safe conditions. The machine restarts only once the guard has been closed and operation has been restored.

L) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

M) Photocell: it detects the presence of the pallet positioned on the platform and, during wrapping, it detects its upper side.

– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.

N) Protective guard for the drive system of rollers

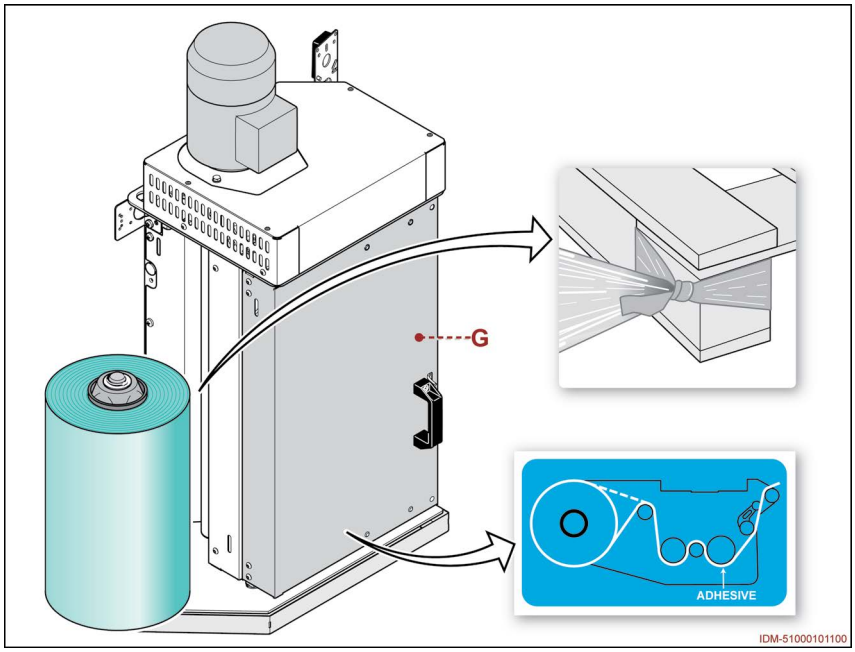
Film Coil Feeding

1. Lower the reel holding carriage until its endstroke.
2. Open the cover **G**.
3. Remove the cardboard core of the reel.
4. Insert the new reel.

Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

5. Insert film according to the required direction of the adhesive size.
6. Tie the trailing end of the film to the base of the product to be wrapped.
7. Close the cover **G**.



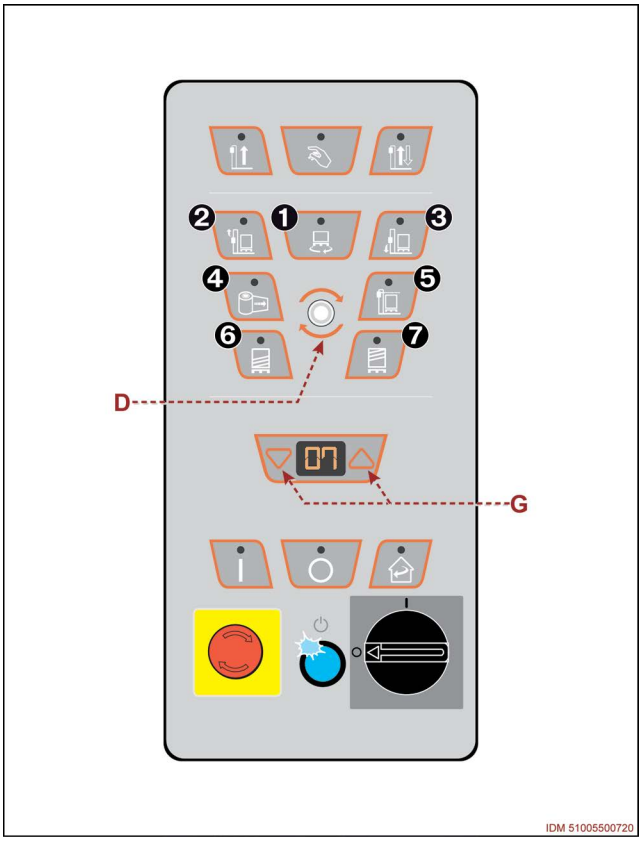
Tension adjustment of film

– **This operation is necessary in order to prevent the film from breaking during wrapping.**

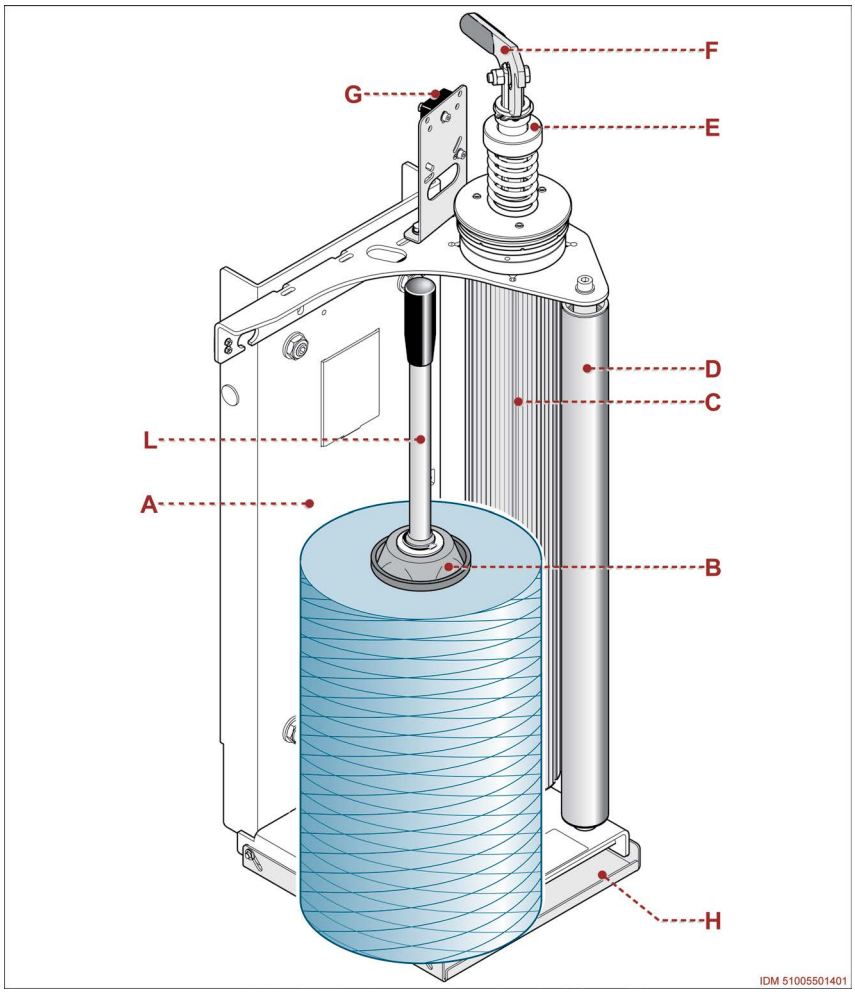
1. Repeatedly press the button **D** until selecting the parameter ❹.

– LED turns on.

2. Adjust the film tension via the controls **G**.
3. Press key **D** to confirm.



Net-type reel holder carriage



Main components

A) Structure: it is equipped with wheels for vertical shifting of carriage on column.

– In the structure a fall arrest system is installed, which stops the carriage in case of lifting belt failure.

B) Reel holder: it is equipped with braking system to avoid reel unwinding.

C) Roller: it tightens the net.

– Roller is coated with inserts in order to ensure film pulling during wrapping.

D) Roller (idle)

E) Ring: this device is used to adjust the tightening of net.

F) Lever: device used to disengage the roller **C**.

G) Photocell: it detects the presence of the pallet positioned on the platform and, during wrapping, it detects its upper side.

– On request, a “black” version of the photocell can be supplied, specifically designed to detect wrapped items or products with a prevalence of dark surfaces.

H) Feeler: safety device that stops the descent of the reel holding carriage in the presence of an obstacle.

L) Lever: control to be rotated to adjust the braking degree.
- **Clockwise:** the value increases.
- **Anti-clockwise:** the value decreases.

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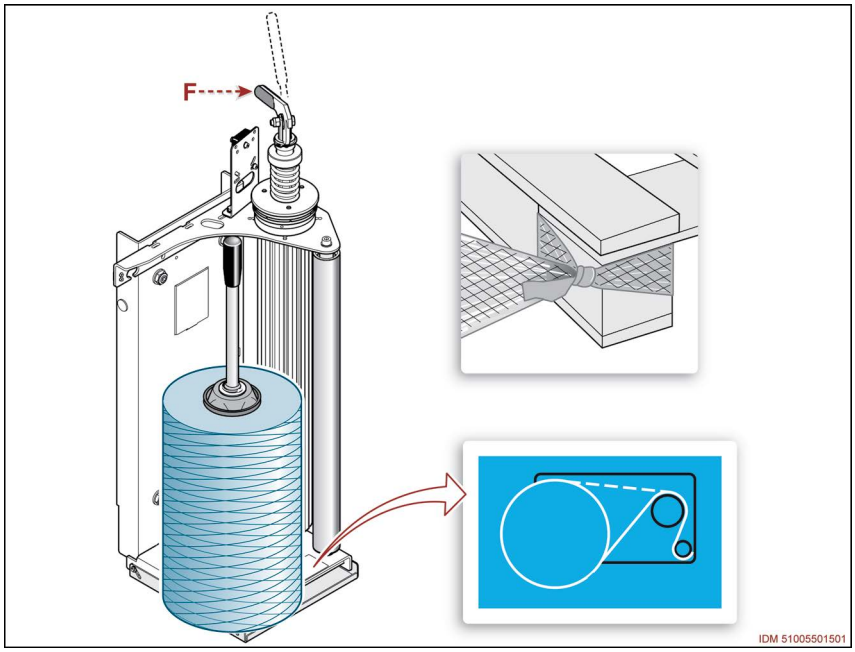
Supplying the reel with net



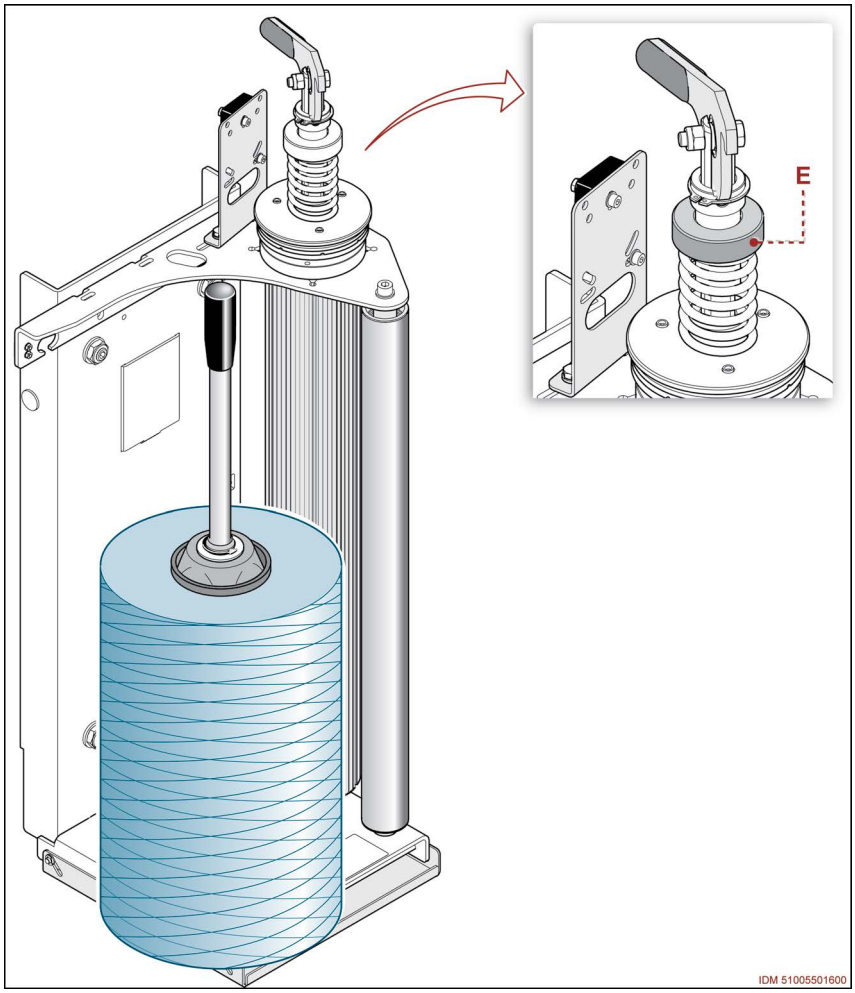
1. Lower the reel holding carriage until its endstroke.
2. Lift the lever **F** to its vertical position.
3. Remove the cardboard core of the reel.
4. Insert the new reel.

Important

In order to avoid transferring impurities to the surfaces of the guiding rollers, discard the outer wrapping film layer on the reel.

5. Tie the end of the net to the base of the product to be wrapped.
6. Start wrapping.
7. Lower the lever **F** to its horizontal position after the platform has completed at least one turn.

Adjustment of net tension



– **This operation is necessary in order to prevent the net from breaking during wrapping.**

1. Lower the reel holding carriage until its endstroke.
2. Lift the lever **F** to its vertical position.
3. Start wrapping.
4. Lower the lever **F** to its horizontal position after the platform has completed at least one turn.
5. Adjust the net tension by means of ring **E**.

– **Clockwise:** the value increases.

– **Anti-clockwise:** the value decreases.

Cleaning and replacement of brake disc

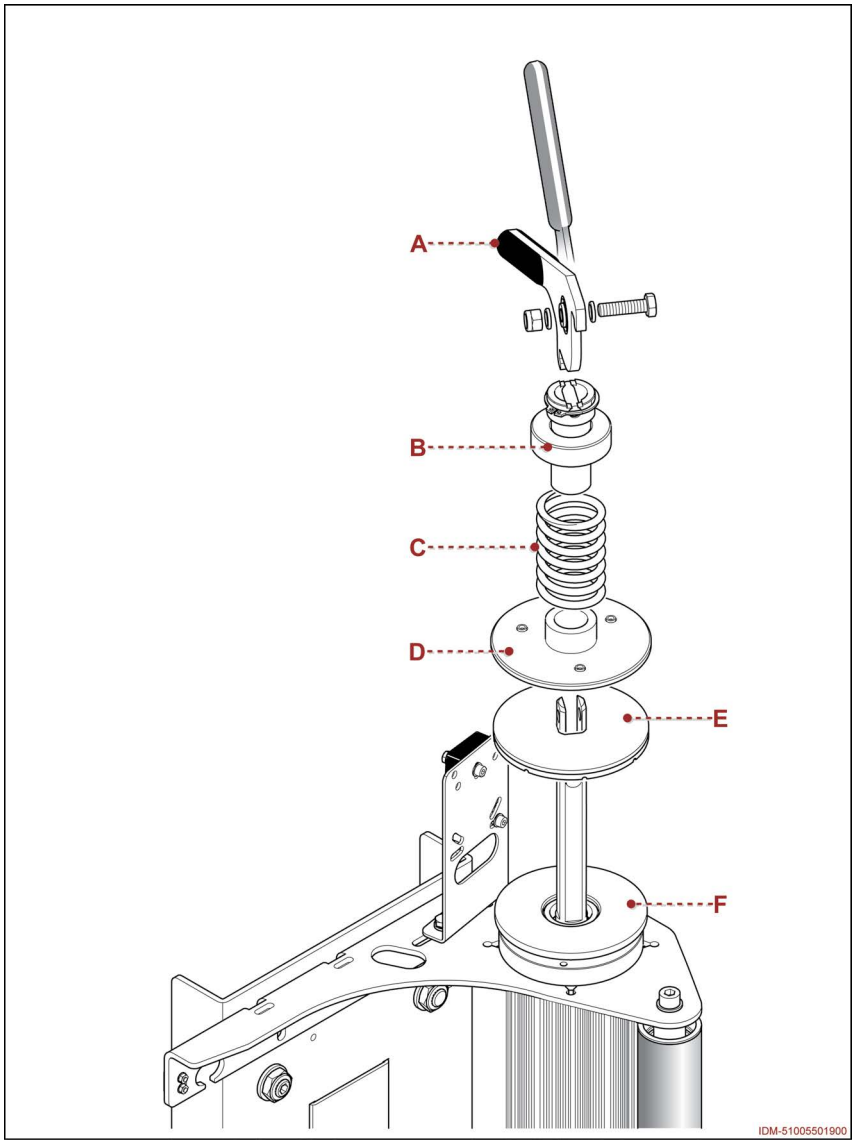
– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**

1. Lift the lever **A** to its vertical position.
2. Remove the fastening elements and remove the lever.
3. Remove in a sequence the components **B-C-D-E**.
4. Clean the matching surfaces of the friction discs **E-F**.
5. Check the wear level of the friction material of the disc **E**.

– In the case of excessive wear, replace the component.

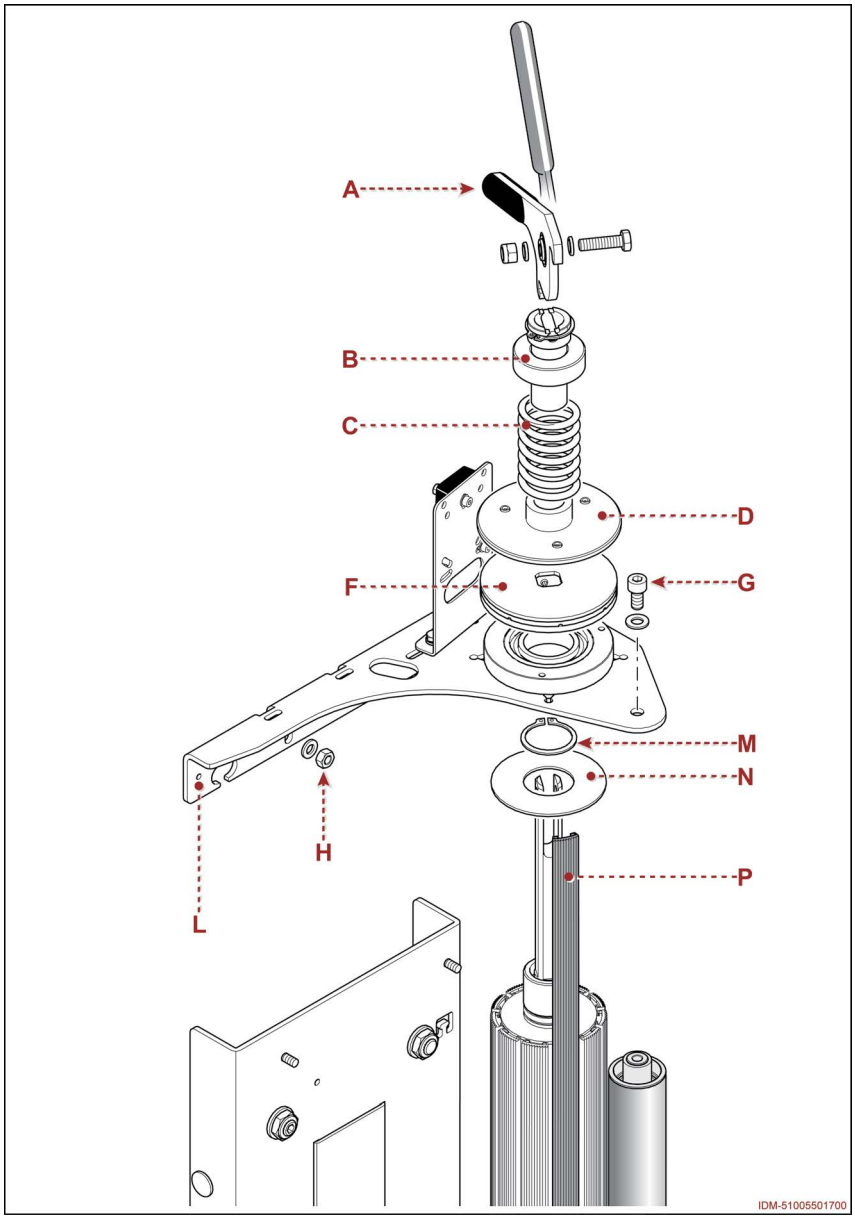
6. Install the disc **E** with the friction material facing downwards.
7. Install in a sequence the components **D-C-B**.
8. Engage the lever **A** in a vertical position and insert the fastening elements.
9. Lower the lever to its horizontal position.

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



Replacing the outer surface of roller

– **This service should be carried out with the reel holding carriage lowered and the machine safely at a stop.**



1. Lift the lever **A** to its vertical position.
2. Remove the fastening elements and remove the lever.
3. Remove in a sequence the components **B-C-D**.
4. Remove the component **F**.
5. Unscrew screw **G**.
6. Unscrew the nuts **H**.
7. Remove the plate **L**.
8. Remove stop ring **M**.
9. Remove the component **N**.
10. Remove all the external cylinder surface inserts **P**, one at a time.
11. Thoroughly clean the grooves of the roller.
12. Insert in a sequence, one at a time, all the new external cylinder surface inserts.
13. Install component **N**.
14. Reinstall the retainer ring **M**.
15. Fit back the plate **L** and fix it with the nuts **H** without tightening.
16. Insert screw **G** and tighten it.
17. Adjust the position of the plate **L** and tighten the nuts **H**.
18. Install component **F**.
19. Install in a sequence the components **D-C-B**.
20. Engage the lever **A** in a vertical position and insert the fastening elements.
21. Lower the lever to its horizontal position.

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

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  - *Normal stop, 31*
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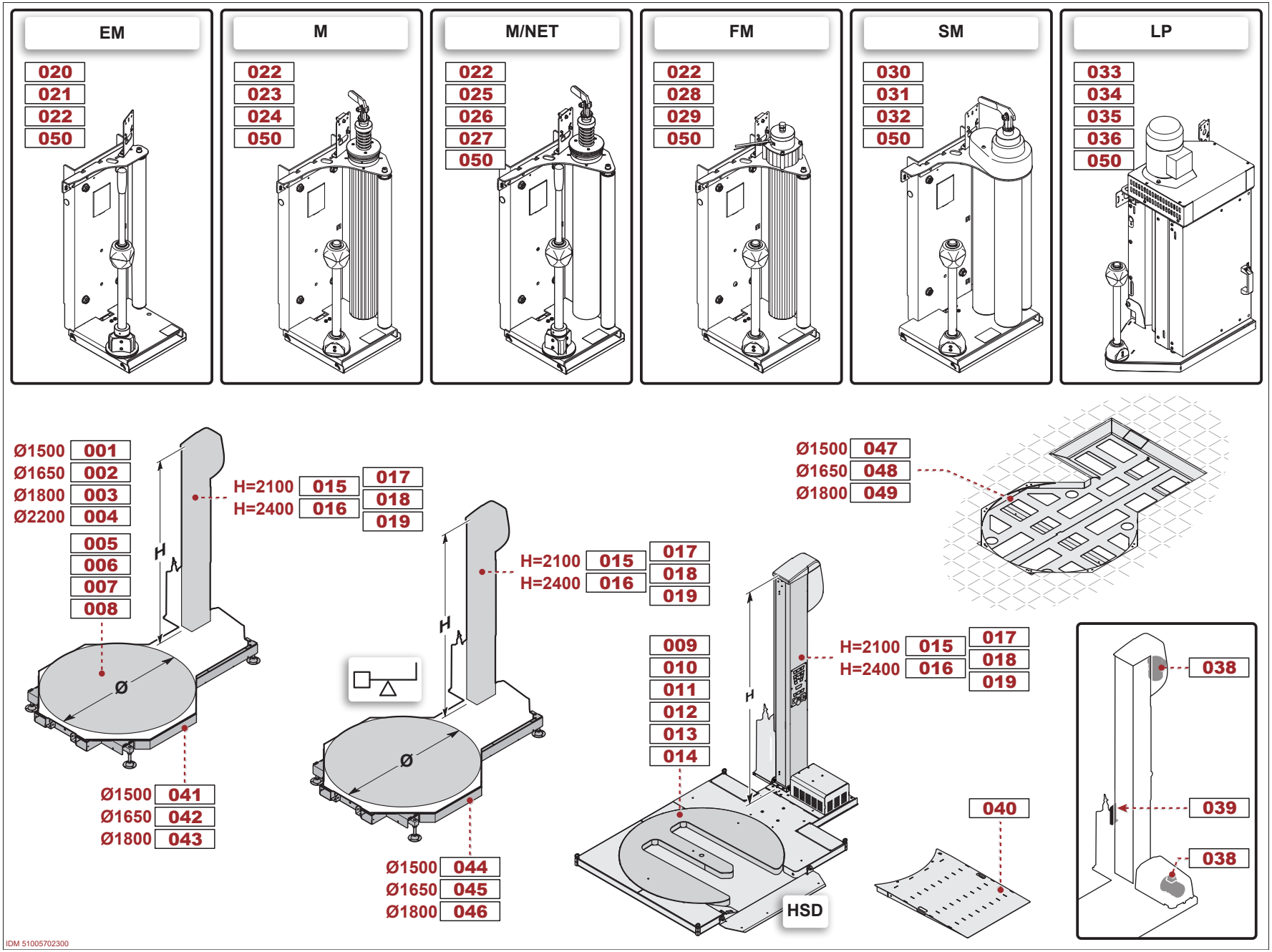

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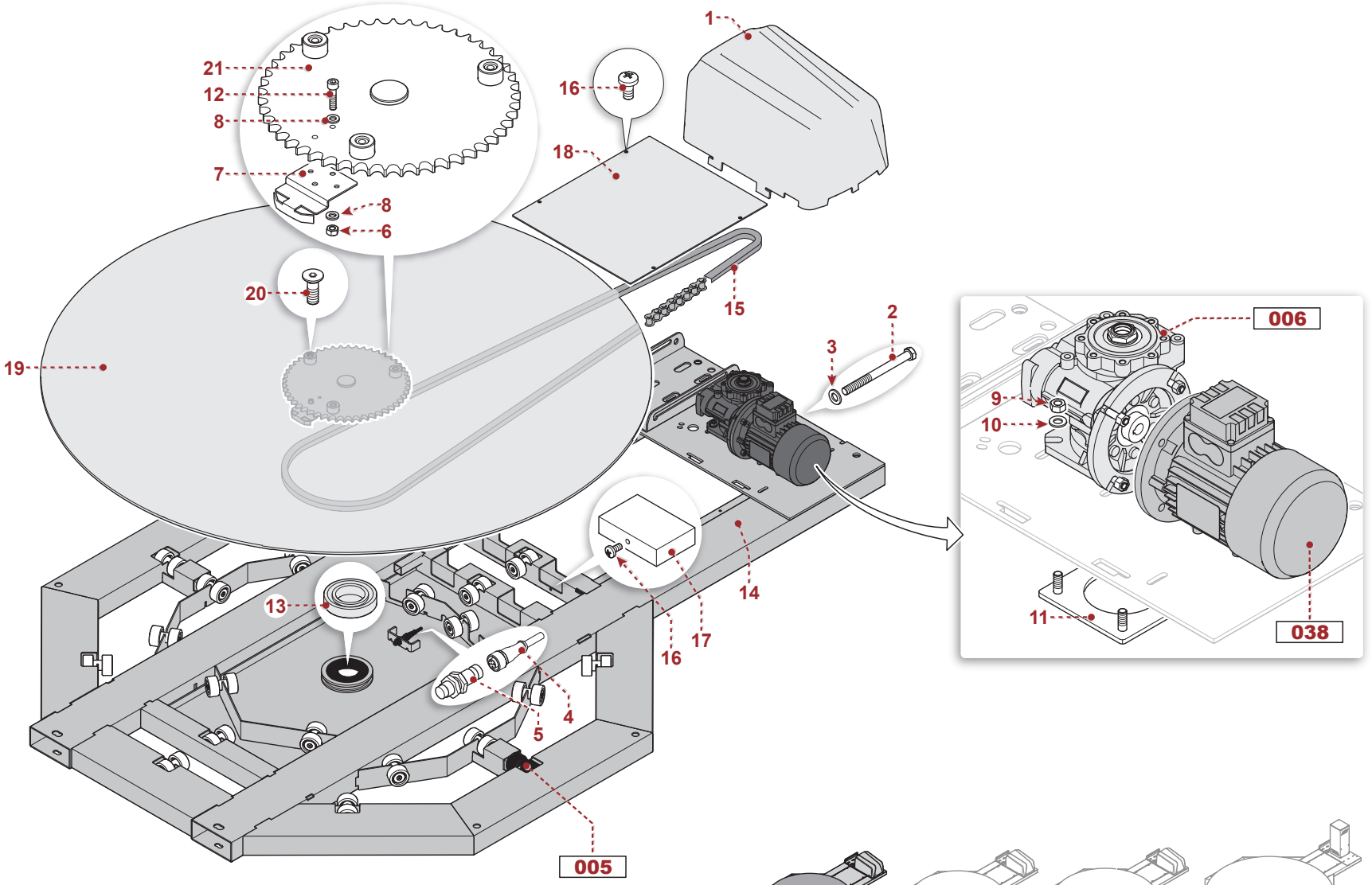

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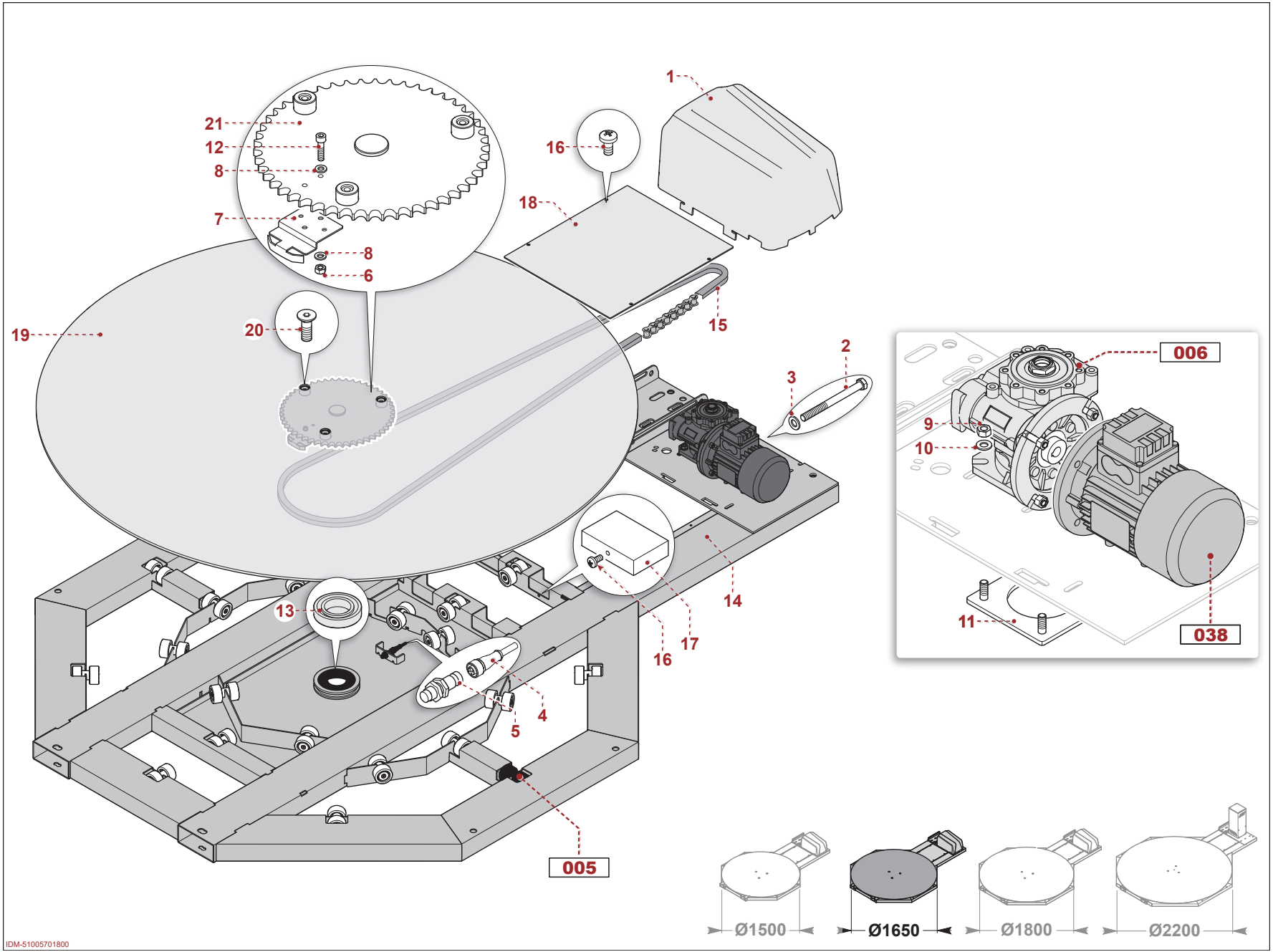

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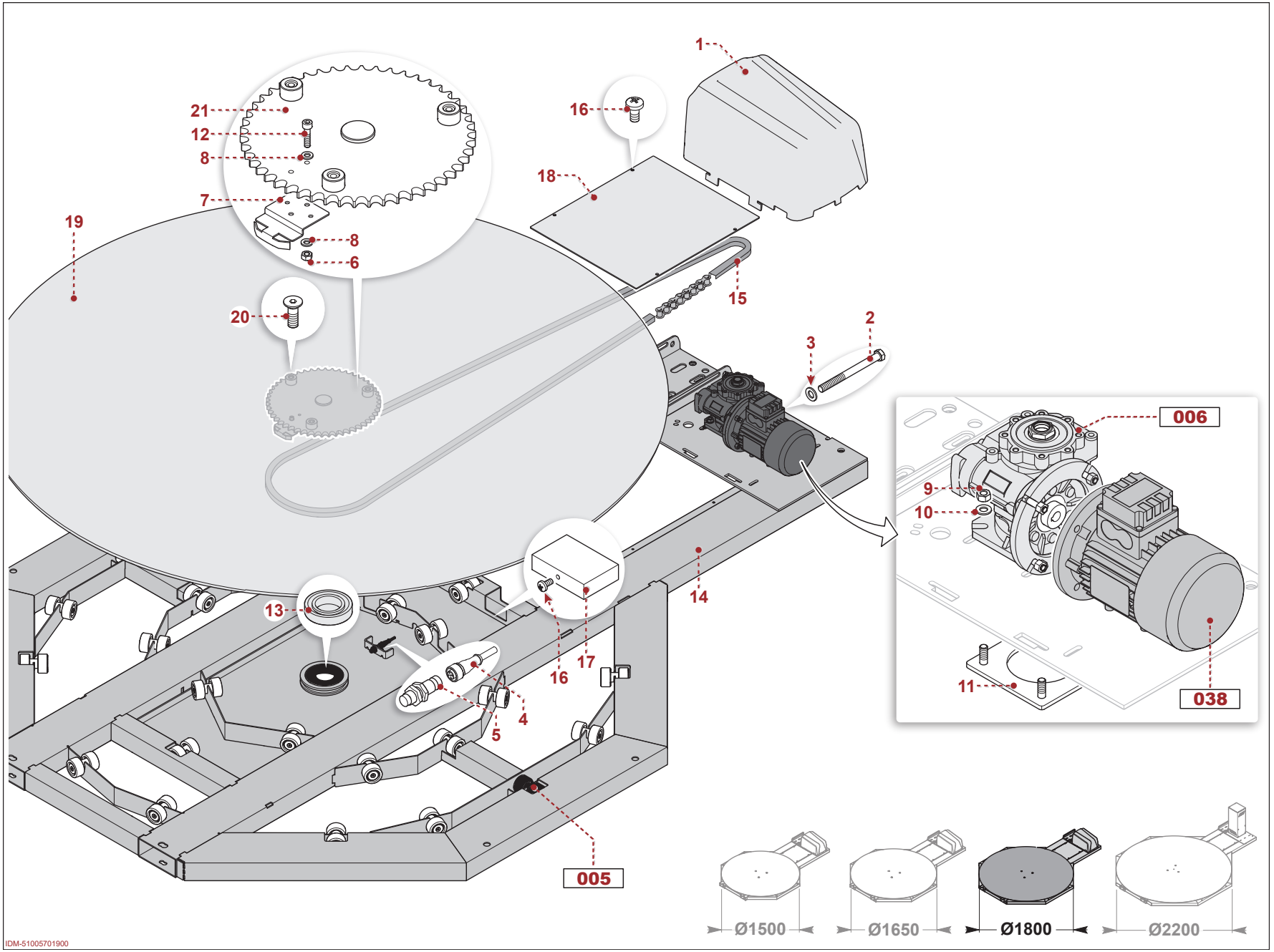

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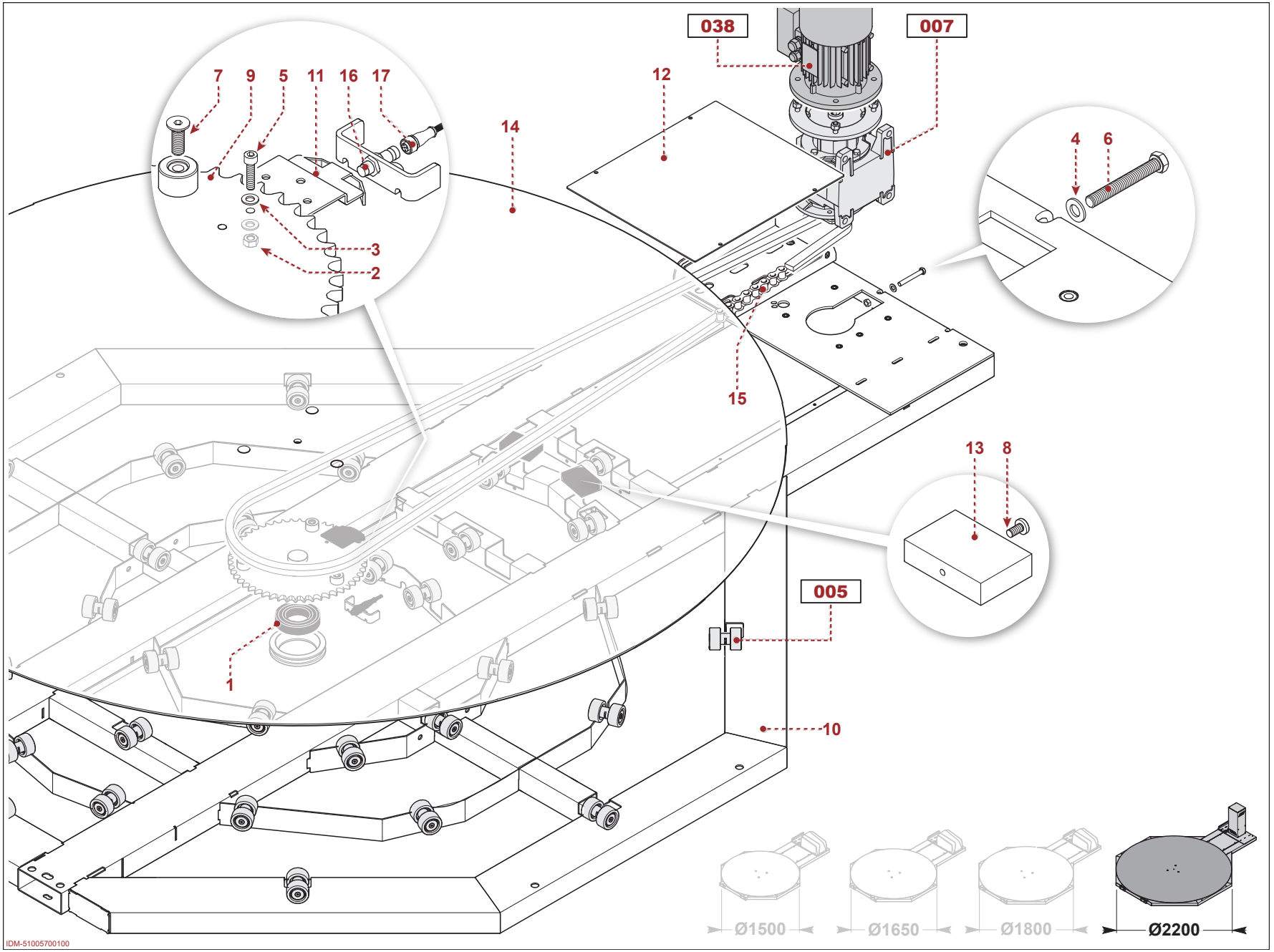

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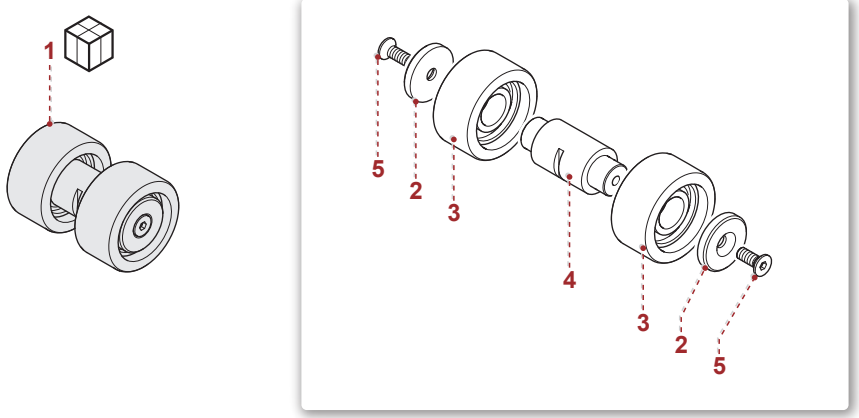

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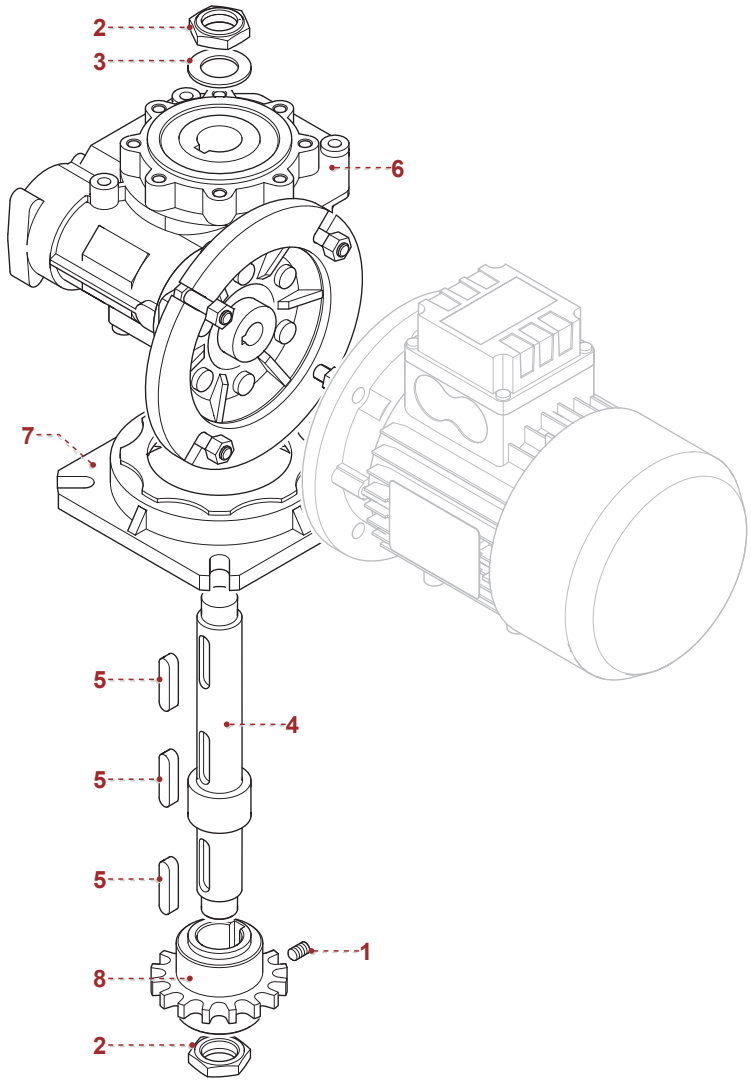

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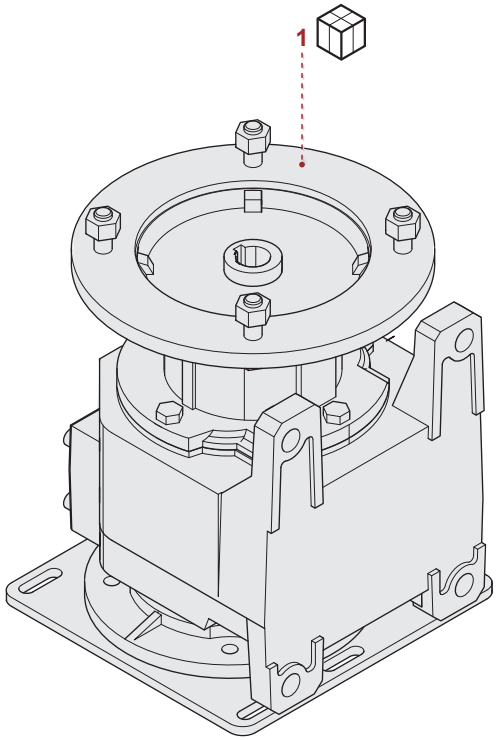

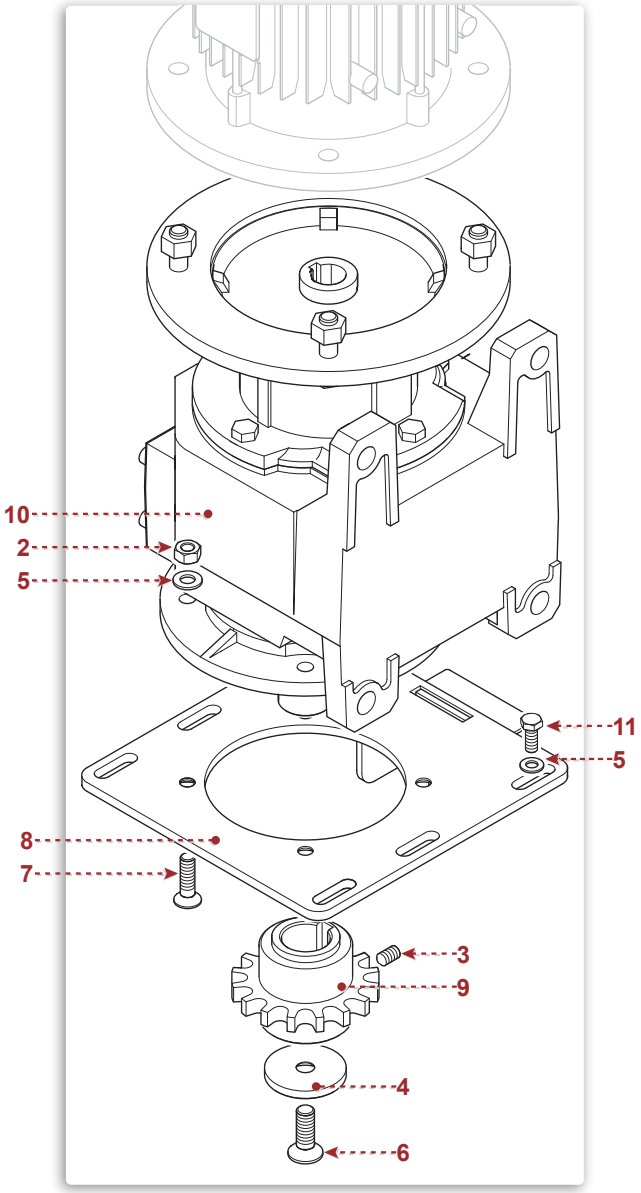

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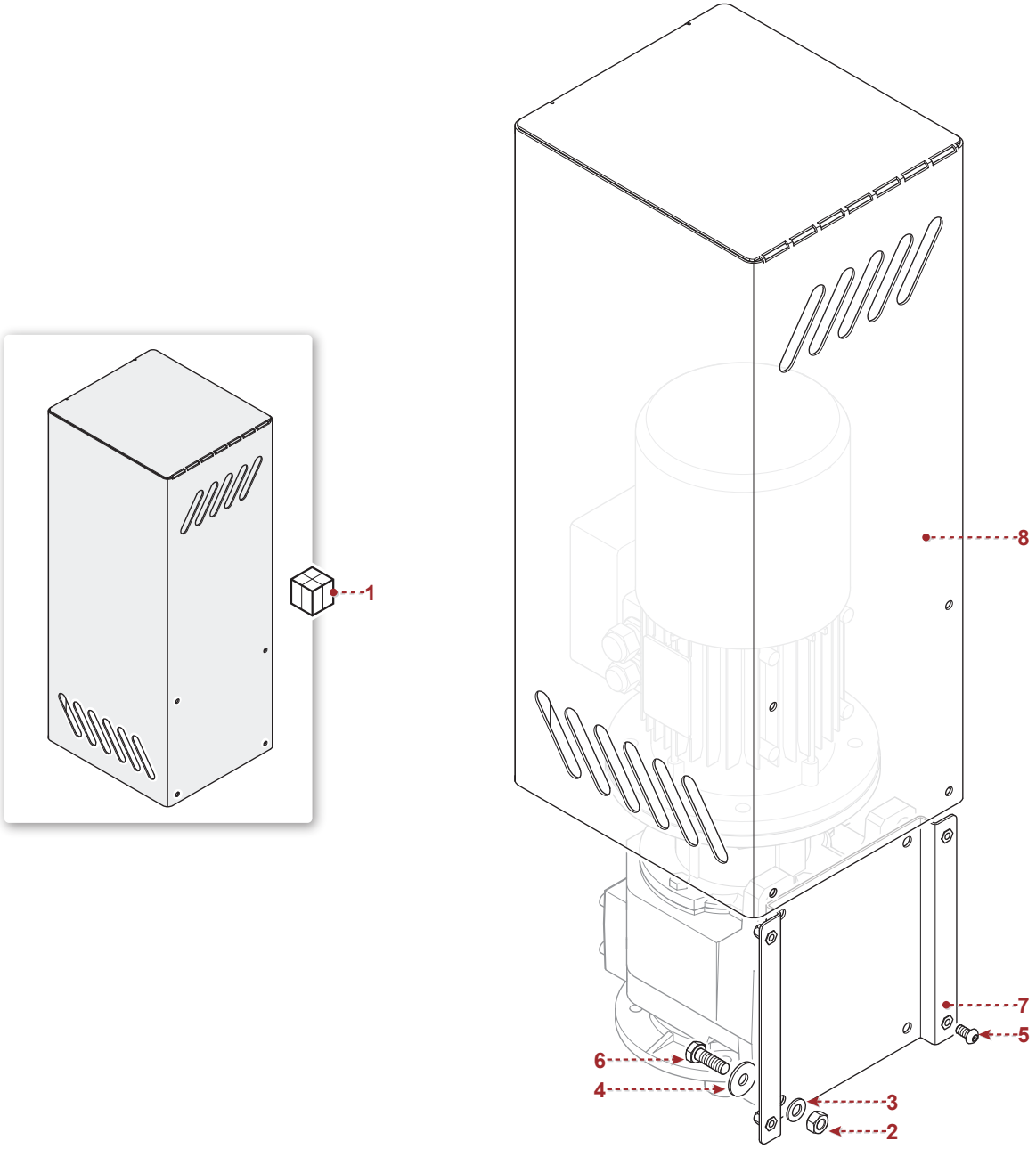

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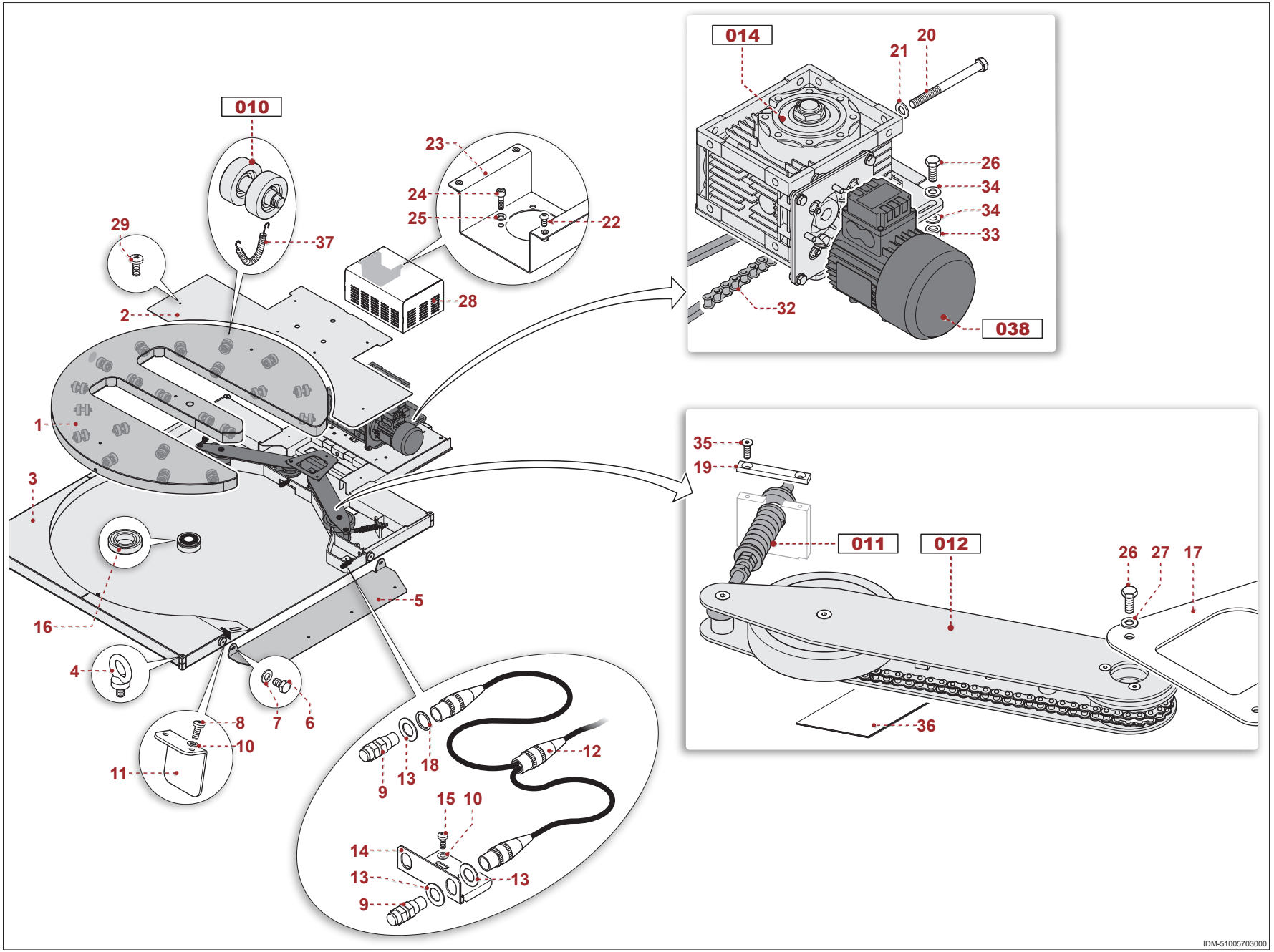

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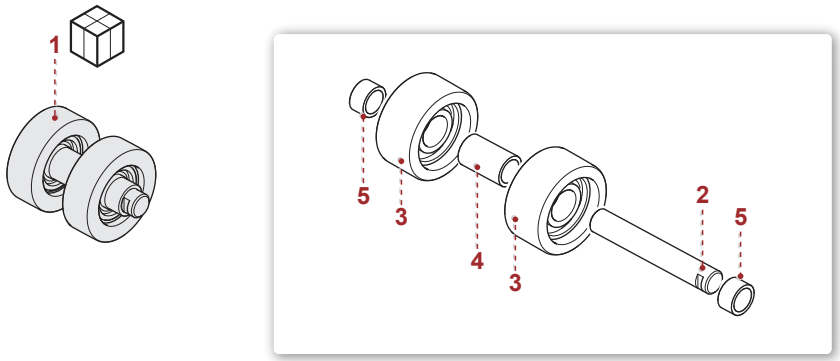

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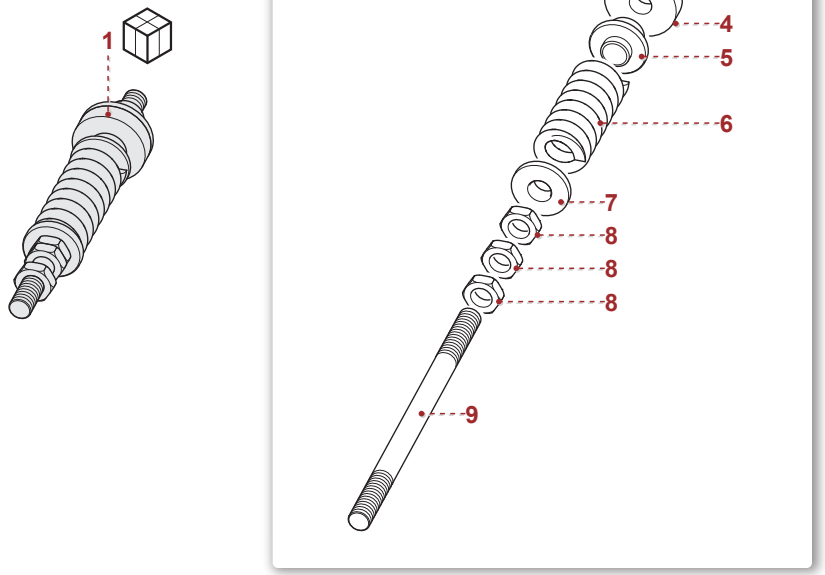

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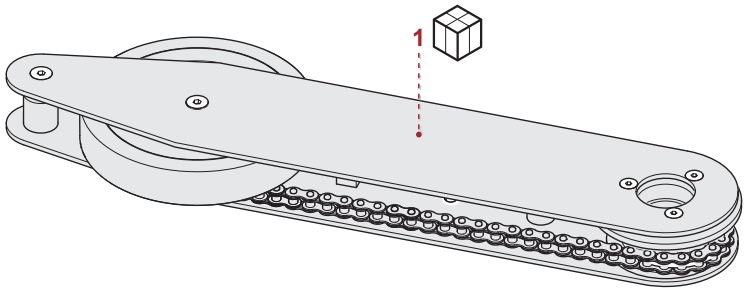

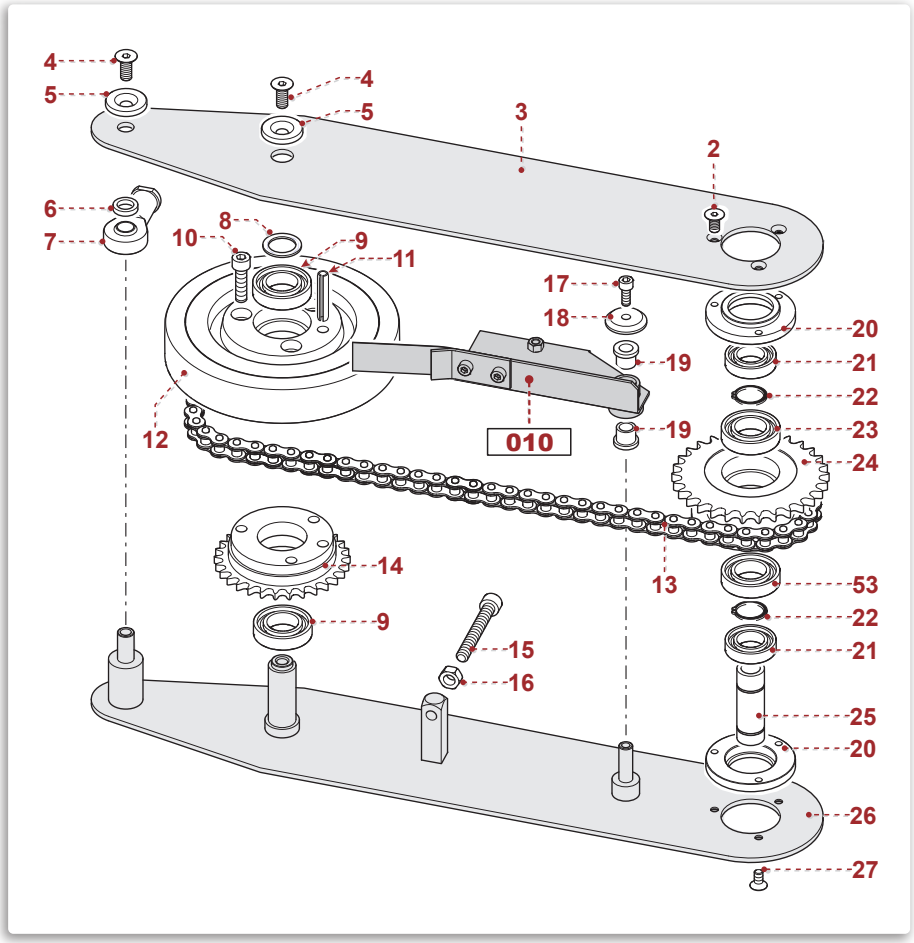

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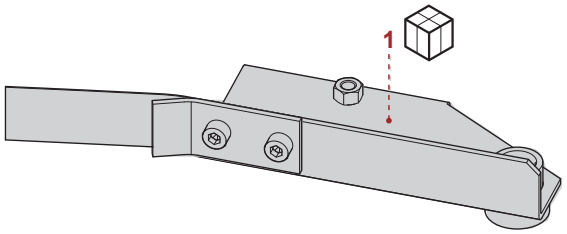

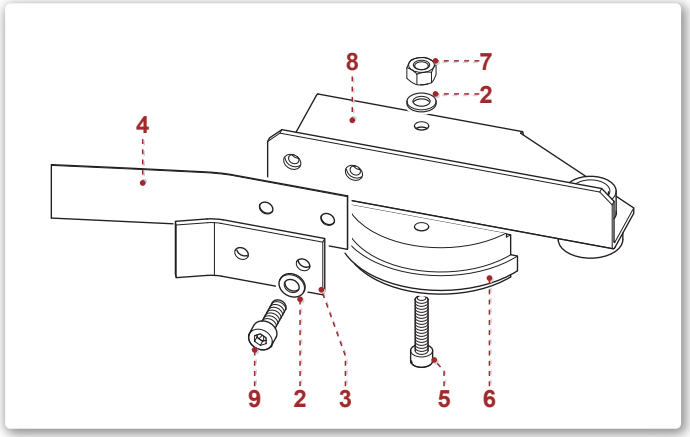

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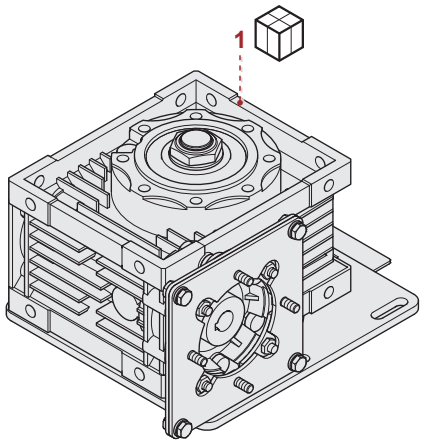

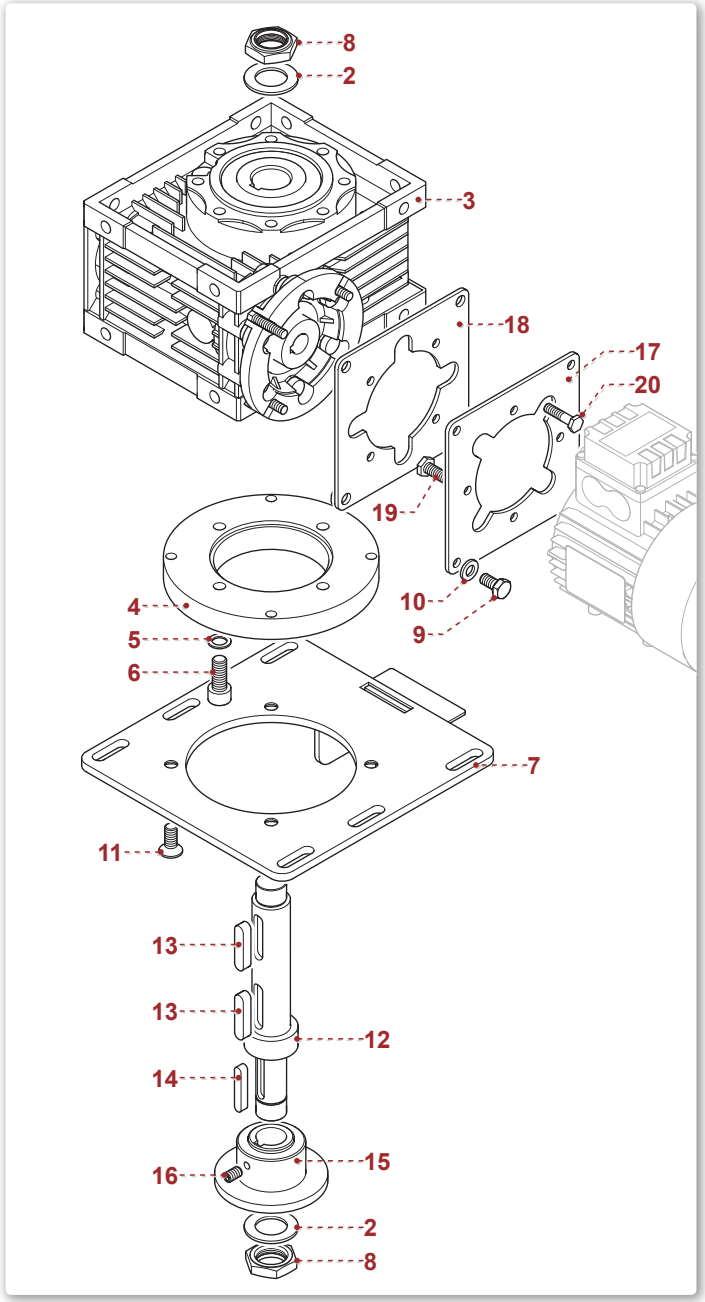

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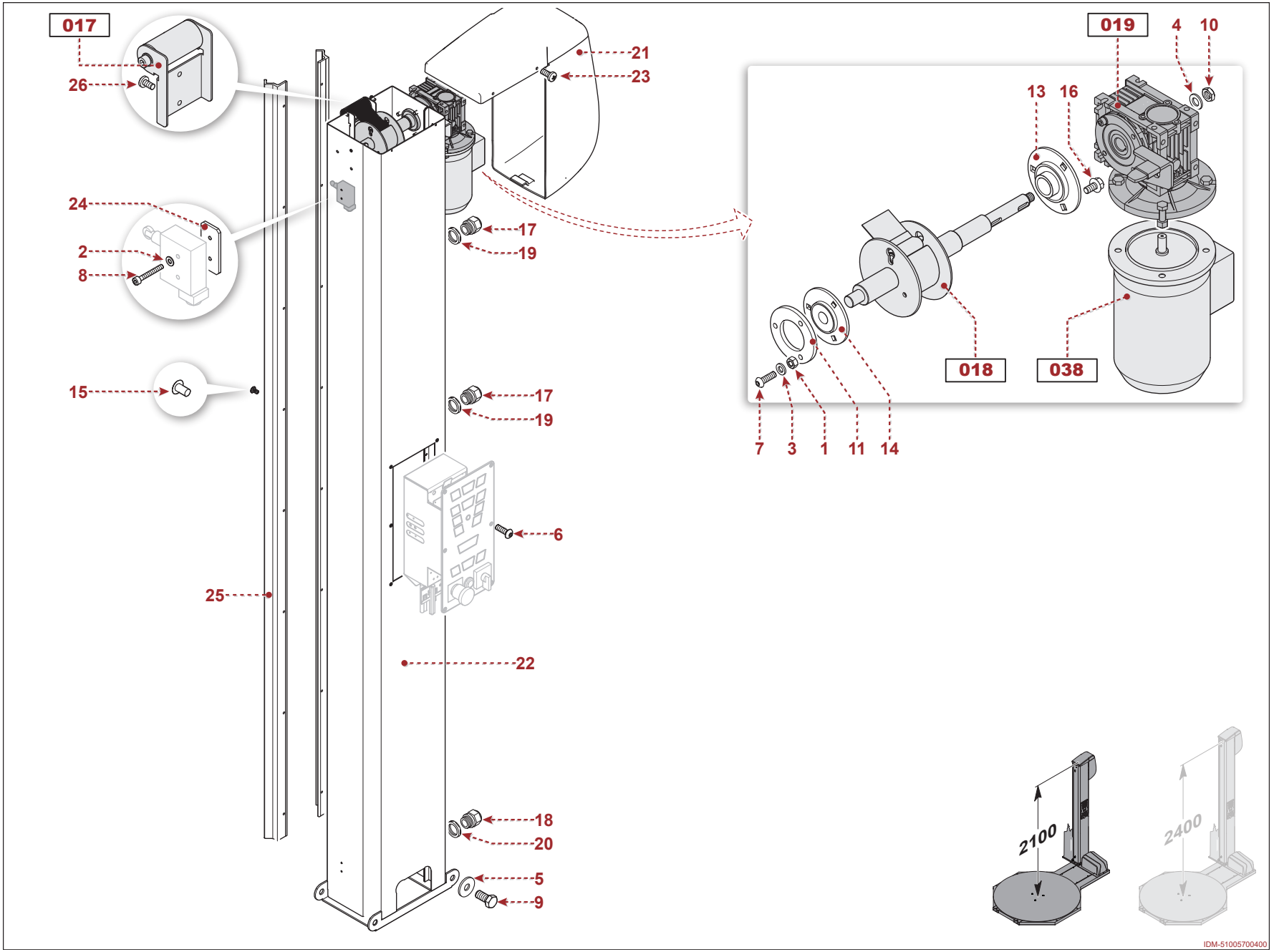

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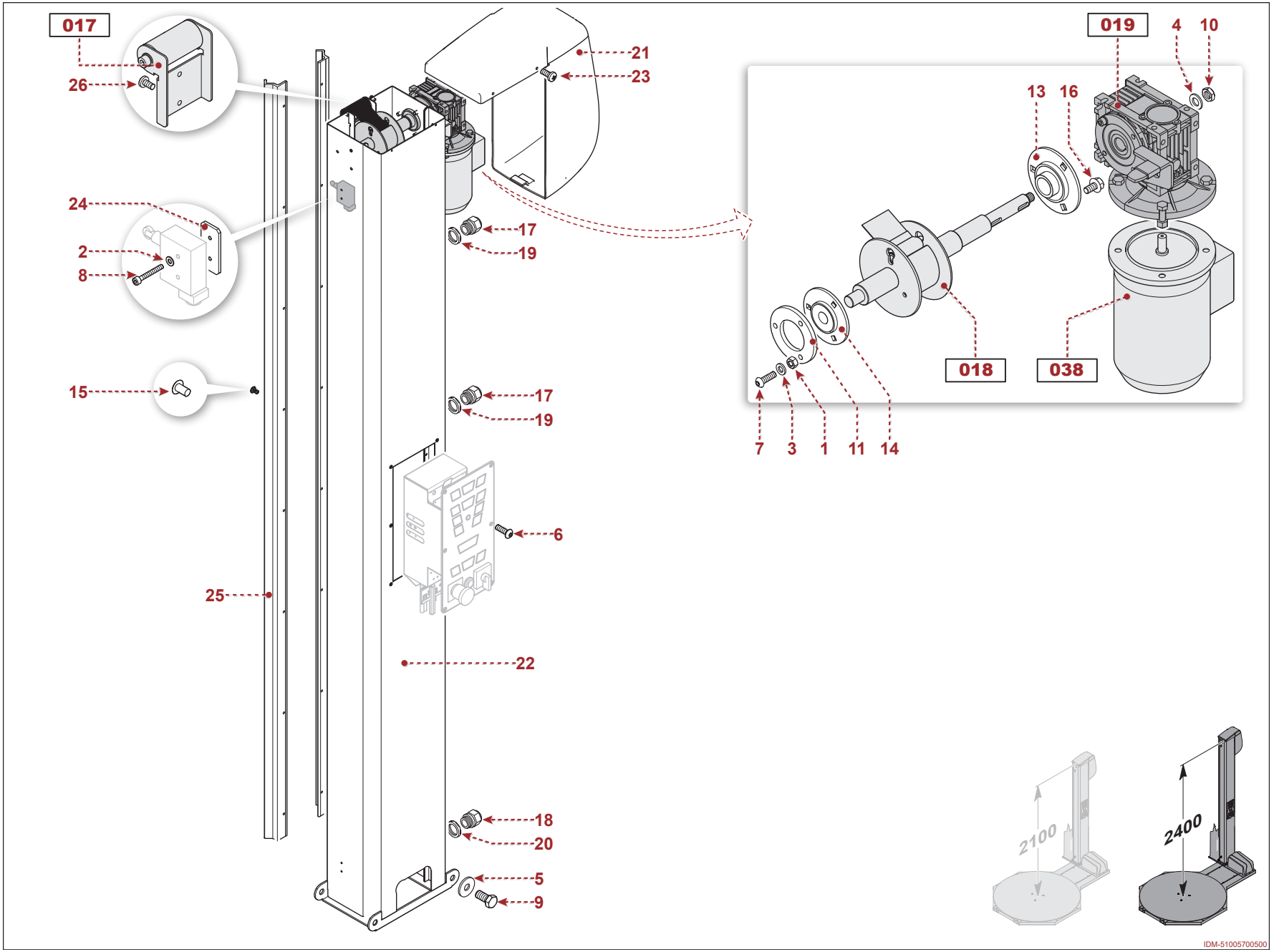

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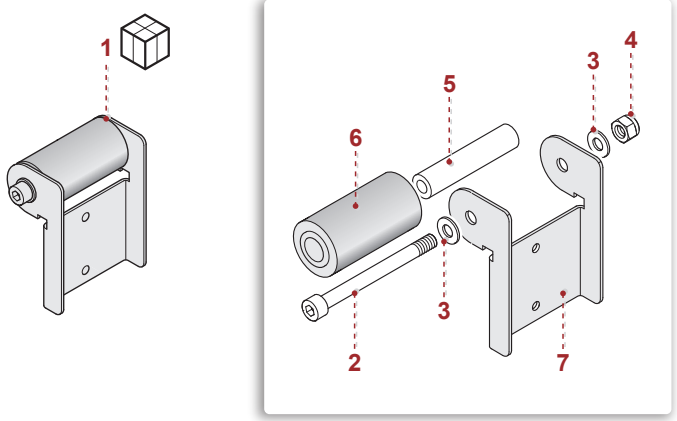

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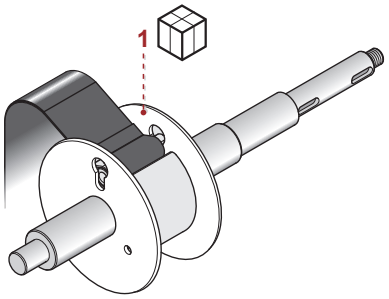

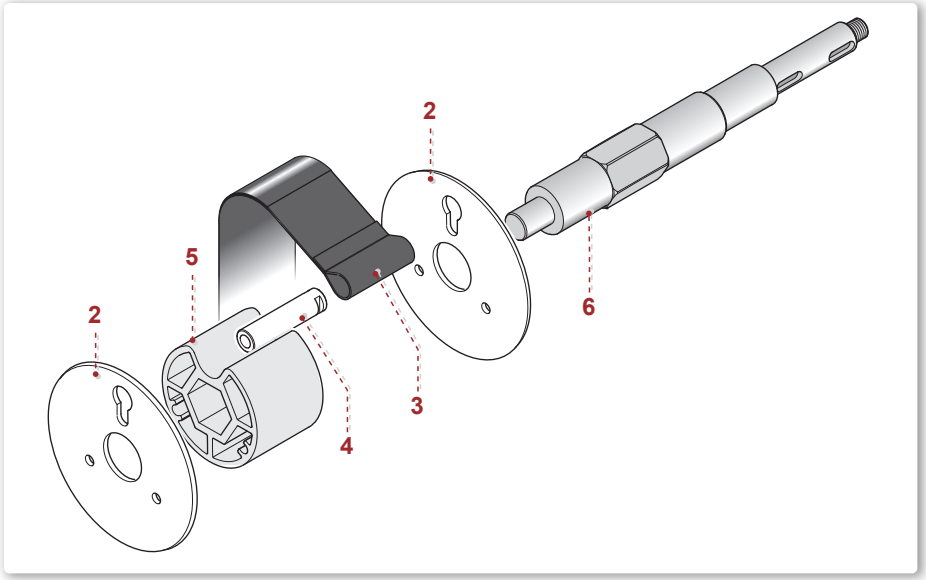

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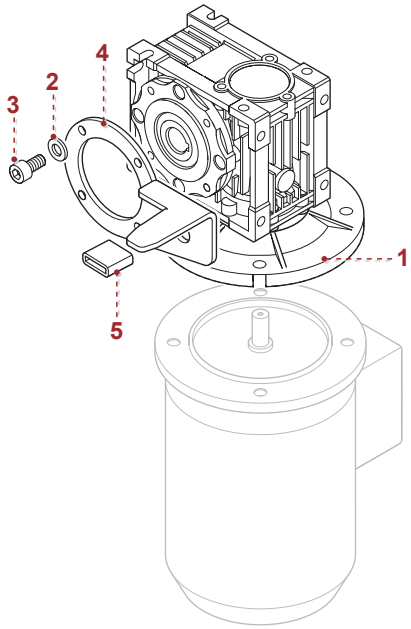

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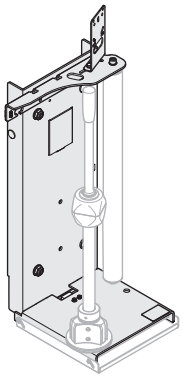

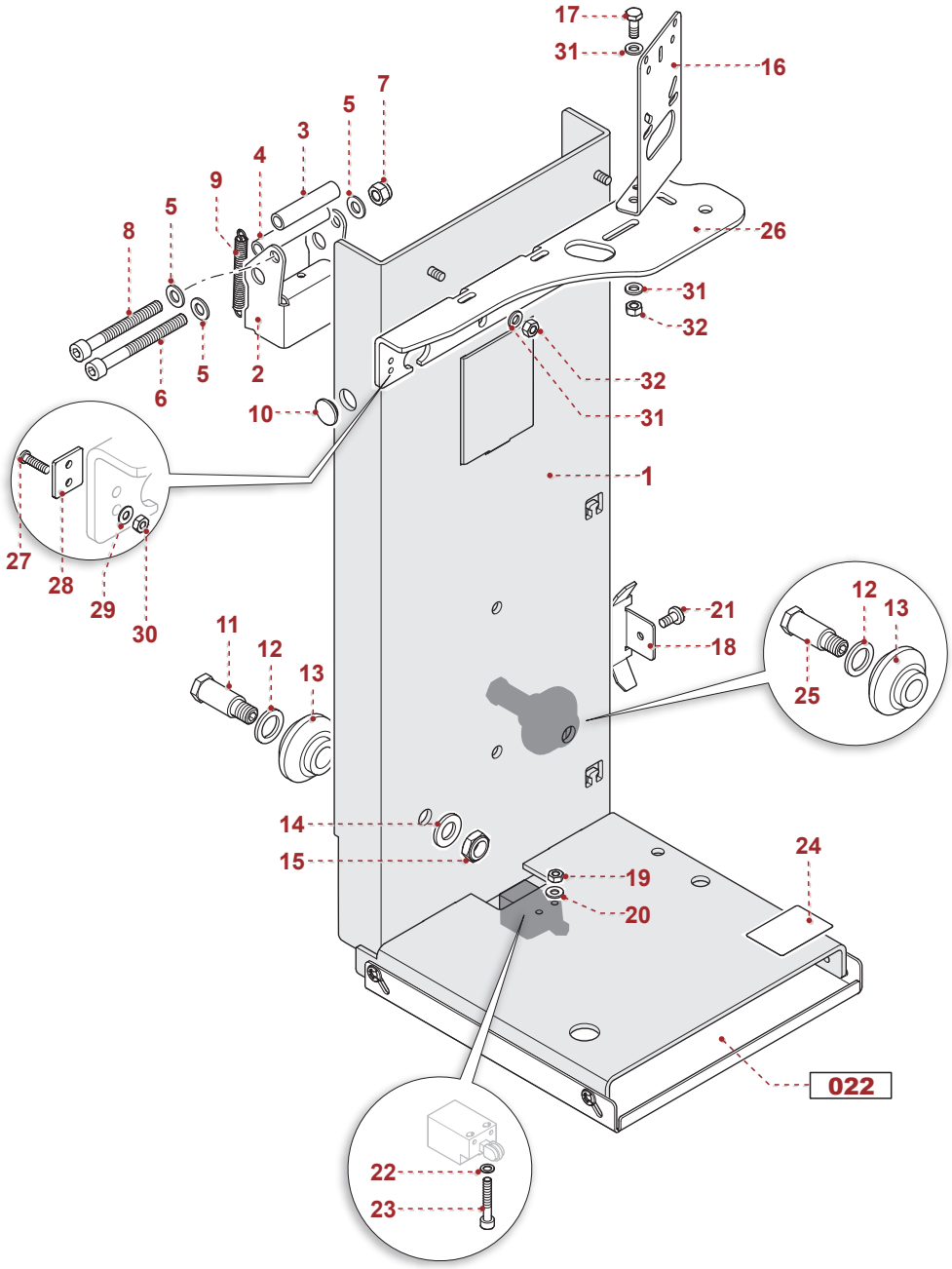

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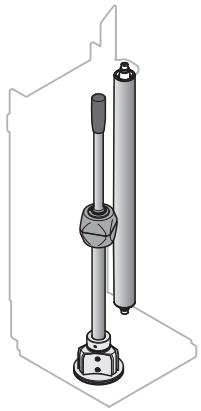

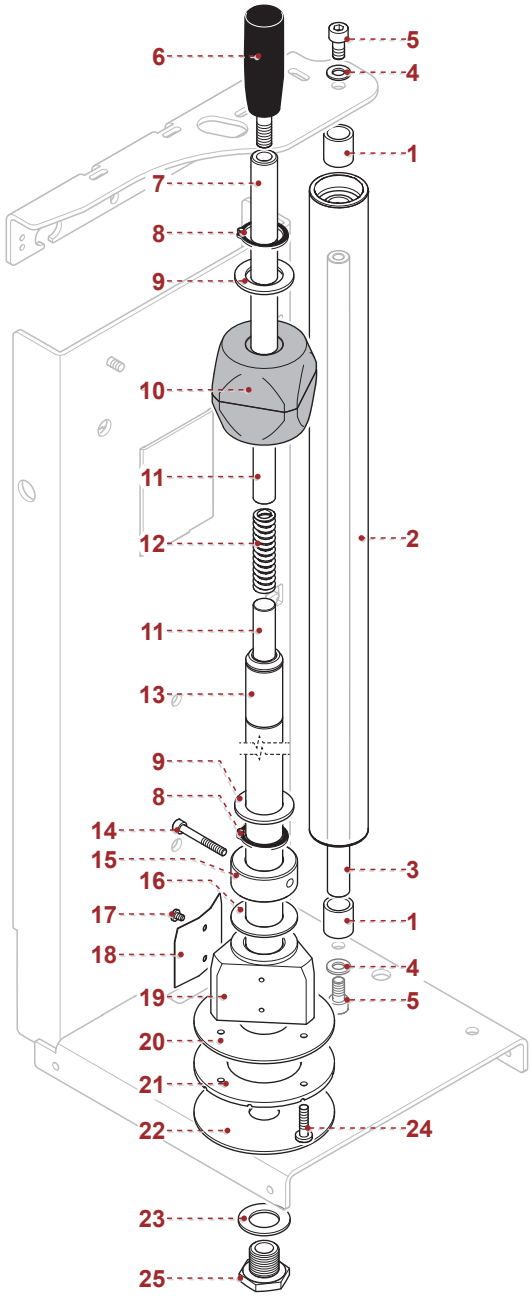

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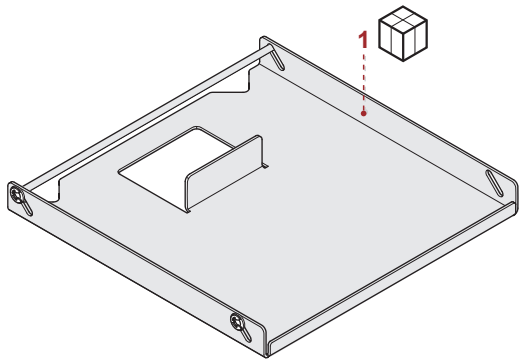

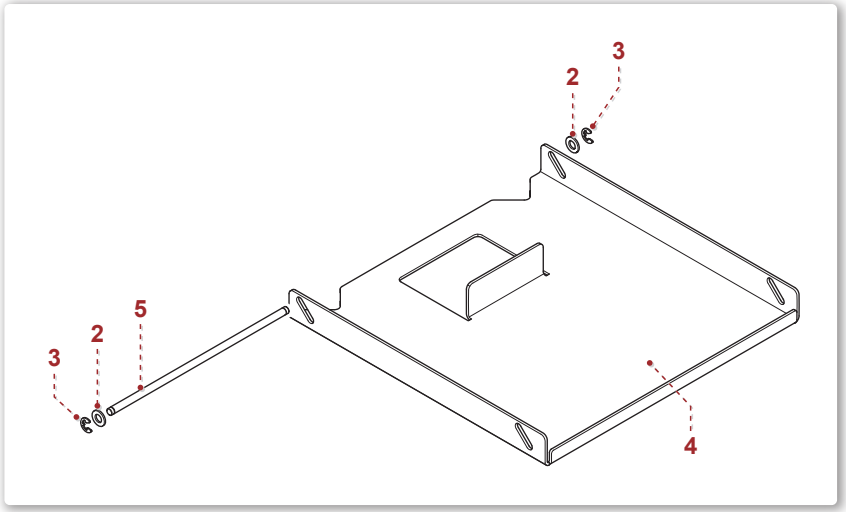

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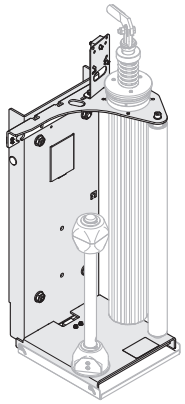

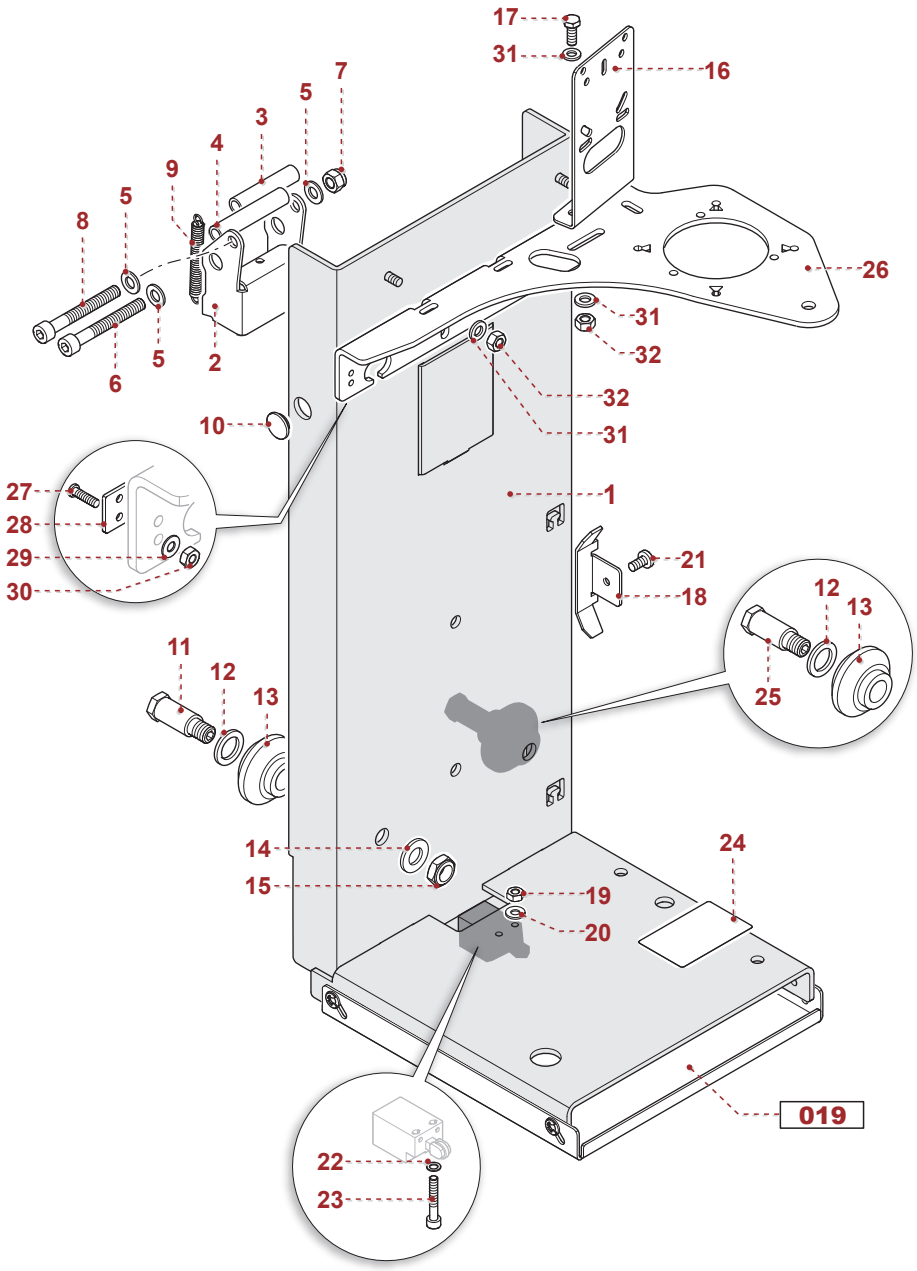

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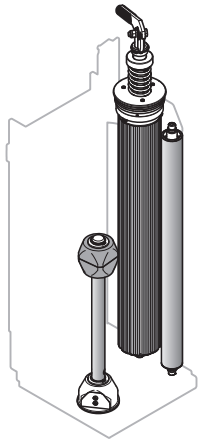

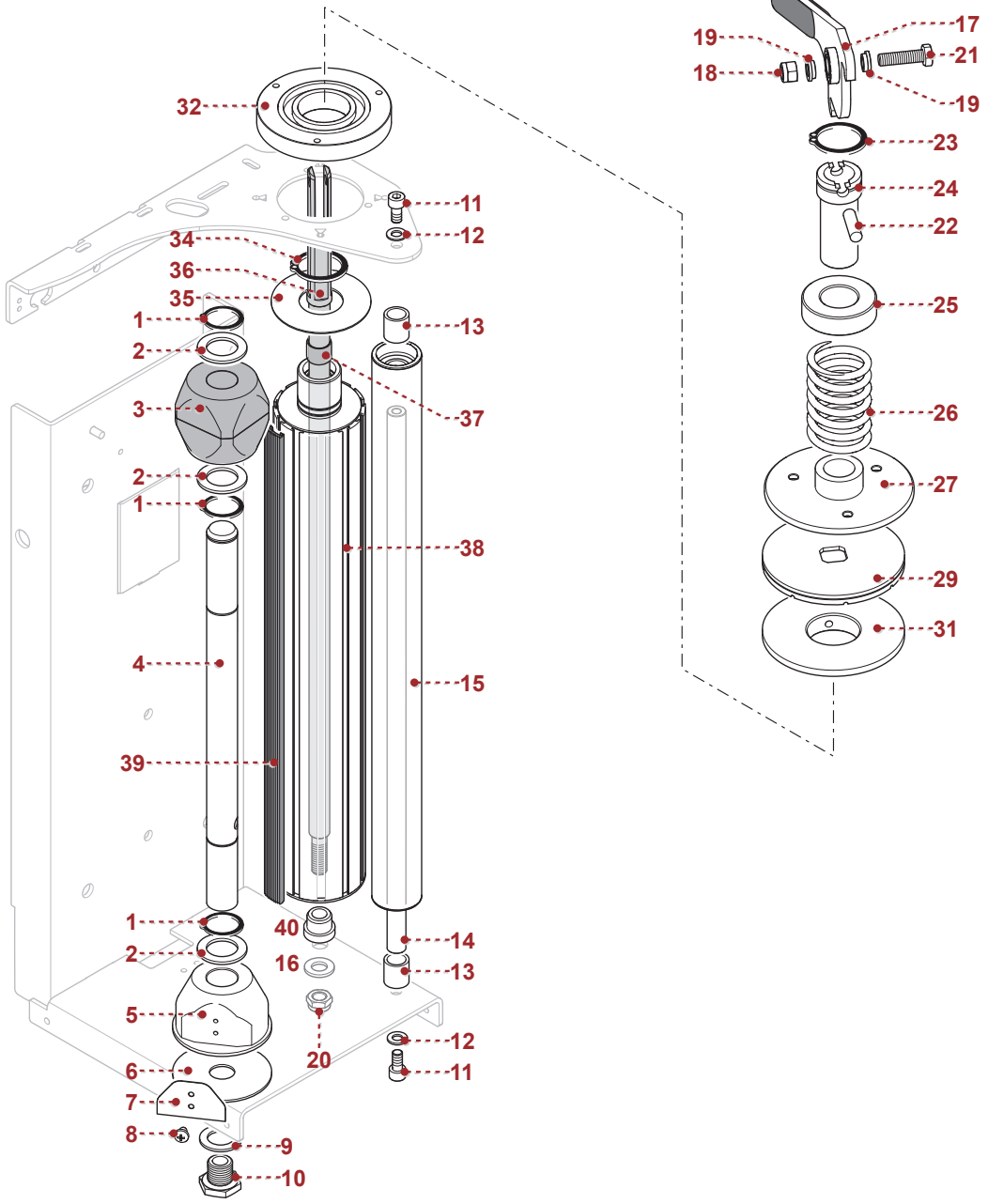

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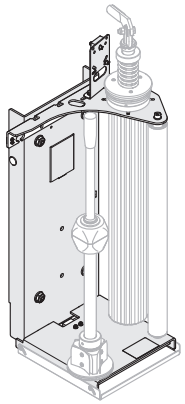

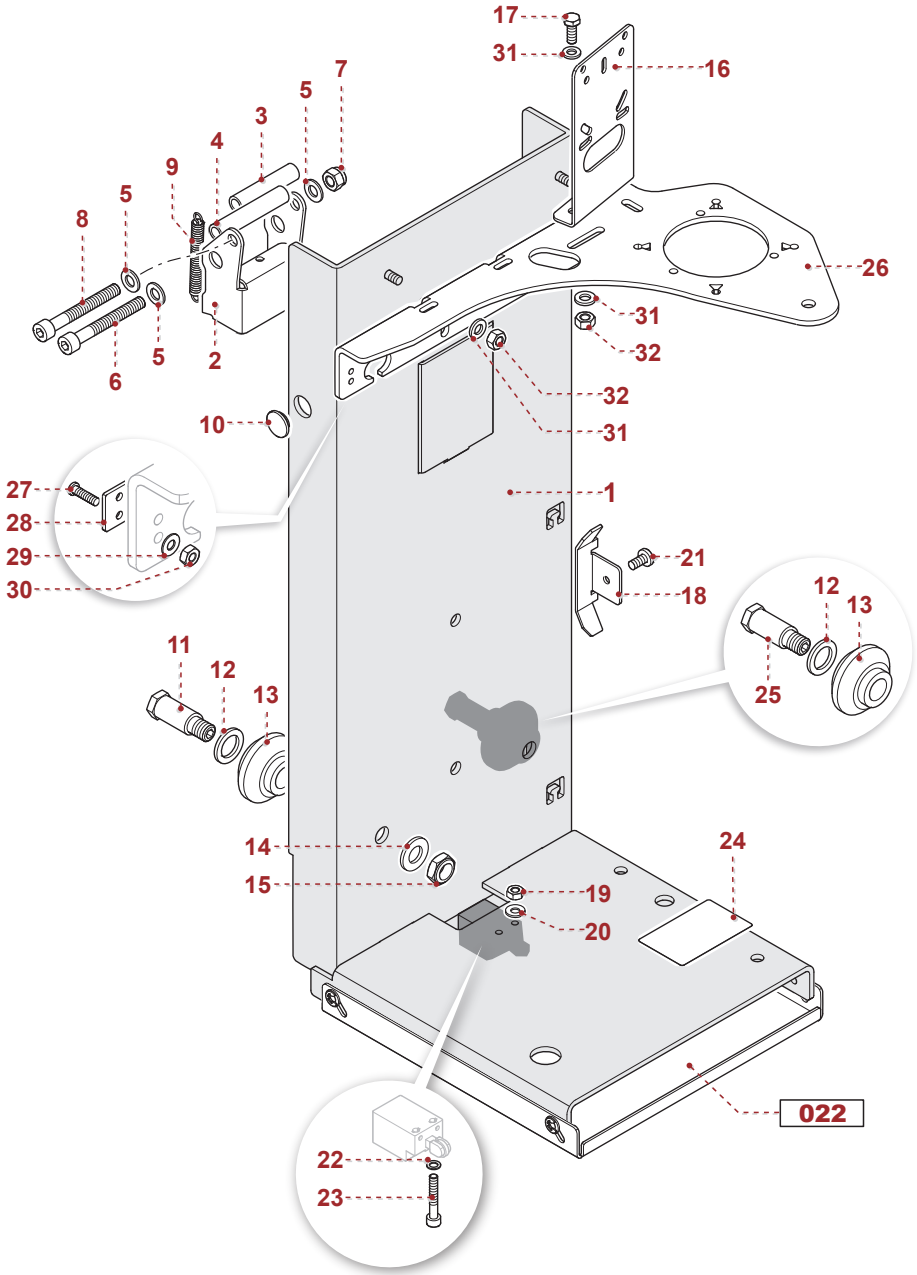

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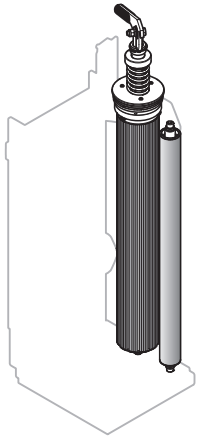

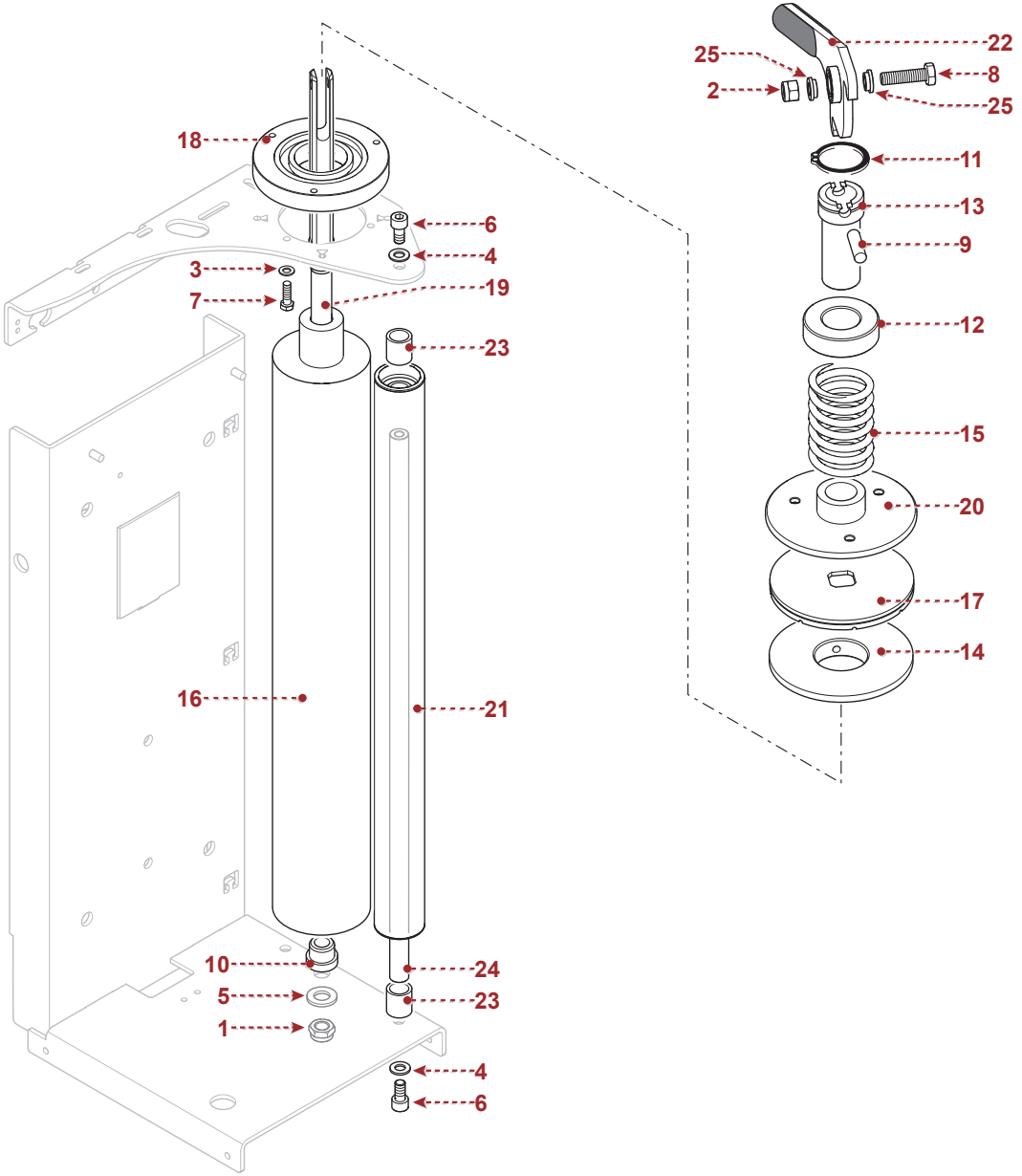

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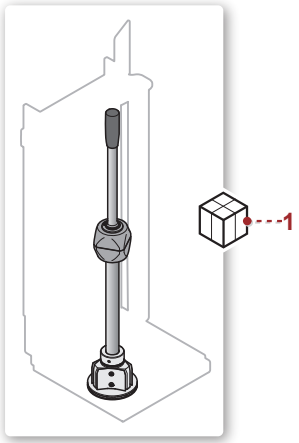

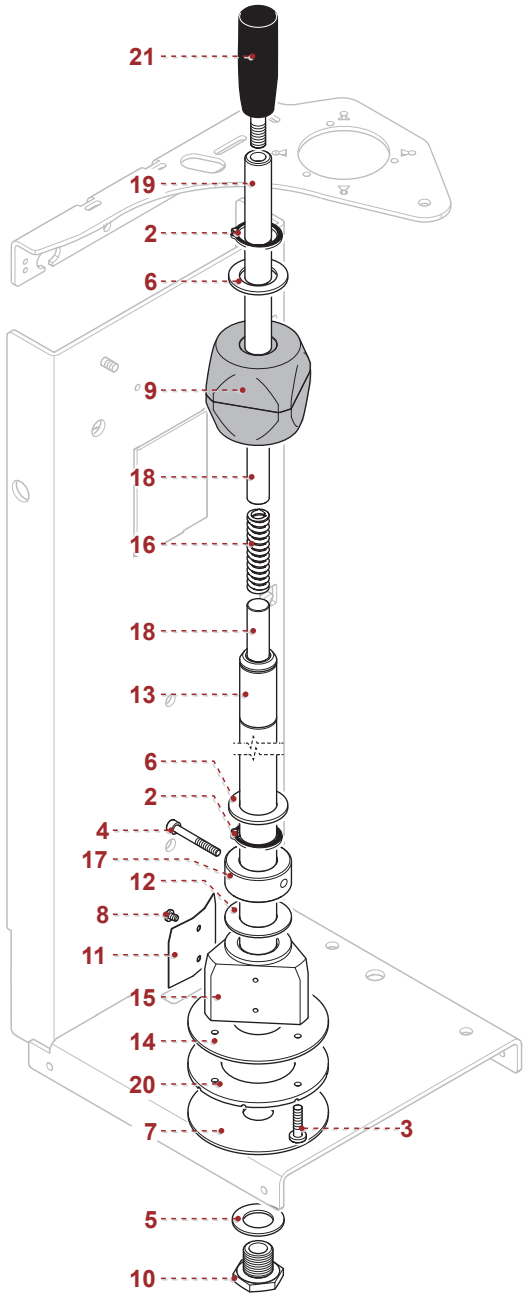

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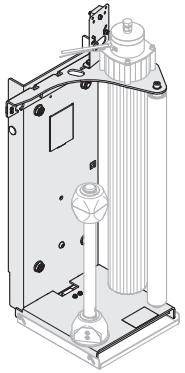

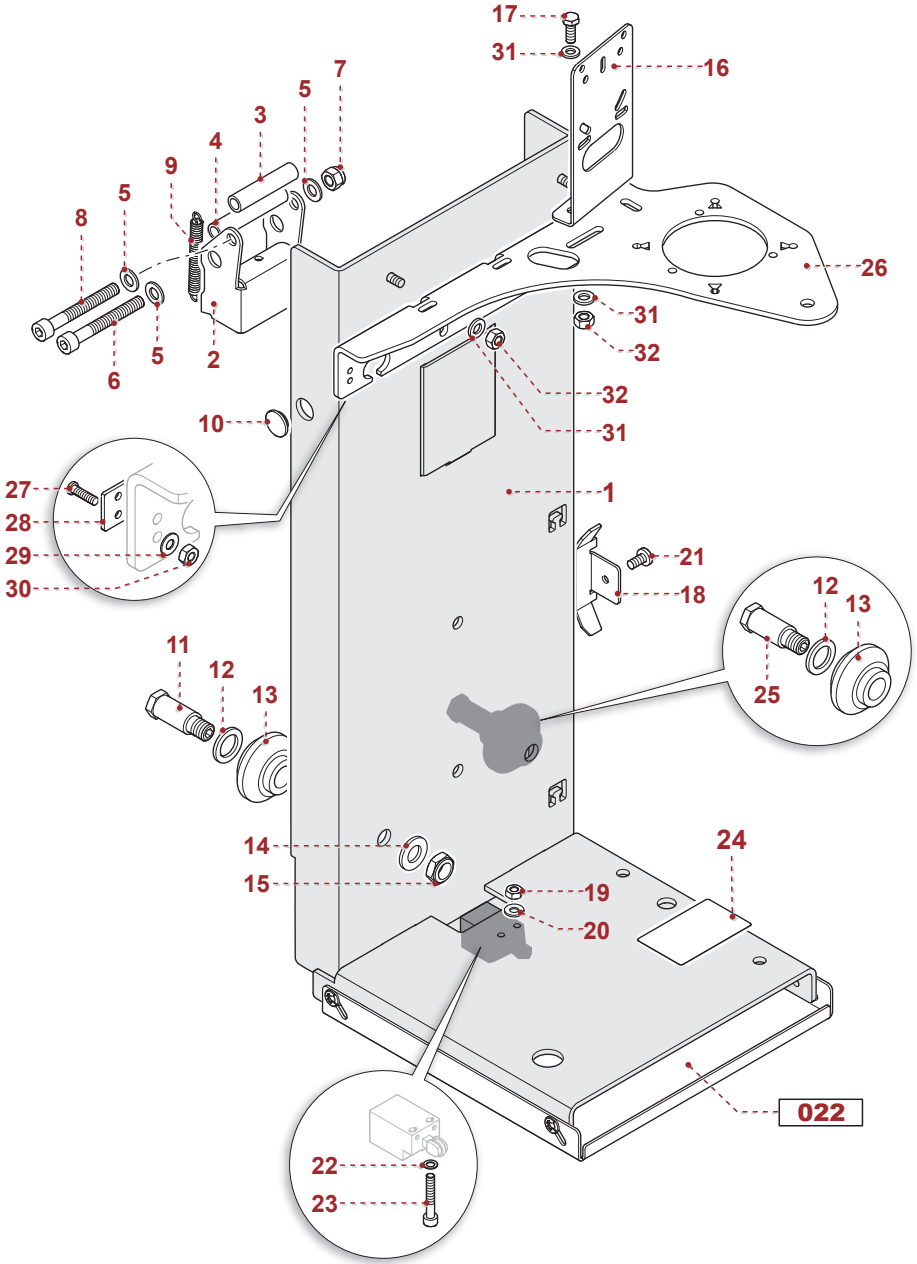

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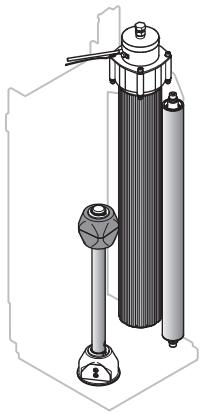

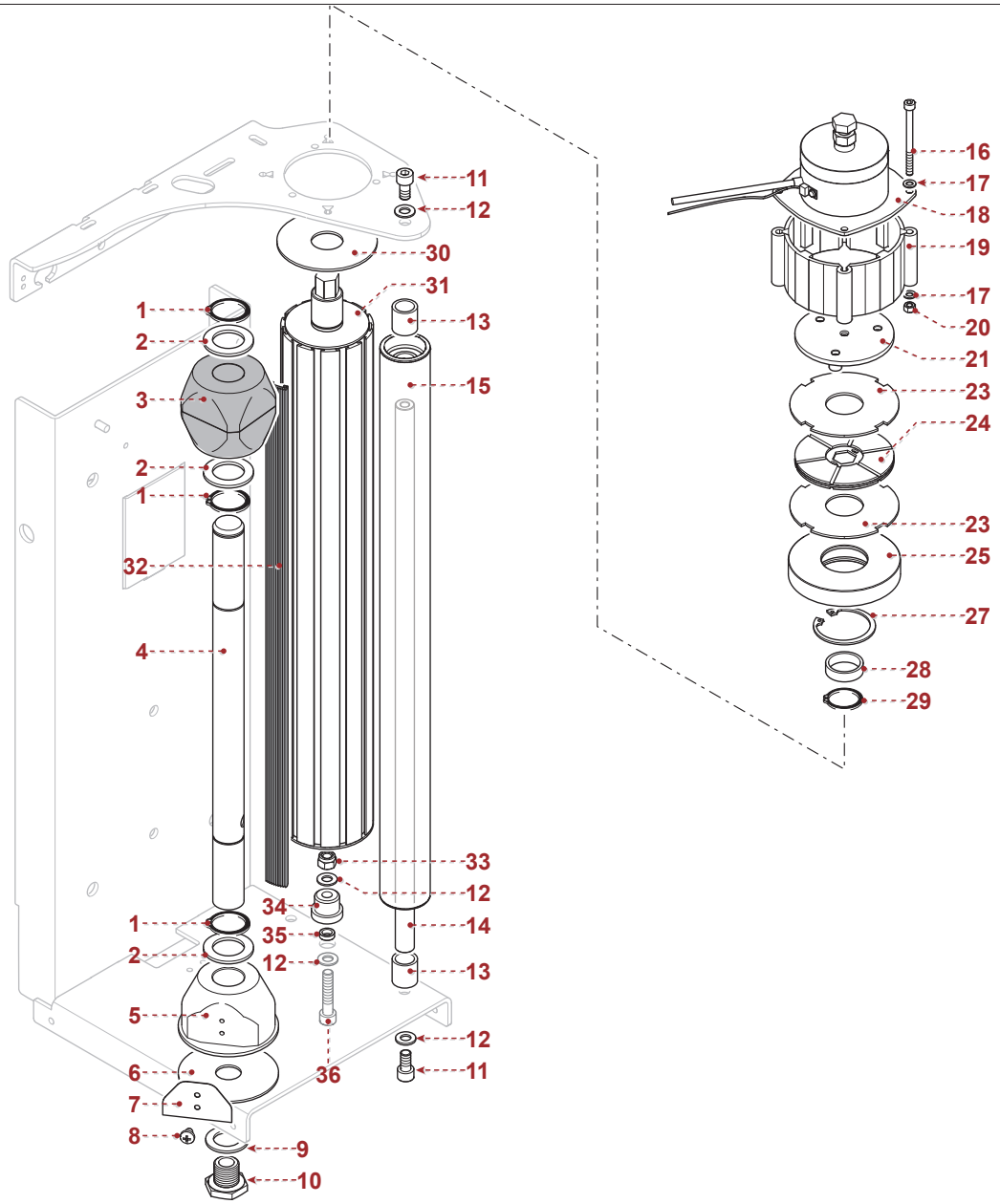

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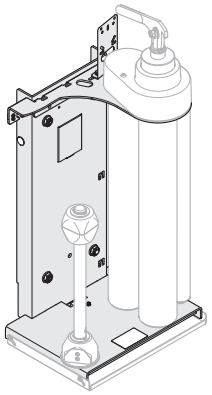

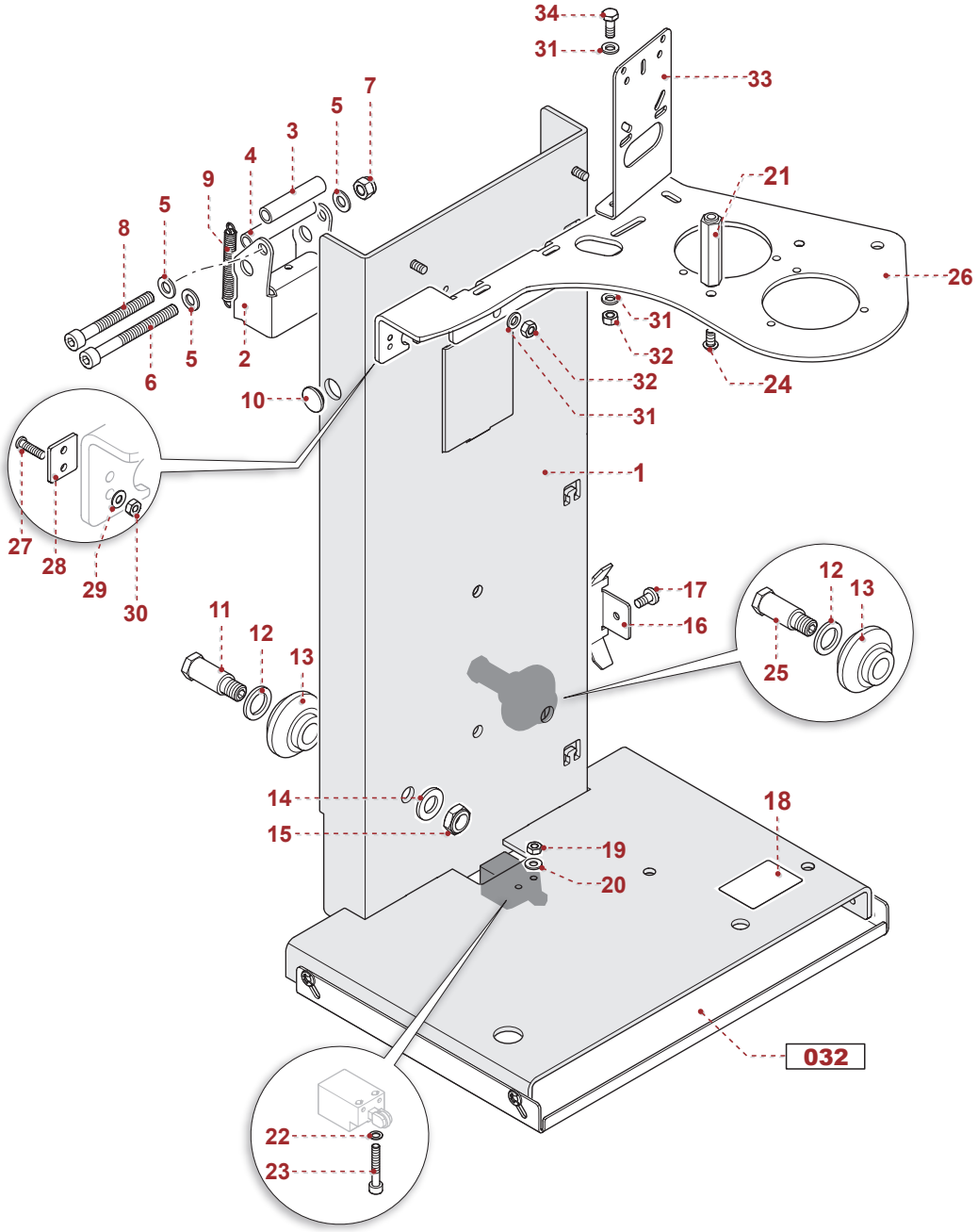

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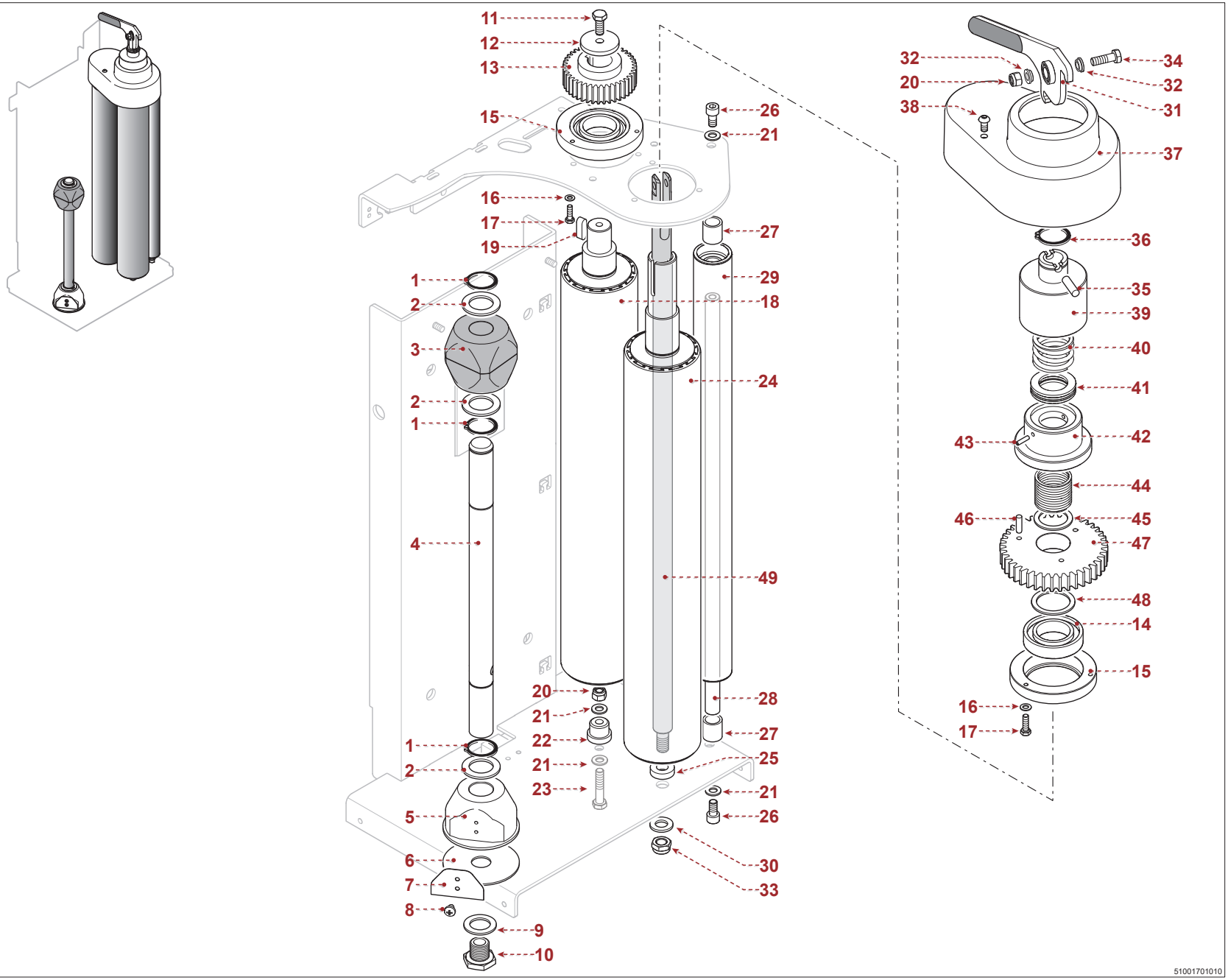

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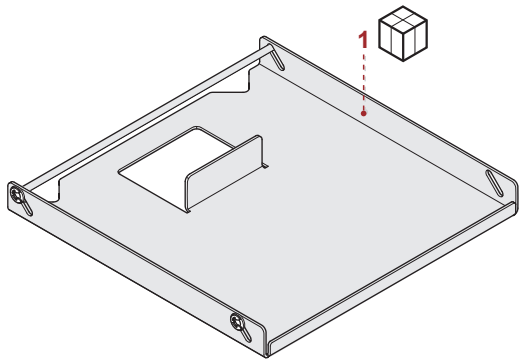

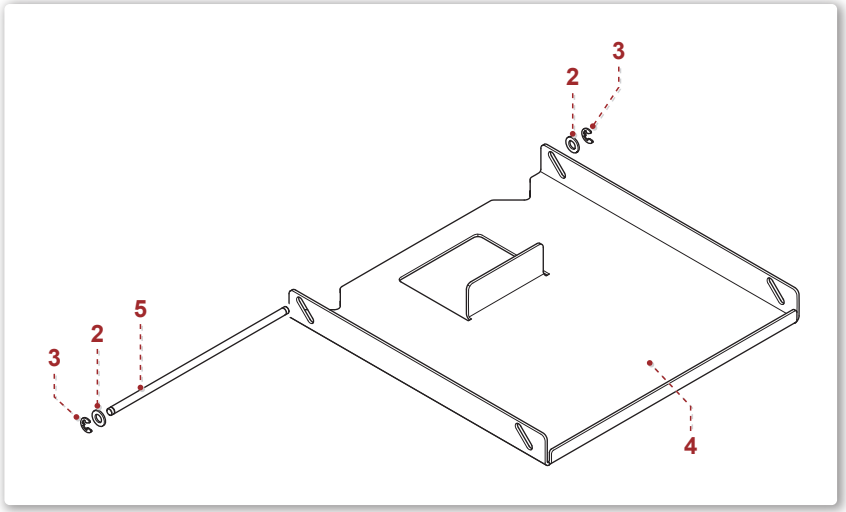

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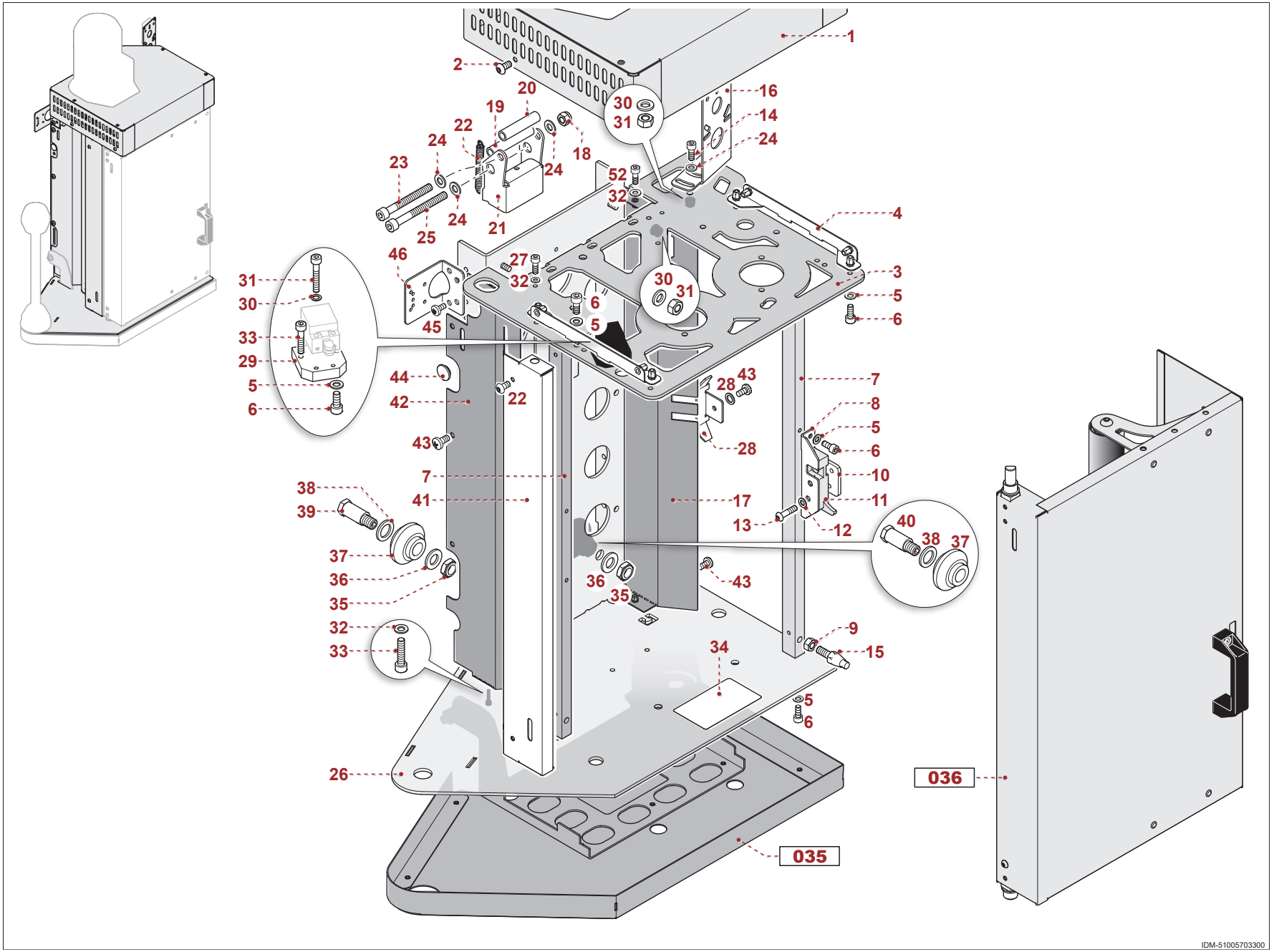

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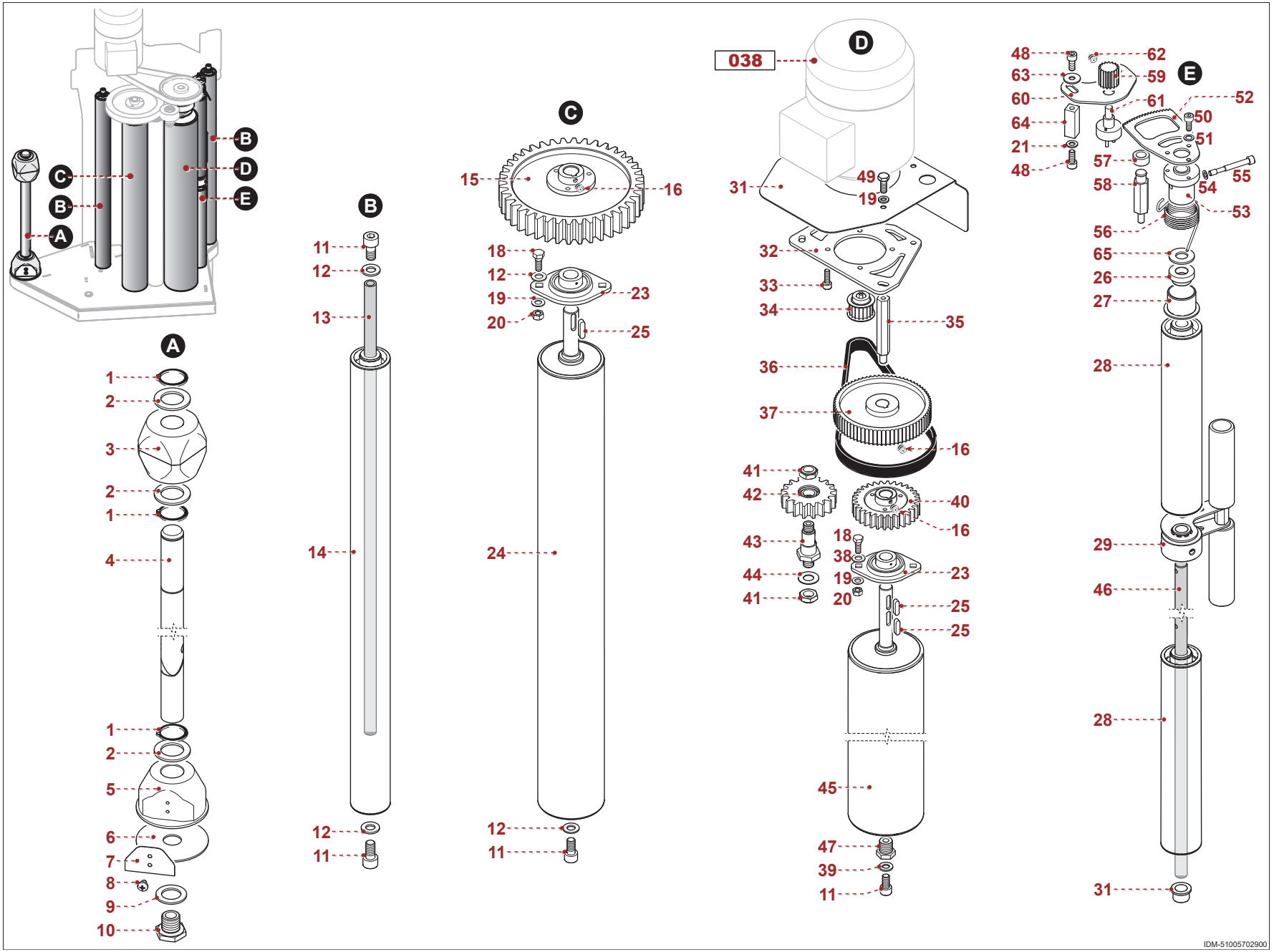

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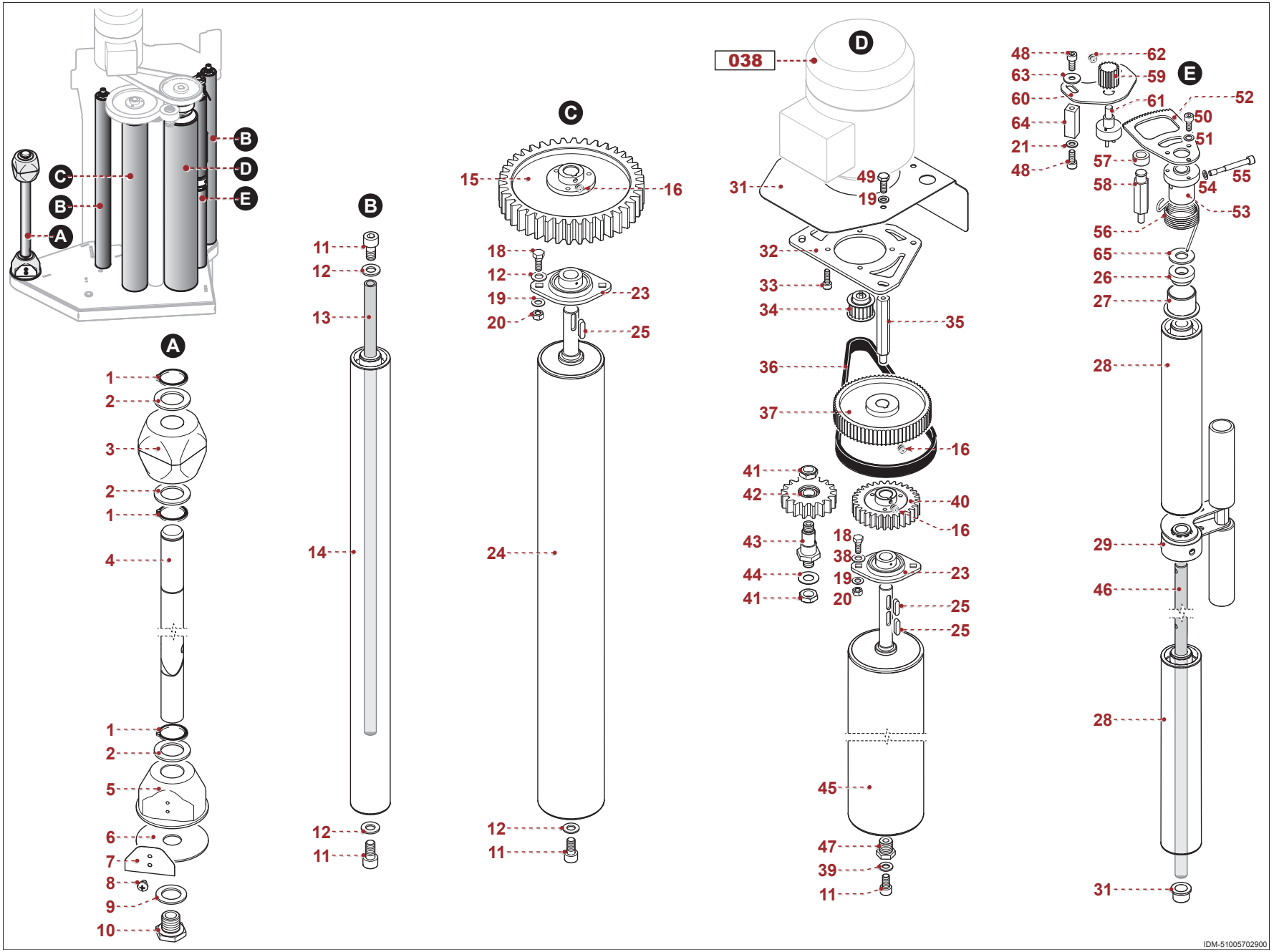

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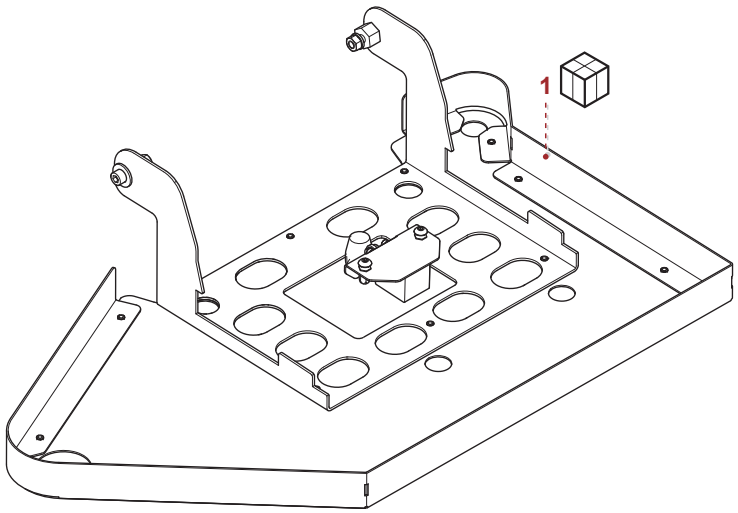

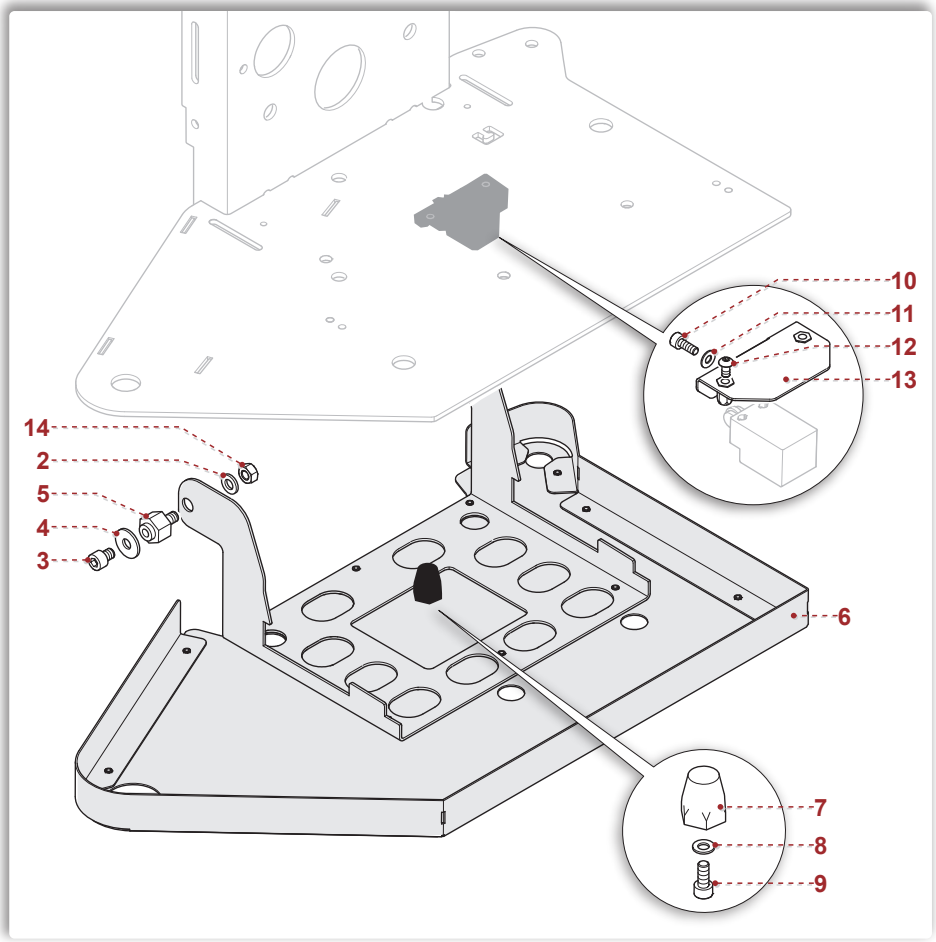

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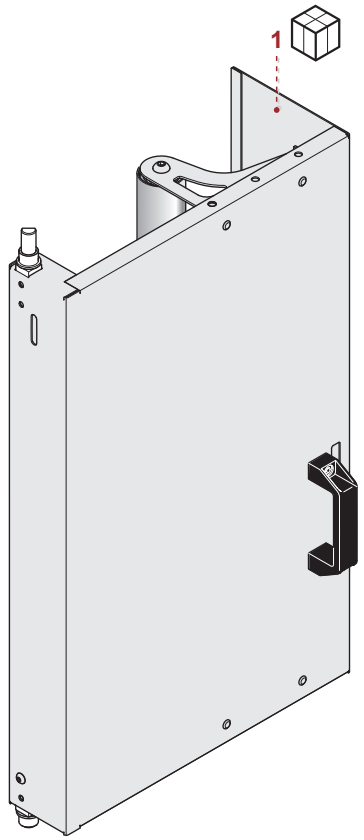

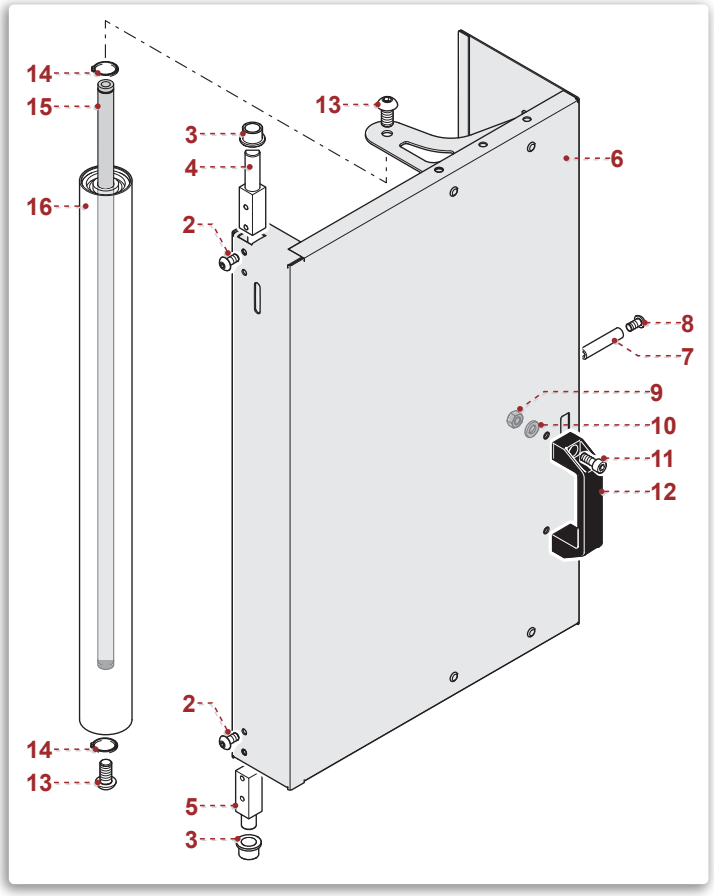

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6	SBA0007386V	
7	SBC0012133T	
8	S340174993Z	
9	S340023593Z	
10	S340017593Z	*STD*
11	S340057793Z	*OPT*
12	S3801095ZZZ	
13	S340344893Z	*Ø1500*
14	S340013592Z	*Ø1650*
15	SBC0012132T	*Ø1800*
16	SBA0007385	*Ø2200*

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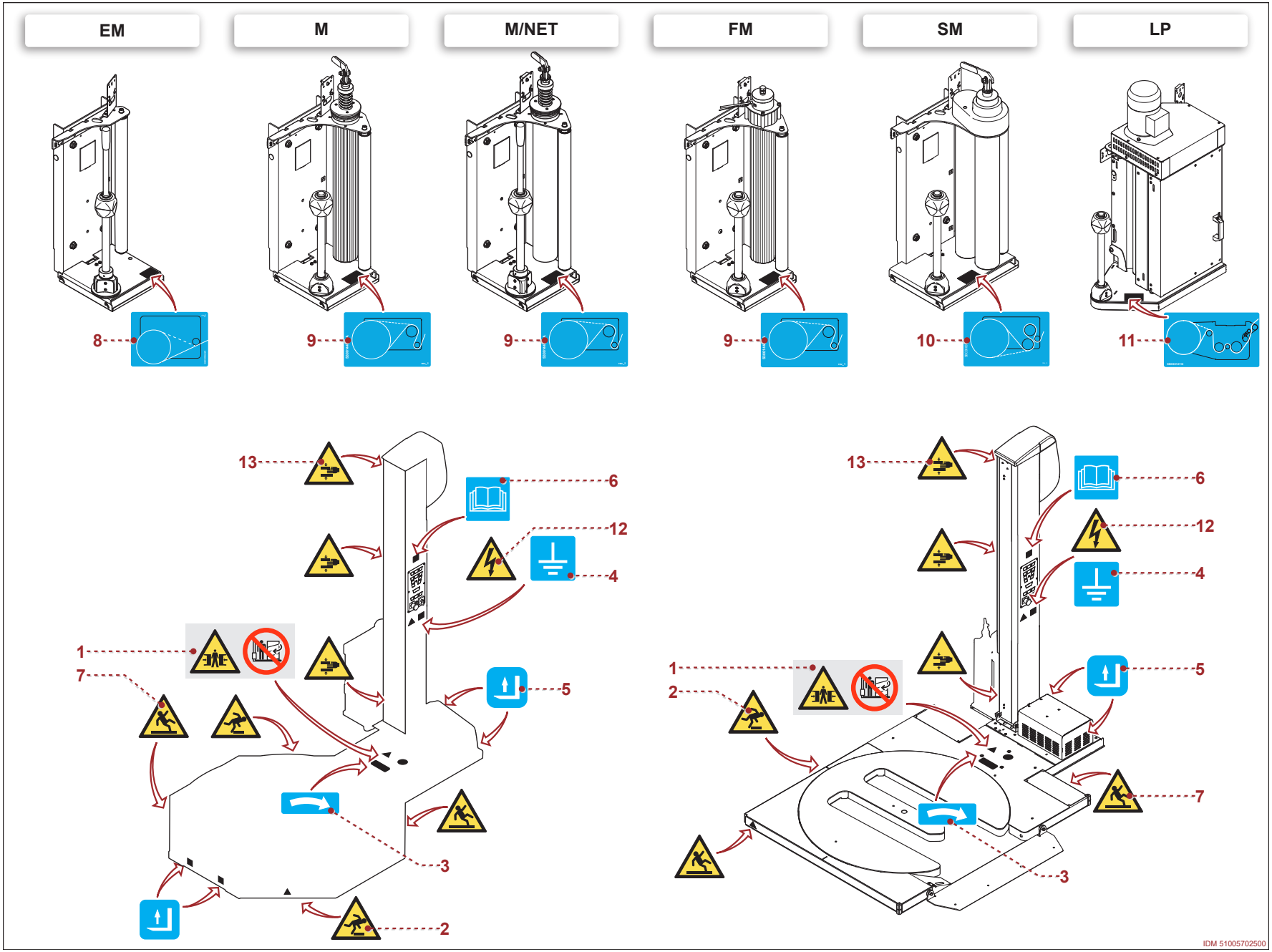

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7	SBC0029873	
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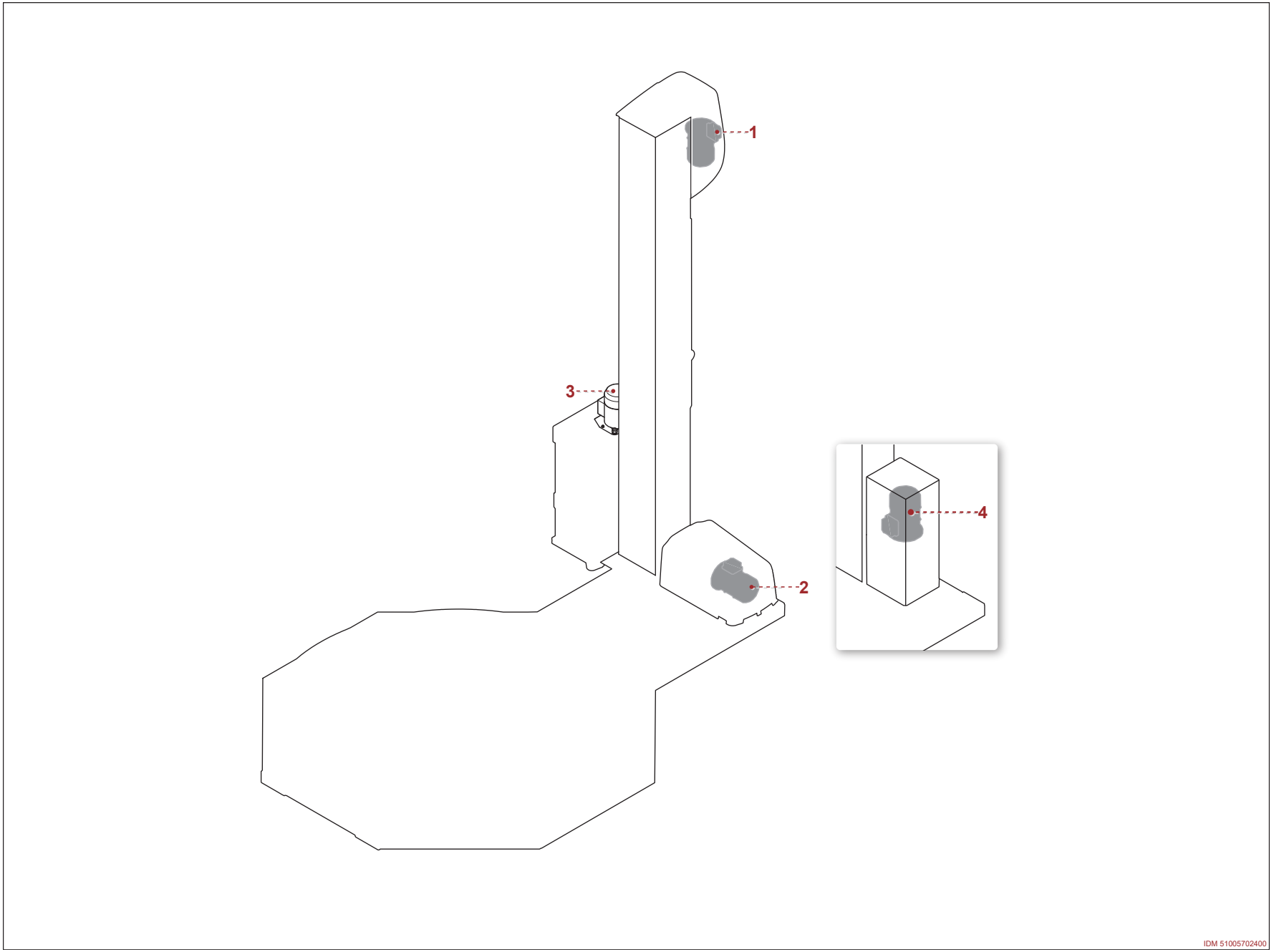
9	S300144499A	
10	SBC0000708	
11	SBC0012110	
12	S300110096A	
13	S300109396A	



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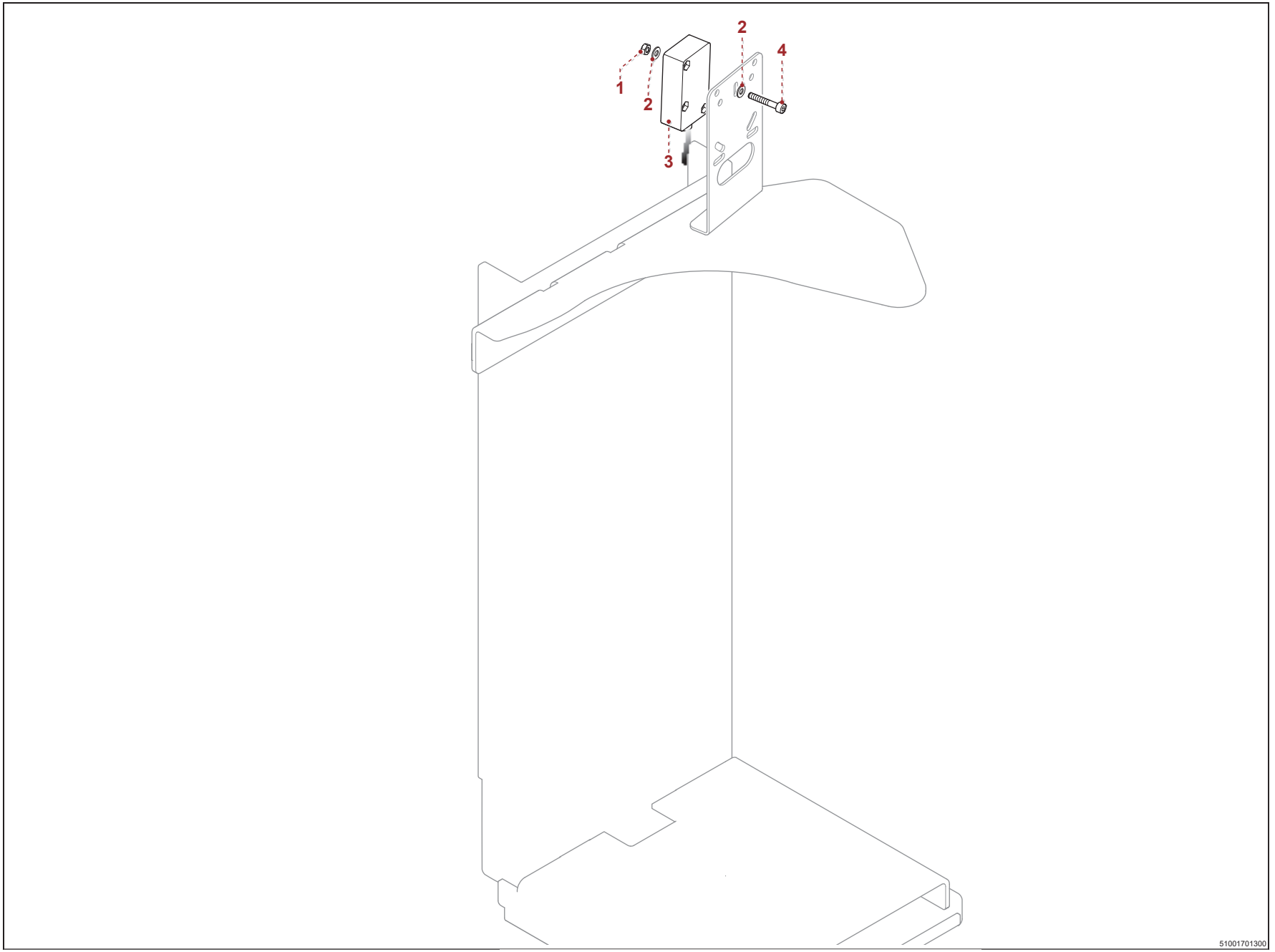
1	SCC0001990 *H63 C6 B5 S1 UL/CSA* *220/240V*
1	SCC0000096 *H63 C6 B5 S1 3F* *220/240V 50Hz* *380/415V 50Hz* *440V 60Hz*
1	SCC0000097 *H63 C6 B5 S1 3F* *440V 50Hz*
2	SCC0003376 *H71C4 B5 220/415V 50HZ* *3F UL/CSA*
2	SCC0000843 *H71 C4 0,55KW B5* *230/415V-50HZ*
2	SCC0000926 *H71 C4 0,55KW* *B5 440V 50HZ 3F*
2	SBA0018046 *220/240-380415 50Hz* *Base HSD*
2	SBA0018073 *220/415V50HZ 3F UL/CSA* *Base HSD*
2	SBA0018057 *440V 50Hz* *Base HSD*
3	SCC0001509 *H63 C4 B14 3F UL* *220/400V 50Hz*
3	S380595900A *H63 C4 B14* *220/240V 50Hz* *380/415V 50Hz*
3	S380751100A *H63 C4 B14* *440V 50Hz*
4	SCC0003584 *220/415V 50HZ 3F* *UL/CSA*
4	SCC0003576 *220/415V 50HZ-440V* *60HZ*
4	SCC0003585 *440V 50HZ 3F*



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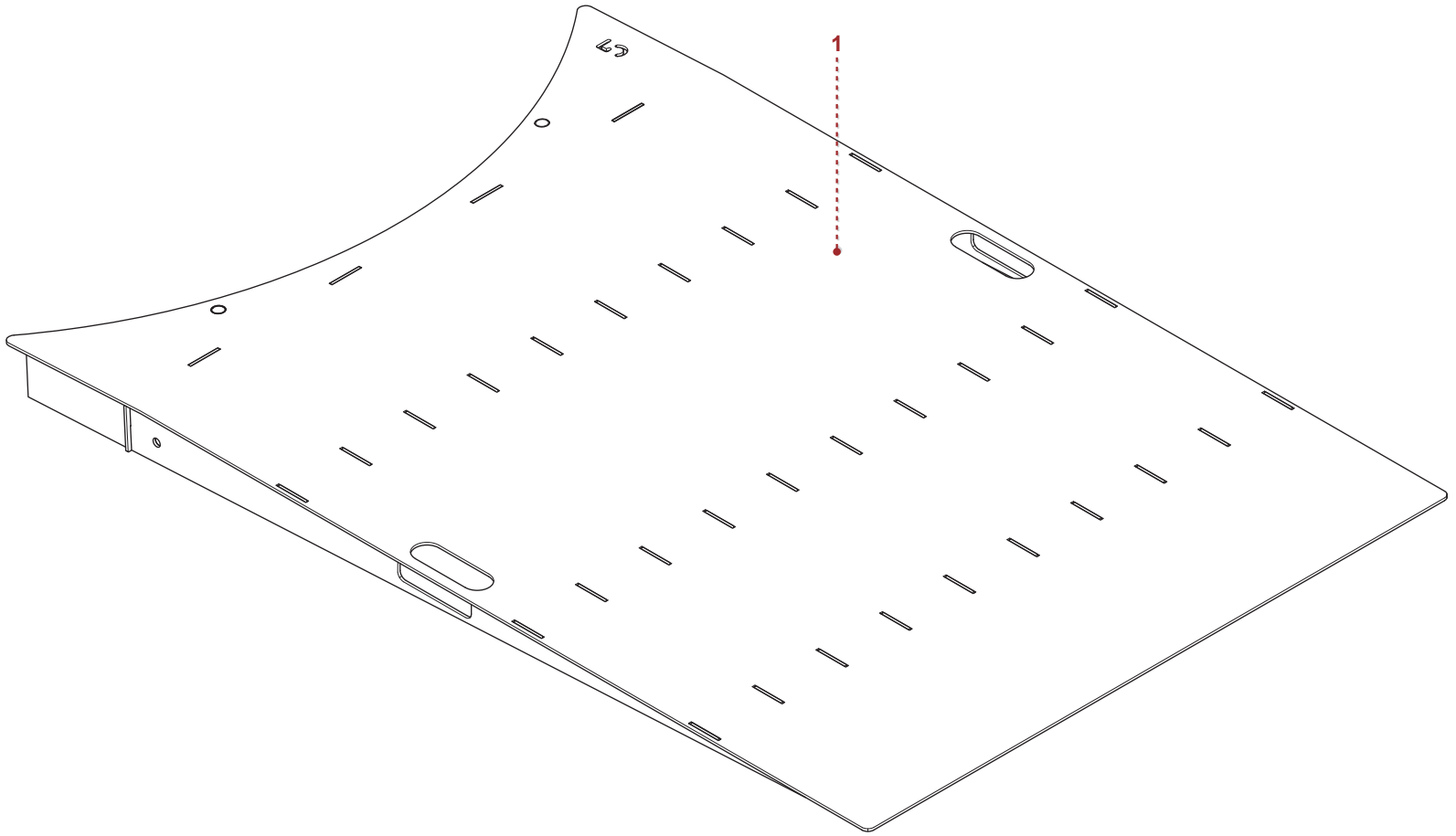

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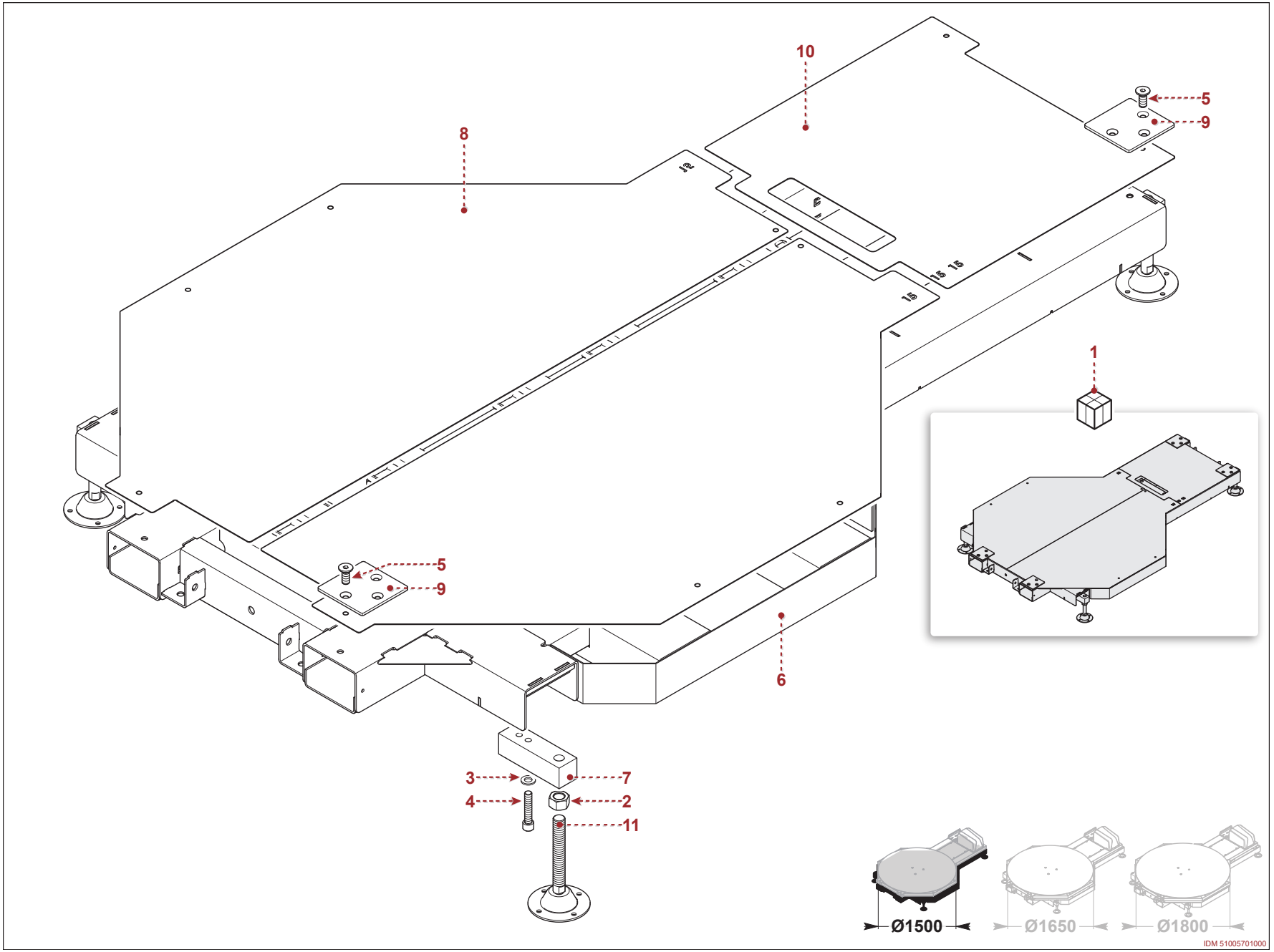

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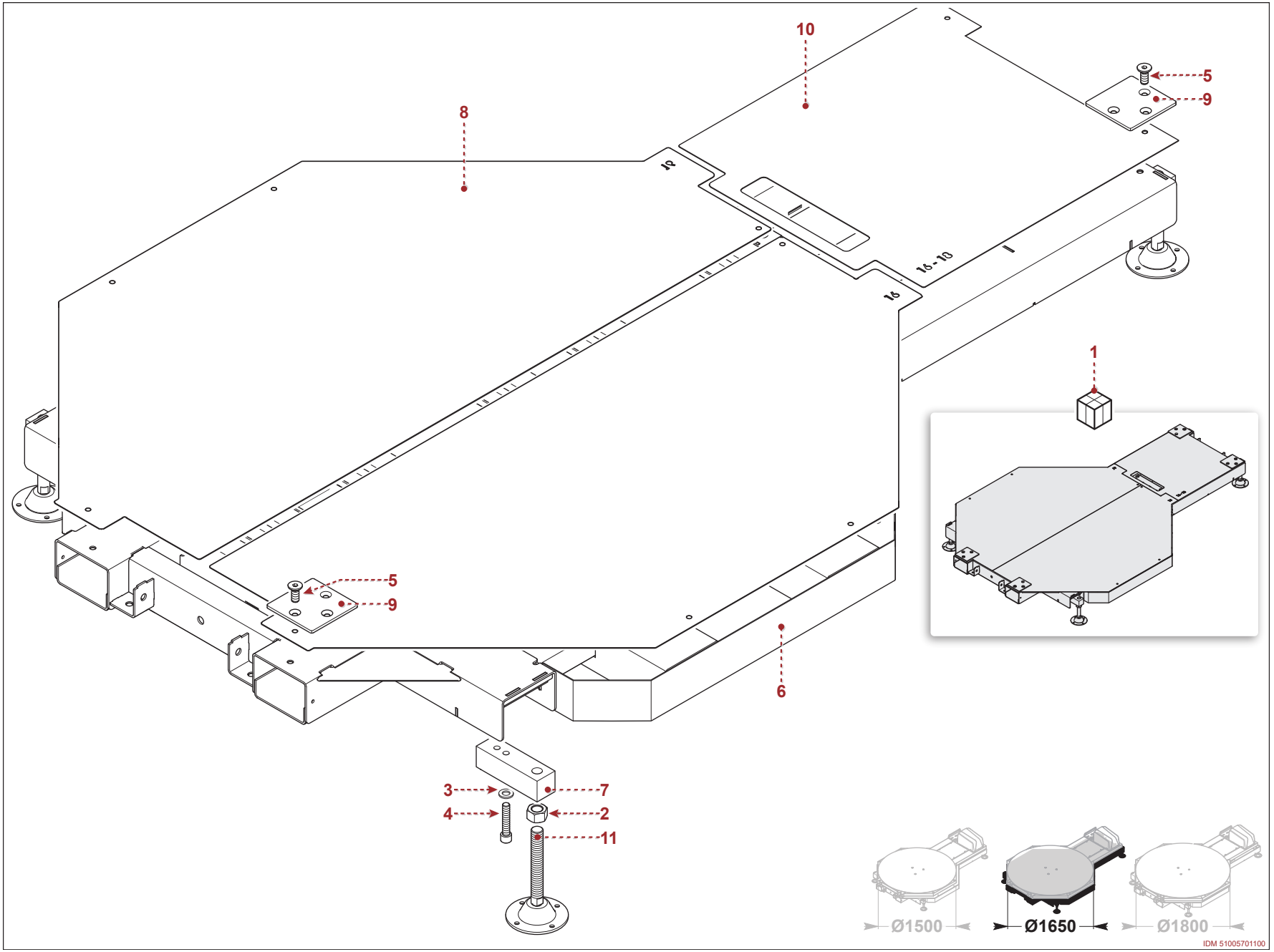
4	S340143592Z	
5	S340041693Z	
6	SBA0018276V	
7	SBC0005714T	
8	SBC0021305	
9	SBC0021756V	
10	SBC0029650	
11	SCA0000337	



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8	SBC0021290	
9	SBC0021756V	
10	SBC0029661	
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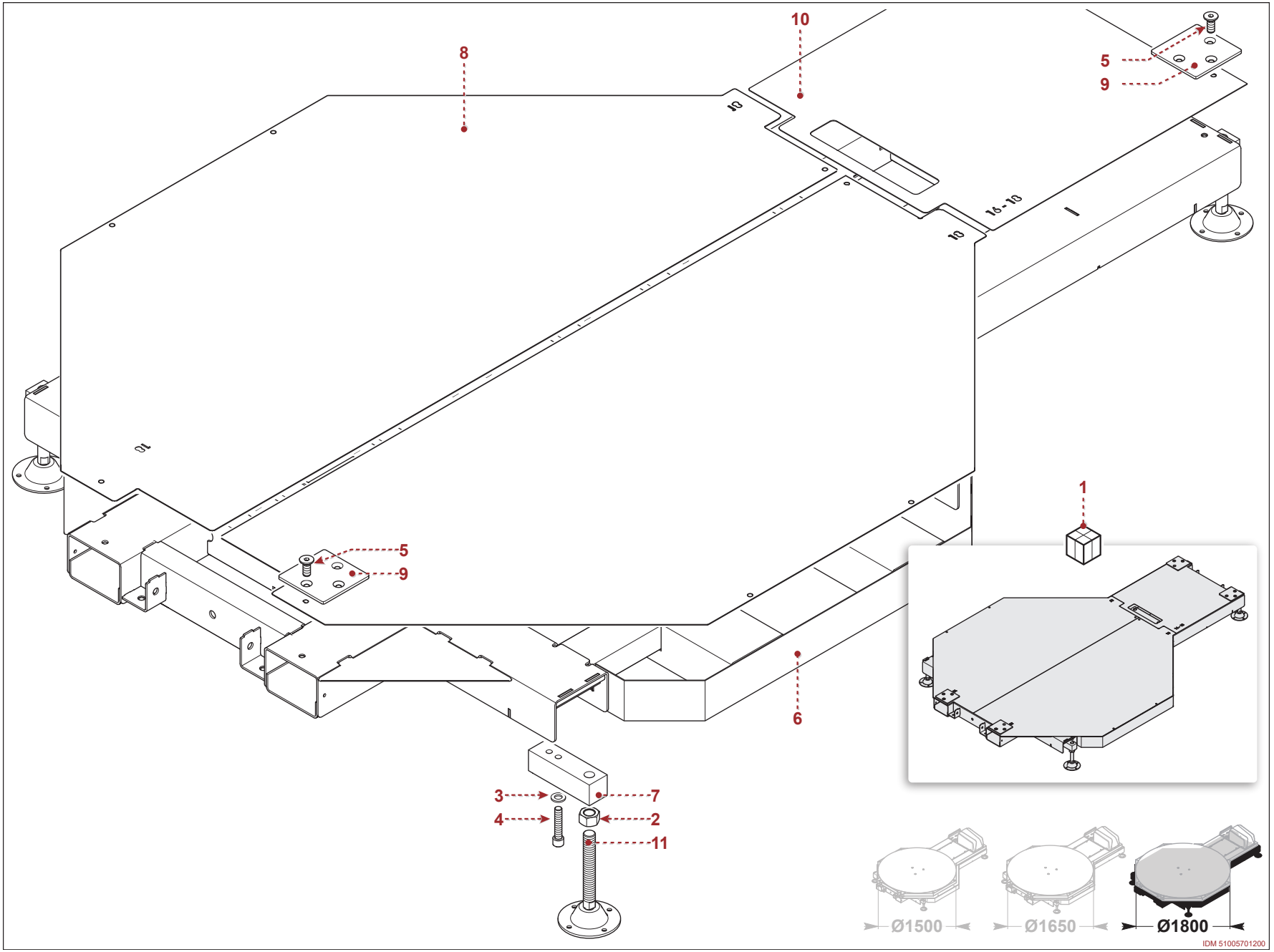

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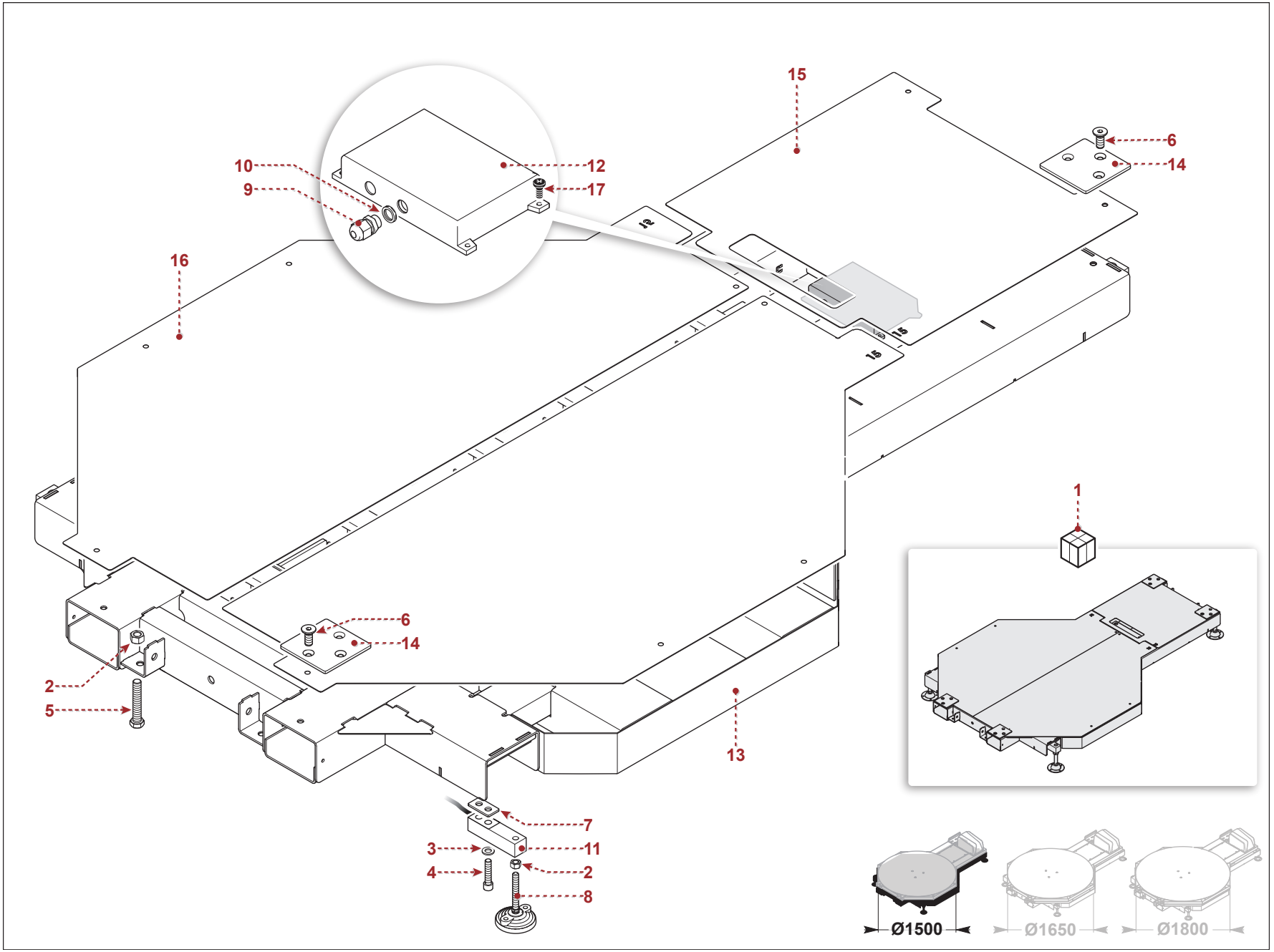

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4	S340531693A	
5	S340049193Z	
6	S340041693Z	
7	S321686093A	
8	S340530500A	
9	S3802138ZZZ	
10	S3802142ZZZ	
11	S380828500A	
12	S380828600A	
13	SBA0018276V	
14	SBC0021756V	
15	SBC0029650	
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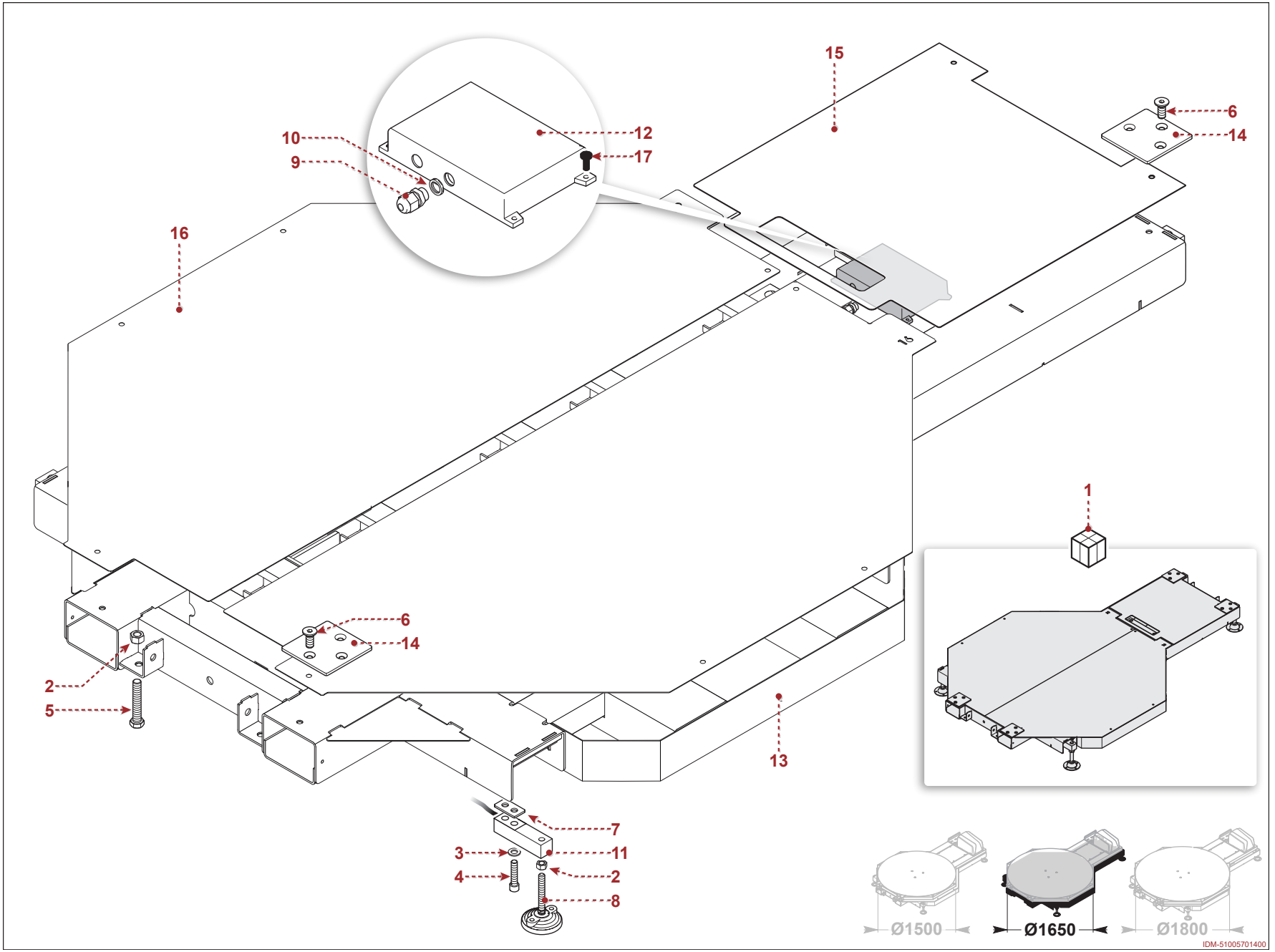
17	S340513993A	



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8	S340530500A	
9	S3802138ZZZ	
10	S3802142ZZZ	
11	S380828500A	
12	S380828600A	
13	SBA0018282V	
14	SBC0021756V	
15	SBC0029661	
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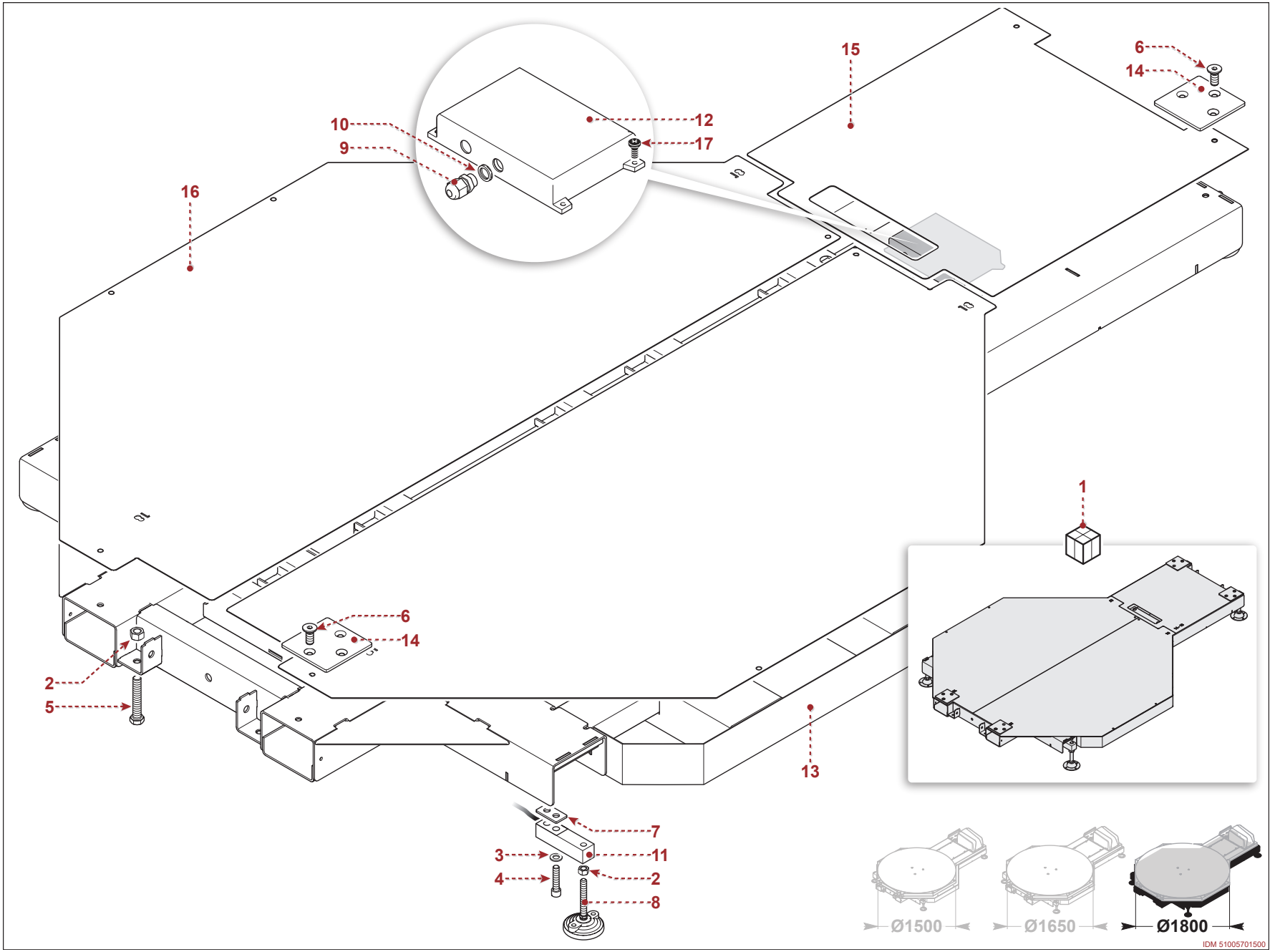

n.	code	
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9	S3802138ZZZ	
10	S3802142ZZZ	
11	S380828500A	
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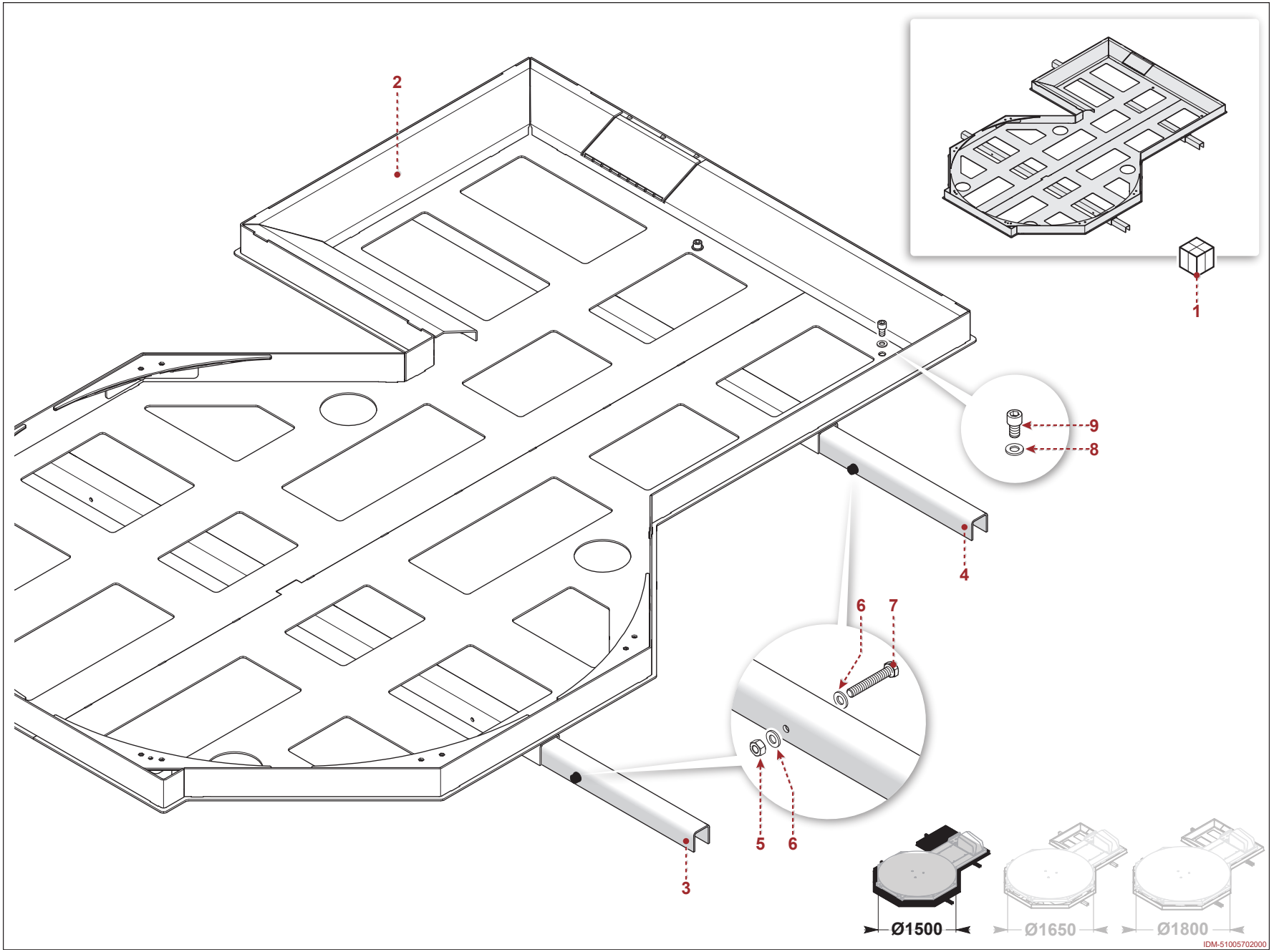

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3	SBC0007325
4	SBC0031247
5	S340000393Z
6	S340012393Z
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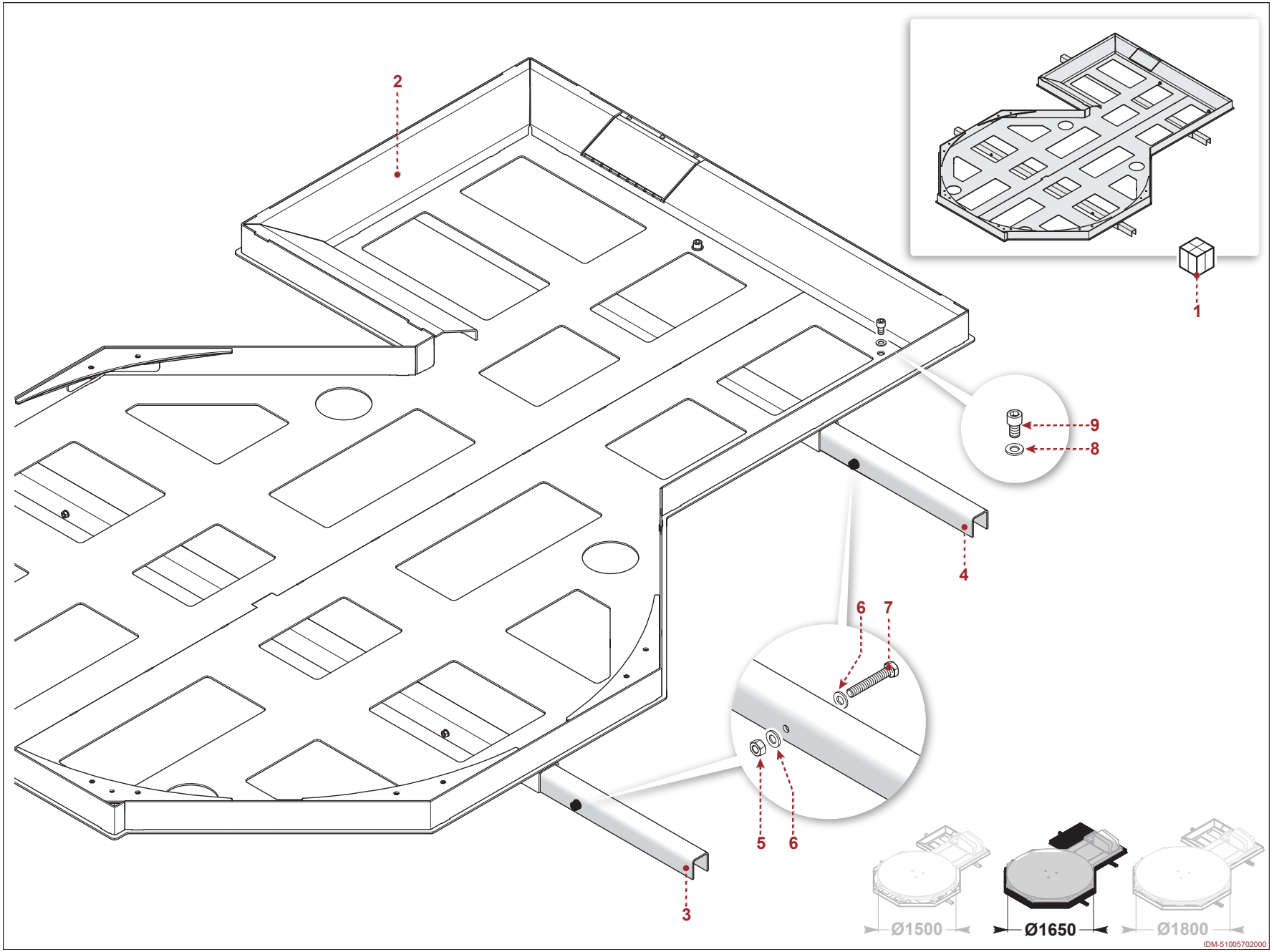

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6	S340012393Z	
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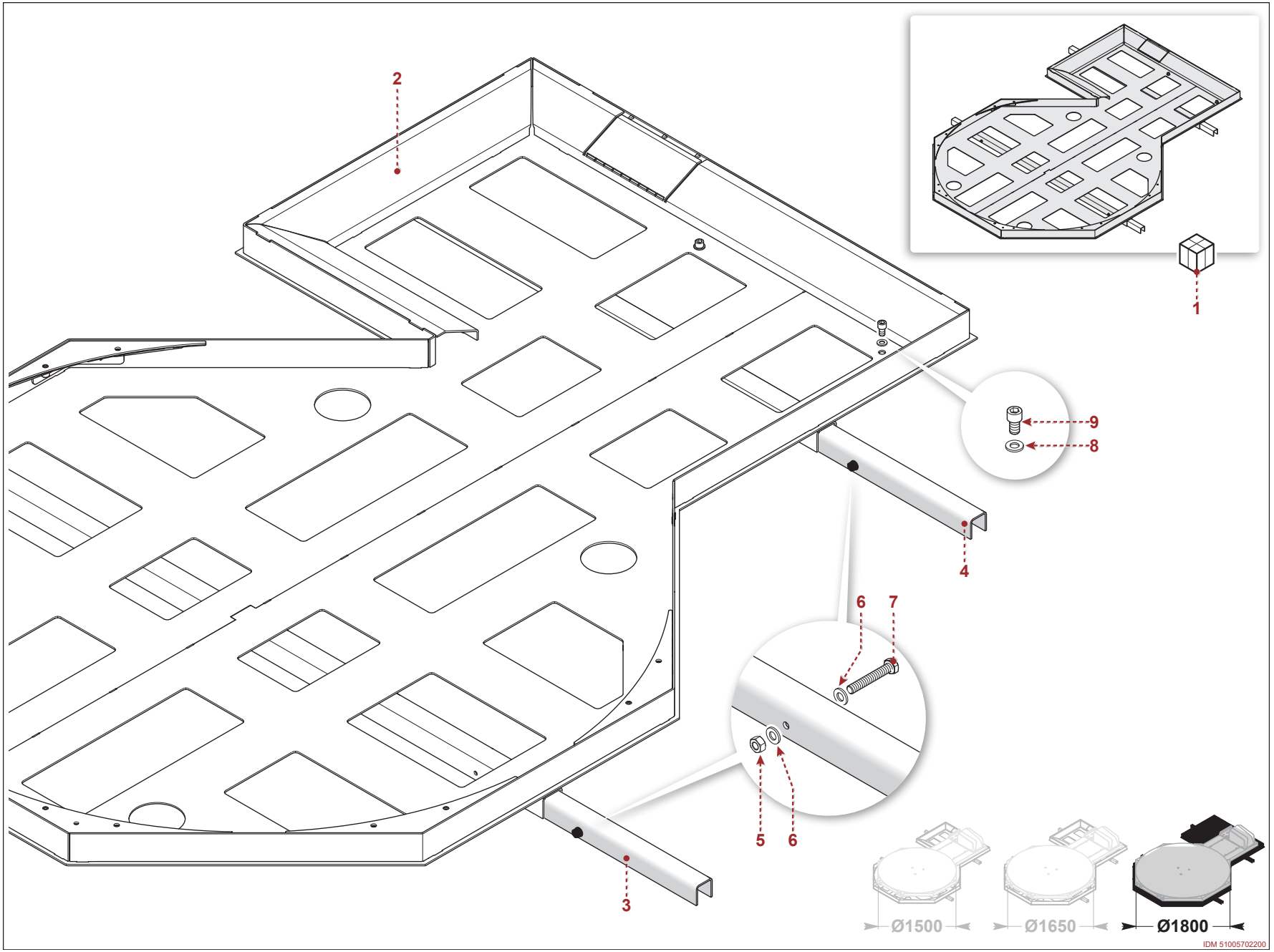

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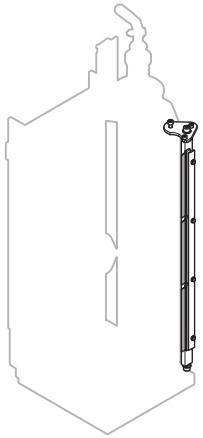

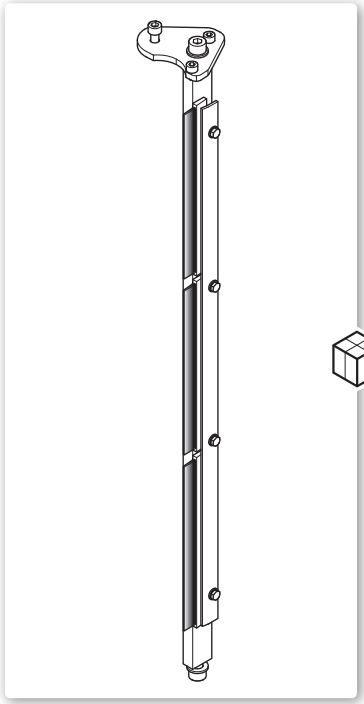

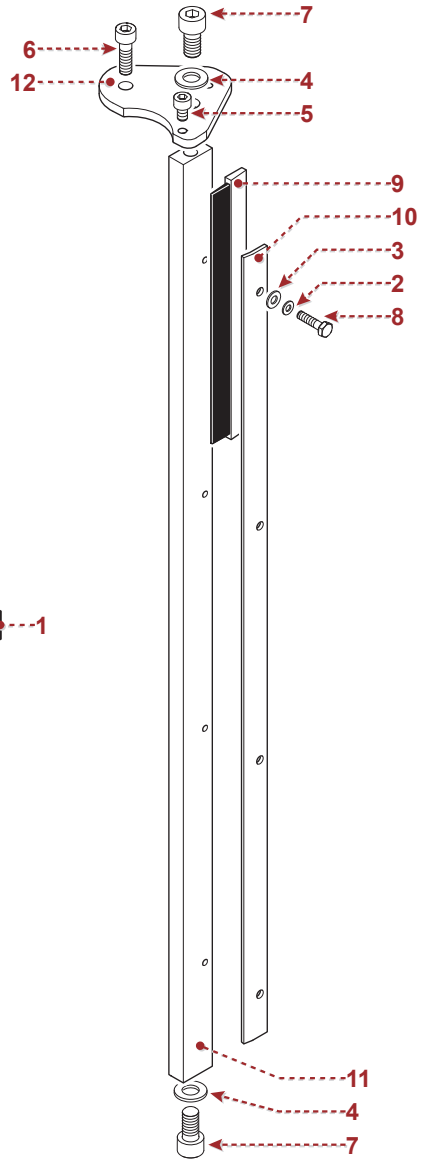

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8	S340065693Z	
9	S3401337ZZZ	
10	SBC0007798	
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