



## Packaging description

The machine is secured to a special pallet with bolts and protected with clear packaging film and cardboard. Open the cardboard box and remove the film.

Make sure that all machine parts, including any accessories, have been supplied and are undamaged.

**Dispose of the packaging material in accordance with current regulations.**



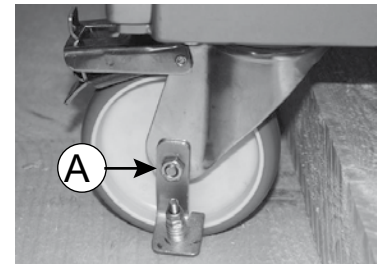
## Transport

Use a forklift or a pallet truck to carry the machine.

Before transporting the machine, make sure that:

- the transport device is able to withstand the load (see technical data of the machine)
- the machine is stable on the forks
- the adjacent area is clear of obstacles, persons or animals that may create dangerous situations

Remove the machine from the pallet by taking out the screws that secure it to the pallet itself. Lift the machine by inserting the forks of the forklift in the area indicated in the figure. Place the machine in the designated work area.



**Before conducting any movement, always check whether the machine is stable and make sure the area where the movement is conducted is clear of obstacles such as objects, animals or persons.**

## Positioning

Provide for a work area large enough to perform all the manoeuvres safely (see technical data).



**IT IS FORBIDDEN TO INSTALL THE MACHINE ON A SLANTING FLOOR**

**Once the machine is positioned correctly, it must be locked using the braking device on the two turning wheels of the machine.**





# TECHNICAL MANUAL AUTOMATIC DERINDING MACHINE

*Model NAB 520 - 720*



**Before using the machine, read this handbook carefully**



This handbook is always supplied with the machine. Read it carefully before attempting to start the machine.

This handbook contains important information and instructions concerning the machine and the safety of the operator, therefore it must remain with the machine at all times.



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## MODEL NAB 520 DD

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- 11.7 PLC ELECTRIC SYSTEM



# CAUTION

**This manual is an integral part of the machine and no operations must be carried out before reading it carefully in all its parts.**

**It should be kept for future reference and must always accompany the machine.**

<b>Technical Data</b>			
<b>Description</b>	<b>Mod. 520</b>	<b>Mod. 720</b>	<b>U.M.</b>
Work width	515	715	mm
Machine depth	2120	2120	mm
Machine height	1248	1248	mm
Belt height	870	870	mm
Machine width	960	1160	mm
Weight	460	550	Kg
Motor power	2,2	2,2	Kw
Air consumption	42	42	Lt/min
Work speed	22	22	M/min
Noise	74.5	74.5	dBA
Operator control circuit	24	24	V

# DECLARATION OF CONFORMITY



**Manufacturer:**

***GRASSELLI*** SPA

**Address**

Via S. D'Acquisto, 2/C  
42020 Albinea  
Reggio Emilia Italy  
Tel. + 39 0522 599745 r.a. Fax + 39 0522 59.81.47  
http:// www.grasselli.com E-mail info@grasselli.com

**Product name:**

**- SKINNING MACHINE**

**Model:**

**Serial number:**

## IT IS IN CONFORMITY WITH THE FOLLOWING DIRECTIVES:

<i>Field</i>	<i>Standard</i>	<i>Title</i>	<i>Result</i>
Directive	2006/42 CEE	Product safety	Applay
Directive	2004/108 CEE	Electromagnetc compability	Applay
Directive	2006 / 95 / CE	Low tension	Applay
Norm	E.N.12355	Skinning machine	Applay

**The person in charge of collect the technical construction file is:**

**Luca Panciroli - Resp. per le Certificazioni**  
**Via I. Calvino 10**  
**42010 Quattro Castella (RE) - Italy**

Place of issue: Albinea ( Reggio Emilia )  
Name: Gemmi Giuliano

Date of issue: \_\_\_\_\_  
Qualification: Product conformity manager

Signature:

*Gemmi Giuliano*



## DECLARATION OF CONFORMITY FOR FOOD STUFFS IN CONTACT WITH COMPOSITE STEEL / PLASTIC SURFACES

We hereby declare that the components destined to come into contact with foodstuffs used on all models of **GRASSELLI spa SLICERS and SKINNERS**

**comply:**

**PARTS IN PLASTIC** : with all relevant legislations, with particular reference to the following European community regulations:

- Regulation CE No.1935/04
- Regulation CE No.1895/05
- Regulation CE No.2023/2006
- Regulation CE No.10/2011 and subsequent amendments

and with the following Italian legislation:

- Ministerial Decree 21/3/73 and subsequent amendments and modifications
- Presidential Decree 777/82 and subsequent amendments and modifications

Plastic components destined to come into contact with foodstuffs are manufactured using the following materials:

- POM-C (Acetal copolymer grade C)

We hereby declare that:

the material contains substances subject to restrictions in the legislations cited and respects the global migration limits and specific restrictions.

The global migration limit, as well as the other specific restrictions that may apply to the monomers and/or additives present in the material, are respected in the conditions of use of 10mg/dm<sup>2</sup>. The statement is supported by analytical tests conducted in accordance with the above specifications or based on calculations assuming that 1kg of foodstuff comes in contact with 6 dm<sup>2</sup> of packaging material.

**STEEL PARTS:** with all relevant legislations, with particular reference to the following European community regulations:

- Regulation CE No.1935/04
- Regulation CE No.2023/2006

and with the following Italian legislation:



- Ministerial Decree 21/3/73 and subsequent amendments and modifications
- Presidential Decree 777/82 and subsequent amendments and modifications

Metal components destined to come into contact with foodstuffs are manufactured using the following materials:

- AISI 420 steel - 1.4028 mod. (X35Cr14)
- AISI 630 steel - 1.4542 (X5CrNiCuNb16.4)
- AISI 304 steel - 1.4301 (X5CrNi 18-10)

We hereby declare that:

the material does not contain substances subject to restrictions under the legislations cited above and respects the global migration limits.

The global migration limits, together with the specific restrictions that may be applied to the articles, have indicated that the articles are suitable for contact with foodstuffs, under the conditions described by the legal method, in compliance with the limits defined by decree 777/1992 and 21/03/73 and subsequent amendments and integrations.

The conditions of use of the stainless steel product are as follows:

Wash thoroughly with hot water and soap, rinse and dry before use. Do not leave foodstuffs containing citric, acetic or lactic acid in contact with the product for long periods of time.

When cleaning, avoid using detergents containing chlorine (such as bleach).

Avoid strong impacts and extreme changes in temperature. To eliminate iridescent rings caused by overheating, use products specifically produced for stainless steel; to eliminate white marks caused by calcium build up, boil a solution of water and vinegar, let cool and wash as normal. Articles with steel grips require particular attention as the heat is conveyed to all steel parts. For this reason, it is advisable to use hand protection.

### **Warning!**

*It is good practice to advise the writer if the conditions of use of the article do not comply with the instructions provided.*

The company declares that the material is technically suitable for the intended use, i.e. for use with fresh refrigerated meat for a period greater than the shelf-life assigned by the client.

The company declares that all necessary supporting documentation required under Regulation Framework 1935/2004 CE article 16 comma 1, is available to the competent legal authority.

This declaration is valid as of the date shown below and will be replaced in the event of significant changes in the production of the material that may alter the product's ability to meet the requirements of conformity or if the legislations cited are amended or updated in such a way that further verification of conformity is required.



Date **Albinea**, .

Signature:

 **GRASSELLI**  
ESTABLISHED THROUGH TECHNOLOGY  
Via S. D'Acquisto, 2/c  
42020 Albinea (RE) Italy (A)

Surname and name: Gemmi Giuliano

Position: Product conformity manager



# SECTION 1 SAFETY



**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**



## SYMBOLS



Symbol used to indicate specific safety measures.



Symbol used to indicate dangerous points.



Symbol used to indicate notes.

## PLATES USED ON THIS MACHINE

**ATTENZIONE**  
PRIMA DI COLLEGARE LA MACCHINA  
ACCERTARSI DELLA PRESENZA DI UN  
INTERRUTTORE DIFFERENZIALE SULLA LINEA

**ATTENTION**  
BEFORE CONNECTING MACHINE TO THE  
ELECTRICAL SYSTEM SUPPLY AN EARTH LEAKAGE  
PROTECTION DEVICE MUST BE FITTED



**ATTENZIONE**  
TOGLIERE LA TENSIONE  
PRIMA DI RIMUOVERE  
LA PROTEZIONE

**ATTENTION**  
TAKE OFF TENSION  
BEFORE REMOVING  
PROTECTION

**CORRENTE ELETTRICA**  
**ELECTRICAL CURRENT**



DEVE ESSERE RIMOSSO SOLO DA  
PERSONALE QUALIFICATO  
MUST BE REMOVED ONLY FROM  
EXPERIENCED PEOPLE



**ATTENZIONE! ZONA PERICOLOSA**  
**ATTENTION! DANGEROUS AREA**

**IMPORTANT!**  
READ THE MANUAL BEFORE  
OPERATING THIS MACHINE

**OPERATOR - CONDUCT THIS SAFETY TEST DAILY**

ENSURE MACHINE STOPS WHEN:

- THE EMERGENCY BUTTON IS PRESSED.
- FOOT SWITCH IS RELEASED.
- MAIN POWER SWITCH IS TURNED TO POSITION 0.
- SAFETY GUARDS ARE REMOVED.

**SAFETY INSTRUCTION**

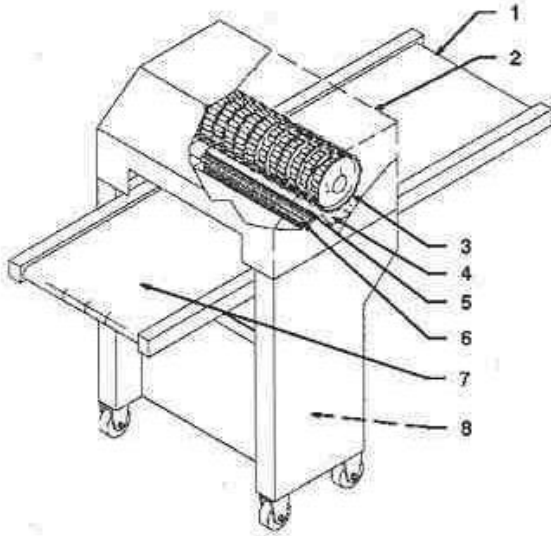
- MACHINE MUST BE USED ONLY BY QUALIFIED PEOPLE INSTRUCTED IN IT'S USE.
- **DO NOT** TOUCH TOOTHROLL OR BLADE WITH HANDS OR CLOTHES.
- **DO NOT** REMOVE OR TAMPER WITH SAFETY
- **DO NOT** LEAVE MACHINE CONNECTED WHEN NOT IN USE.
- IF MACHINE DOESN'T WORK PROPERLY

**STOP IT IMMEDIATELY**  
AND REPORT TO YOUR IMMEDIATE SUPERVISOR.



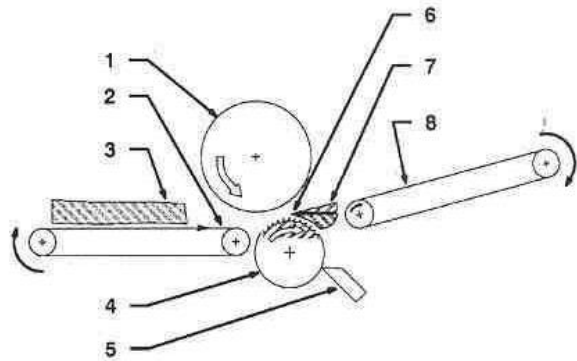


## 1.1 GENERAL NOTICES



### Key

1	Outfeed conveyor belt	5	Blade
2	Mobile guard	6	Tooth or conveyor roll
3	Hold-down rollers	7	Infeed conveyor
4	Blade holder	8	Drive



### Key

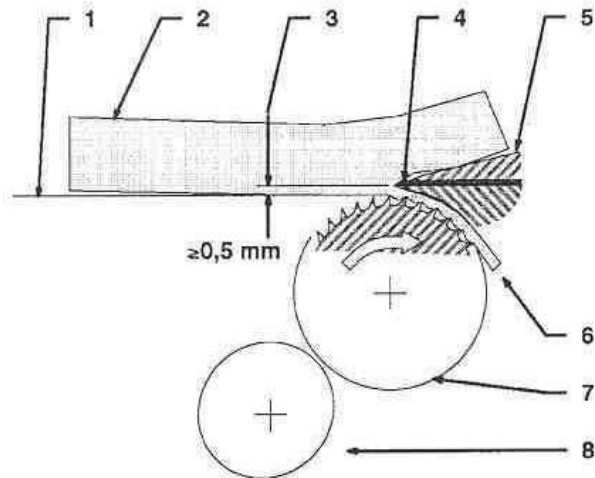
1	Hold-down rollers	5	Stripper comb or stripper roll
2	Infeed conveyor belt	6	Blade
3	Product	7	Blade holder
4	Tooth or conveyor roll	8	Outfeed conveyor

Open skinning and membrane removal machine with infeed table and a distance between the floor and the surface of the infeed table between 800 mm and 1050 mm.

Groove form of the transport roller:

Depth  $\leq$  2,0 mm

Pitch  $\leq$  2,5 mm



### Key

1	Infeed table	5	Blade holder
2	Product	6	Membrane
3	Cutting	7	Transport roll
	Thickness $\leq$ 0,5 mm	8	Stripper roll
4	Blade		



Derinding, skinning and membrane removal machines consist mainly of a machine frame, tooth roll with stripper comb, hold down roller with stripper rake, transport roll with stripper roll and air jet cleaning blade device and electrical, electronic, or pneumatic components, depending on the machine type.

Derinding, skinning and membrane removal machines can e.g. be equipped with a:

- infeed and outfeed table;
- infeed- and outfeed conveyor belts;
- blade device;
- double blade;
- hold down device, (e.g. hold down rollers, belts or fingers);
- circular knives inside or instead of hold down rollers;
- stripper comb/stripper roll/stripper rake.

Derinding, skinning and membrane removal machines can be mobile.

#### **- Intended use**

This European Standard deals with all significant hazards, hazardous situations and events relevant to derinding, skinning and membrane removal machines, when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer.

This European Standard deals with the hazards which can arise during commissioning, operation, cleaning, use, maintenance and decommissioning of the machine

#### **- Not intended use**

A not intended use is e.g.:

- the wrong installation of a derinding, skinning and membrane removal machine;
- the processing of flat products on open derinding machines;
- working on open derinding, skinning and membrane removal machines without using the gloves which the manufacturer recommends;
- manipulation of interlocking systems on safety devices;
- using of cleaning- and disinfection detergents, which are not recommended by the manufacturer in the instructions for use.



## List of hazards

### General

This clause and annex C contains the hazards and hazardous situations based upon EN 1050 as far as they are dealt with in this European Standard, identified by a risk assessment significant for derinding, skinning and membrane removal machines, and actions to eliminate or reduce risk.

Before using this standard it is important to carry out a risk assessment of the derinding-, skinning- and membrane removal machines to check that it has the hazards identified in this clause.

#### • Mechanical hazards

##### **Open derinding machine with infeed table**

###### - Zone 1

Rotating tooth roll and height adjustable blade holder with blade (see Figure 6).  
Hazards of separation of the skin or the fingers being drawn in.

###### - Zone 2

Rotating tooth roll and stripper comb (see Figure 6).  
Hazards of fingers or hand being drawn in.

###### - Zone 3

Rotating tooth roll and fixed machine parts (see Figure 6).  
Hazards of the fingers, hand or lower arm being drawn in.

###### - Zone 4

Rotating tooth roll with adjustable height double blade (see Figure 10).  
Hazards of fingers being drawn in and cutting fingers, hand or lower arm.

##### **Automatic derinding, skinning and membrane removal machine**

###### - Zone 1

Rotating tooth roll/conveyor roll, height adjustable blade holder with blade and hold down rollers or fingers .  
Hazards of separation of skin or fingers, hand or lower arm being drawn in.

###### - Zone 2

Rotating hold down rollers or fingers and protective cover.  
Hazards of fingers or hand being drawn in.

###### - Zone 3

Rotating tooth roll/conveyor roll and stripper comb/stripper roll.



- **Hazards of the fingers or the hand being drawn in.**

- Zone 4

- Rotating tooth roll/conveyor roll and fixed machine parts.  
Hazards of fingers, hand or lower arm being drawn in.

- Zone 5

- Rotating conveyor belt and drive and guide rolls.  
Hazards of fingers or hand being drawn in crushing.

- Zone 6

- Rotating circular blade.  
Hazards of cutting fingers or hand.

- Zone 7

- Machine components  
Unintended closure of guard covers  
Hazards of crushing of the hand

- **Electrical hazards**

- **Direct or indirect contact with live parts**

- Hazard from electric shock to the body.

- **Electrical components with insufficient safety level**

- Hazard of mechanical injury to the body due to malfunction.

- **Hazards generated by loss of stability**

- Zone 9

- Mobile derinding-, skinning- and membrane removal machines.  
Hazard of impact or crushing to the body if machine topples over.

- **Hazard generated by noise**

- Derinding, skinning and membrane removal machines may generate noise which can result in hearing damage, in accidents due to interference with speech communication and interference with the perception of acoustic signals.

- **Hazards from non-compliance with ergonomic principles**

- Unhealthy body postures or excessive efforts

- Insufficient consideration of human hand/arm or foot/leg anatomy during machine design.



- **Hazard of harm to the body**

- **Hazards from non-compliance with hygienic principles**

**Microbiological causes**

Hazard (spoilage) of the foodstuff

Hazard of damage to health of the consumer through food poisoning

Infection of the operator

**Chemical causes**

Contamination of foodstuff through residues of cleaning and disinfecting agents causing harm to consumer

**Physical causes**

Entrapped items originating from raw materials, machine parts or other sources causing harm to consumer.



## 1.2. INTRODUCTION

### To all personnel !



**Read and understand all the safety measures and instructions, especially the following.**

**1. Start the machine only if you are ready to operate it.**

**2. Cut off electrical and pneumatic supply when the machine:**

- is unattended
- undergoes a failure
- needs work such as blade change or maintenance

Cutting off the electrical supply means physically eliminating the connection between the electrical and compressed air mains and the machine.



**Read and understand the instructions/precautions given on the following pages.**



## 1.3. SAFETY INSTRUCTIONS

1. Read and follow the instructions contained in this manual before installing, using, cleaning or repairing the machine.
2. Check that all the safety devices work properly, otherwise notify the foreman.
3. Use the machine only when it and the safety devices work properly.
4. The cutting edge of the blade must not be touched.

Used blades must be placed in a special container.

**Wear protective gloves when changing blades.**

5. Follow in particular the instructions concerning:

**Safety**

**Maintenance**

**Cleaning**

**Changing the blade**

6. Use this machine only for the work it has been designed for:

**Removing the hide from a vast range of meats**

7. Use only genuine Grasselli S.p.A. spare parts.



**If during use the machine does not work properly, stop it immediately. Notify the department foreman.**

**Read and understand the precautions given on the following page.**



## 1.4. SAFETY PRECAUTIONS

**IT IS ABSOLUTELY FORBIDDEN:**

- **To operate** on this machine in an improper manner, that is with designs other than those it was designed and intended for.

**IT IS ABSOLUTELY FORBIDDEN:**

- **To connect** the machine to sources of energy (ELECTRICITY, COMPRESSED AIR) until assembly and installation of all the protections and safety devices has been completed.

**IT IS ABSOLUTELY FORBIDDEN:**

- **To use** the machine until the daily test has been successfully completed.

**IT IS ABSOLUTELY FORBIDDEN:**

- **To do** any work (REPAIRS, ADJUSTMENTS, CHECKS, etc.) until the electricity and compressed air have been cut off.

**IT IS ABSOLUTELY FORBIDDEN:**

- **To use** the machine with parts that are damaged or missing, with safety devices out of order and with guards fixed incorrectly.

**IT IS ABSOLUTELY FORBIDDEN:**

- **To modify**, remove or replace parts or safety devices designed to be used with this machine.

**IT IS ABSOLUTELY FORBIDDEN:**

- **To touch** the cutting edge of the blades. Always wear a pair of protective gloves when handling the blade. Eliminate used blades appropriately and safely.

**IT IS ABSOLUTELY FORBIDDEN:**

- **To touch** the internal protections or any other moving part while the machine is in operation.

**IT IS ABSOLUTELY FORBIDDEN:**

- **To leave** the machine connected to the energy sources when it is not being used.

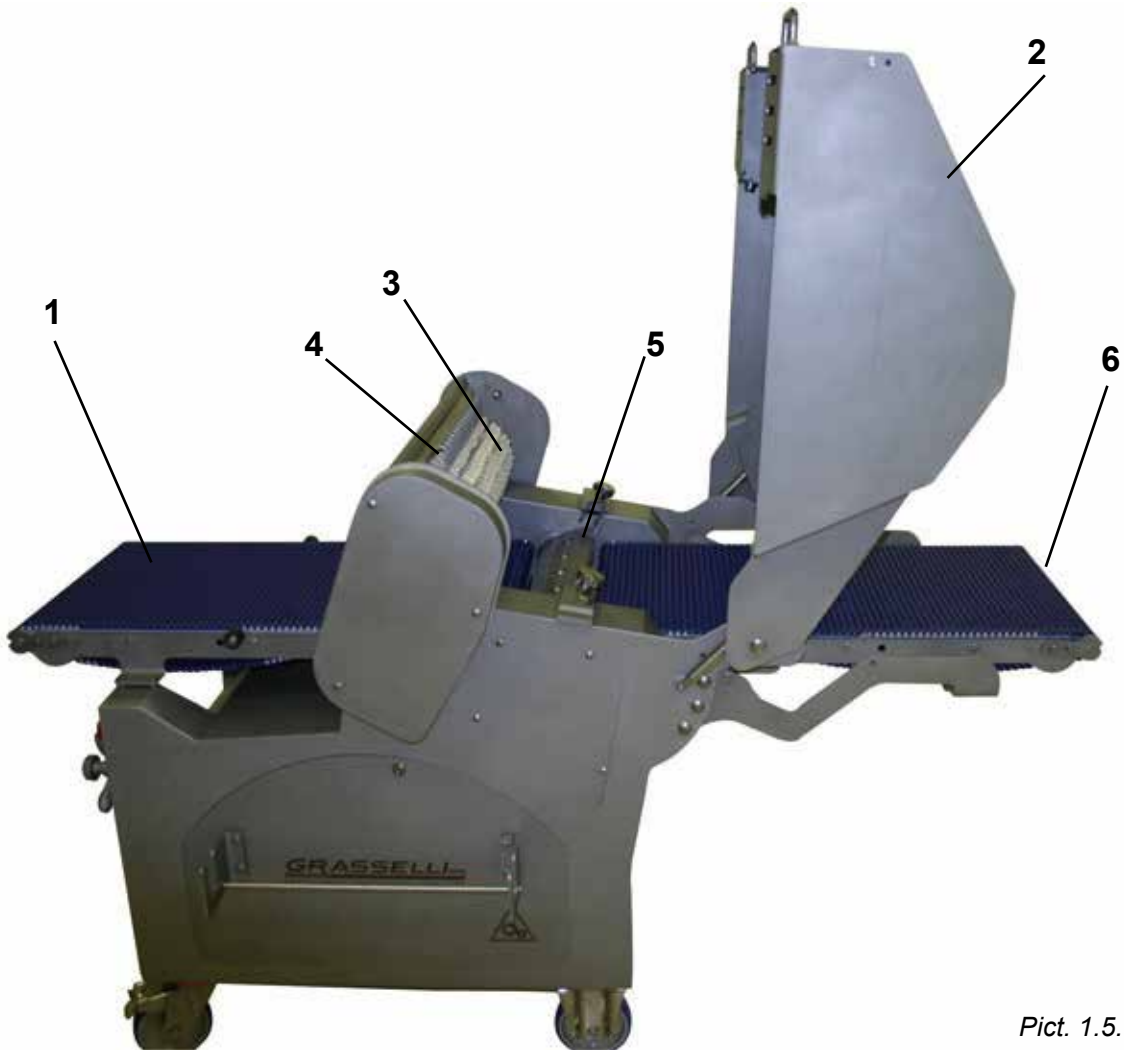
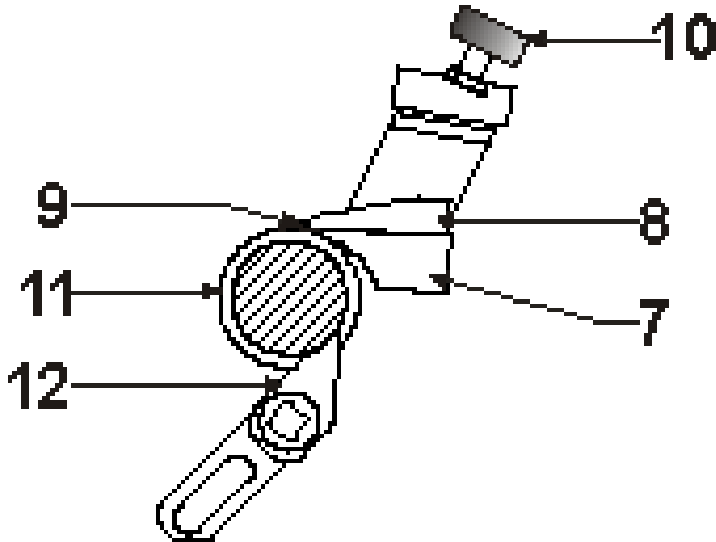


**Should the machine not work properly during use, stop it immediately. Notify the foreman.**





# 1.5. GENERAL DESCRIPTION OF OPERATION



Pict. 1.5.1



The **NAB** model has been designed to remove rinds automatically, on a vast range of meats (beef, veal, pork, turkey, etc.).

**The main components of the machine are:** (see Pict. 1.5.1)

- |    |                          |     |                      |
|----|--------------------------|-----|----------------------|
| 1) | Infeed belt              | 7)  | Blade support plate  |
| 2) | Front protection         | 8)  | Blade protection     |
| 3) | Rubber roller group      | 9)  | Blade                |
| 4) | Rubber roller comb group | 10) | Blade holder knobs   |
| 5) | Blade group              | 11) | Toothroll            |
| 6) | Outfeed belt             | 12) | Toothroll comb group |

## OPERATION

Preliminary checks to be made before each work cycle:

- check state of the machine.
- check shields have been fixed properly.
- check that machine will not start with front protection (2) open.
- run control test, see Sect. 2.9 "**Daily test**".

After carrying out these steps, pass on to start machine, see Sect. 2.8 "**Starting the machine**".

Product to be treated must be placed on infeed belt (1). Product's part to be removed must on bottom side.

Toothroll (11) aided by rubber roller group (3), will draw the product towards blade (9) that will separate the product into two portions.

The processed product will be conveyed outside the machine by outfeed belt (6).



**Machine's work cycle is carried out automatically**



# SECTION 2 INSTALLATION



**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**



## 2.1. INDICATIONS CONCERNING TRANSPORT

The machine is delivered to the user bracketed on a pallet and enclosed in a cardboard box full of special material making it a solid and compact entity.

Use a forklift truck to handle the packed machine. Insert forks into area indicated on packing.

It is forbidden to overturn, lay down or stand the packing one on top of another.

Handling the unpacked machine may be done by using the wheels of machine with or by a forklift truck, inserting the forks only from the side shown in Pict.2.1.1

## 2.2. INDICATIONS CONCERNING UNPACKING

Open the cardboard box then, after removing filler material remove cardboard box.

Remove fixing brackets joining machine to pallet.

Clean the machine of any remains of packing and push it into its place of use.

## 2.3. PRELIMINARY OPERATIONS

**N.B. Right- and left-hand sides are meant considering the working position of the operator**

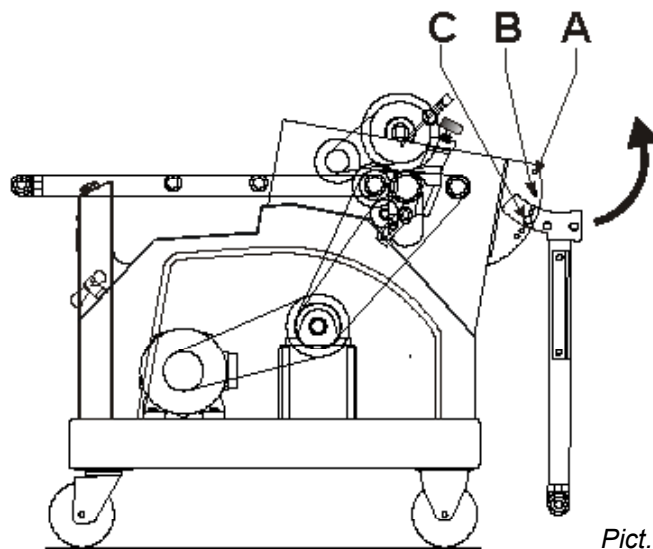
### **FITTING THE BELTS** Pict.2.3.1-2.3.2

Machine will be delivered with infeed belt in work position and with outfeed belt low (see Pict. 2.3.1). To fix outfeed belt in work position follow below sequence:

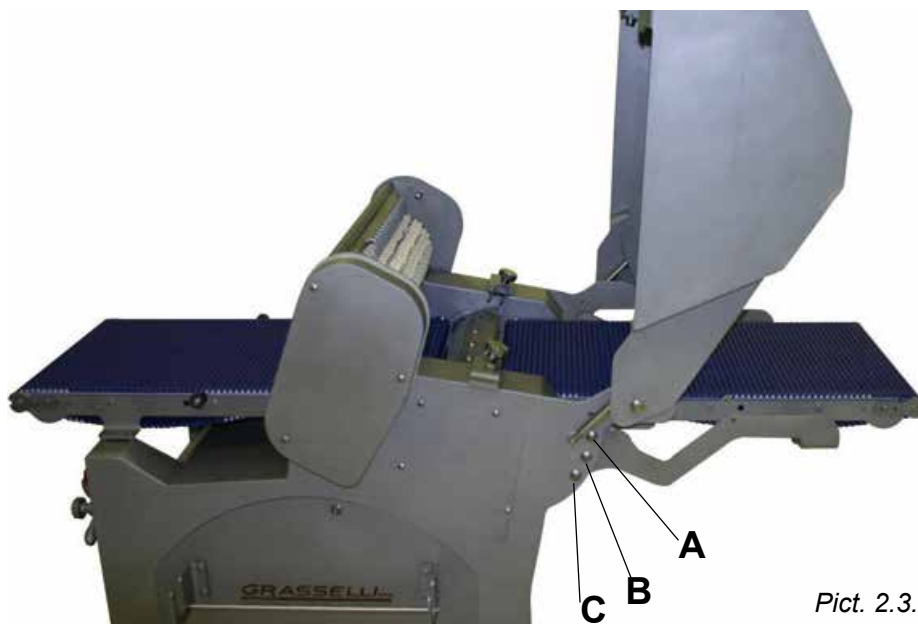
- remove screws A and B
- loose screws C
- turn on outfeed belt upwards ( see the arrow ).
- screw A and B in their holes ( see fig. 2.3.2 ) and tight nuts.



Pict. 2.1.1



Pict. 2.3.1



Pict. 2.3.2



## 2.4. MACHINE CHARACTERISTICS

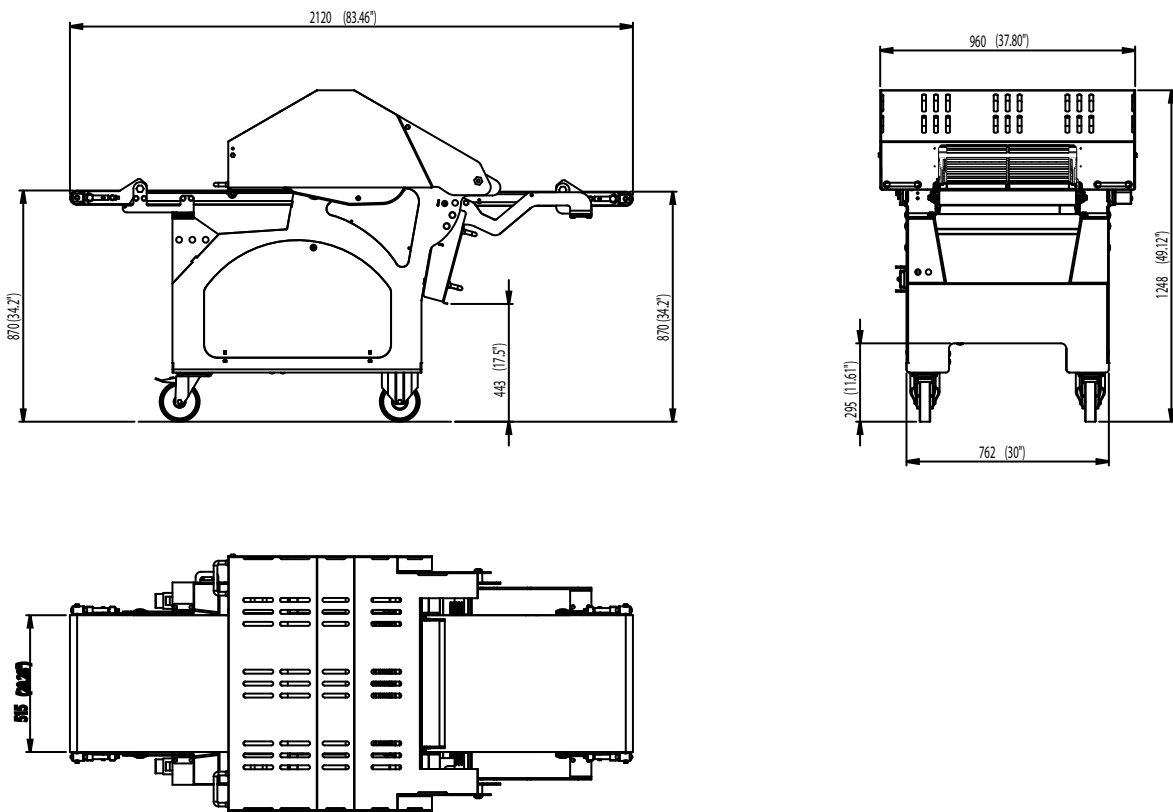
Machine type:	<b>Machine to remove rinds automatically, on a vast range of meats</b>
Abbreviation:	<b>NAB 520 - 720</b>
Power supply:	<b>Electric</b>
Motor:	<b>2,2 Kw- 3 Ph - RPM 1400</b>
Work environment:	<b>Foodstuffs</b>
Air consumption:	<b>42 litres/min.</b>
Weight:	<b>See table "Technical data"</b>
Noise level:	<b>79,5 dBA pos.</b>
Work speed:	<b>22 m/min.</b>
Material in contact with foods:	<b>Conforming to standard</b>
Overall dimensions:	<b>See Pict.2.4.2.</b>

<b>Motor</b>	
<b>Power 2.2 KW 3 HP    Speed 1400 RPM 50 Hz    1680 RPM 60 HZ</b>	
<b>4 pole 3 phase</b>	
200V-60Hz-----10A	415V-50Hz-----5,37A
200V-50Hz-----9,19A	440V-50Hz-----5,75A
200V-60Hz-----9,1A	440V-60Hz-----4,82A
240V-50Hz-----8A	460V-50Hz-----6,18A
380V-50Hz-----5,21A	460V-60Hz-----4,86A
380V-60Hz-----4,8A	575V-60Hz-----5,2A



# MACHINE DIMENSIONS

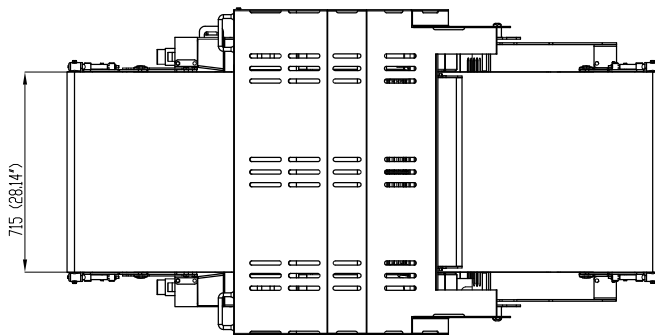
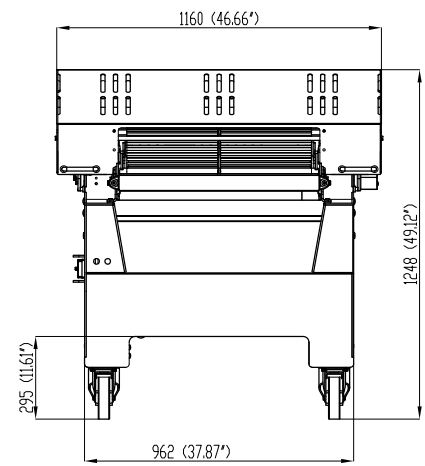
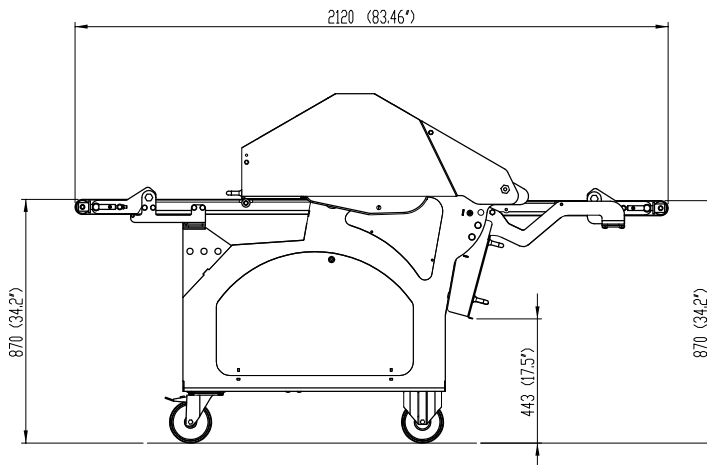
NAB 520\DD\CD



Pict. 2.4.2



## NAB 720







## 2.5. ELECTRICAL CONNECTION



Connecting the machine to the mains involves an electrocution hazard. All connection operations must be carried out by specialised personnel, equipped with special PPE in compliance with the regulations in force.

1) The machine is supplied in various versions with voltages (V) and frequencies (Hz) on request. **Make sure that the operating voltage and frequency are compatible with the features of the mains by checking the CE plate applied on the machine (see section 5.2 "Pictograms").**

Make sure the mains complies with current regulations and is fitted with a differential switch with a minimum opening of the contacts of 3 mm in compliance with the laws in force.

2) The machine must be **connected to earth** correctly by means of the **yellow-green lead**.

3) Check that the **infeed belt turns towards to the into the machine** otherwise reverse the polarity.

4) **It is compulsory to have the connection made by skilled personnel.**

**The Manufacturer cannot be held liable for damage caused by incorrect connections or connections that are not compatible with the machine's power supply system.**

Use a 3P+E plug to conduct the connection.

Check the polarity of the connection when you start up the machine for the first time.

- Turn the master switch (I-ON) on
- Start the cycle (see the paragraph "Commissioning the machine")

To reduce risk exposure, the wiring diagram has:

2 magnetic coded safety sensors installed on mobile guards, front and rear.

1 emergency pushbutton.

Ensuring the correct functioning of the emergency push-button and the safety sensors at the beginning of every work shift is **COMPULSORY**:

- by pressing the safety button the machine **MUST** stop
- the machine **MUST** stop when the front and rear mobile guards are lifted

The safety control systems are in compliance with the standard:

UNI EN ISO 13849-1:2008 - category 1 - PL=b



## 2.6. PNEUMATIC CONNECTION see Pict. 2.8.1

Connect the machine air inlet (20) to the pneumatic network by means of the **1/4 GAS** fast union. Supply pressure must be between **6 and 10 Bar**.

The air supplied must be free from humidity, otherwise it is advisable to insert a check filter.

If there is a manual condensation drainage filter, it is advisable to drain it off every time the level reaches **3/4** of the capacity of the container.

## 2.7. DAILY TEST



**Caution! Always run the test to prevent serious damage**

Carry out the following tests referring to Pict. 2.8.1 and Pict. 2.8.2

- 1) Press emergency button (15)  
**The machine must stop.**
- 2) Turn main selector 0-1 (17) in position 0 (zero).  
**The machine must stop.**
- 3) Open the front protection (2)  
**The machine must stop.**



**If the machine does not stop, switch it off and immediately notify the foreman.**

**Never leave the machine connected when it is unattended.**

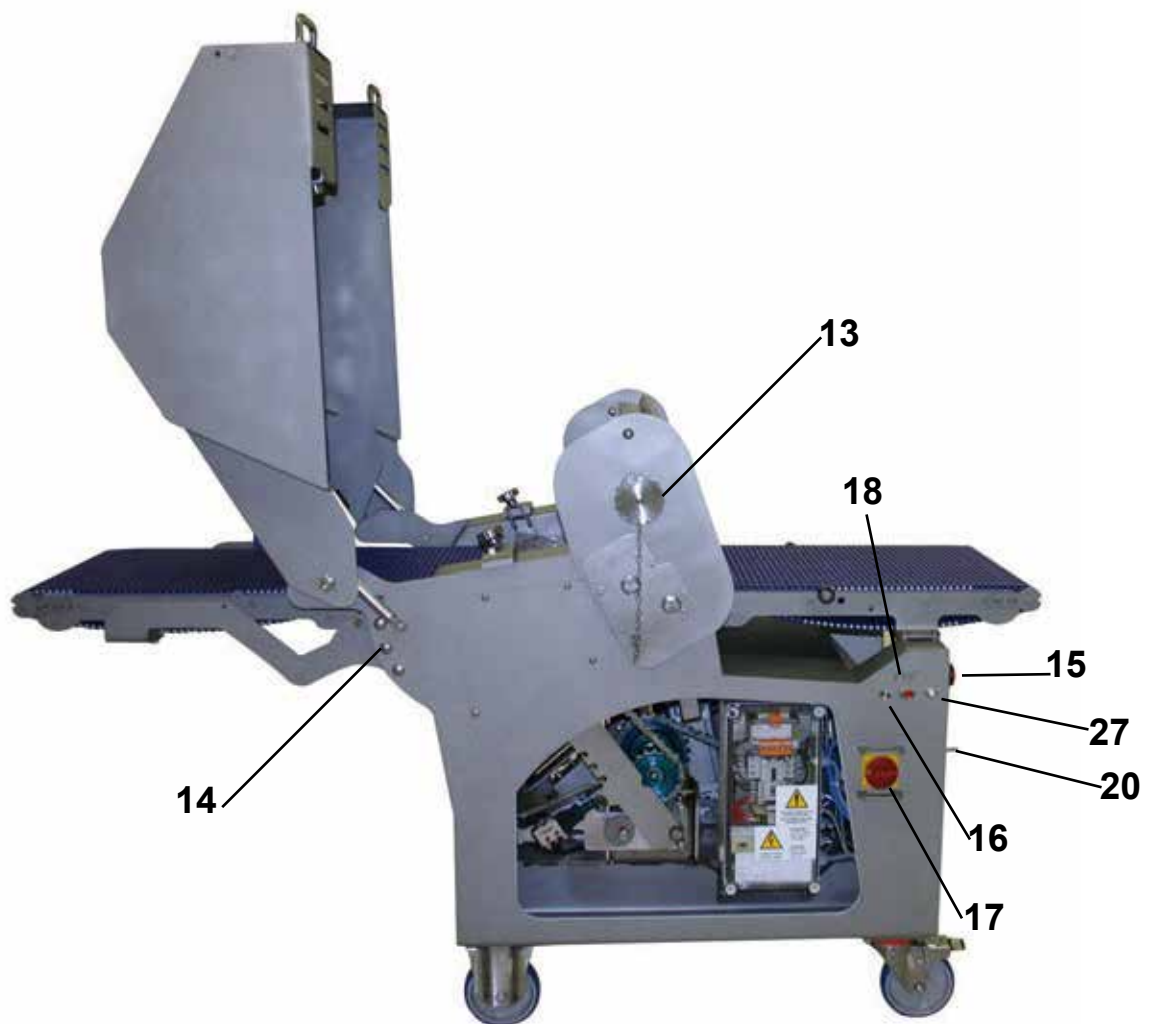


**The signal lamp ON signals that the machine is powered up.**

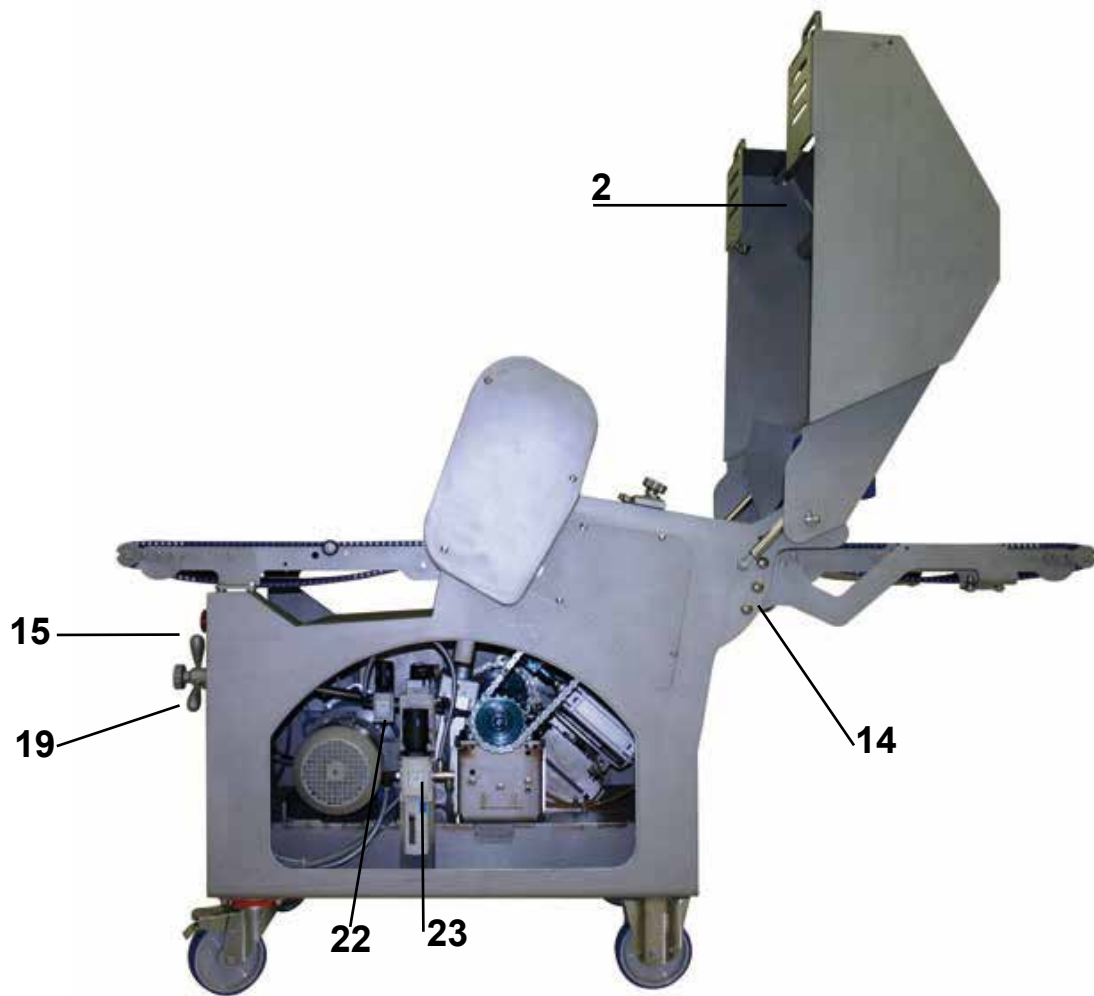


## 2.8. DESCRIPTION OF MAIN COMPONENTS

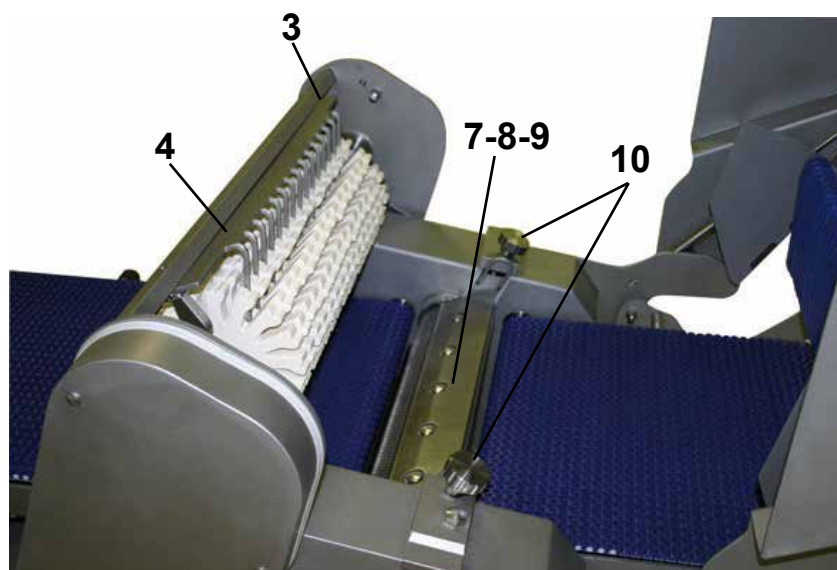
- 2) Front protection
- 3) Rubber roller group
- 7-8-9) Blade holder unit
- 10) Blade holder knobs
- 13) Rubber roller extraction handwheel
- 14) Outfeed belt regulation system.
- 15) Emergency button
- 16) Start button
- 17) Main switch 0-1
- 18) Off button
- 19) Rind thickness adjusting handwheel
- 20) Air inlet
- 22) Rubber roller air pressure regulator
- 23) Filter regulator with air pressure gauge
- 27) Signal lamp



Pict. 2.8.1



Pict. 2.8.2



Pict. 2.8.3



## 2.9. STARTING THE MACHINE

Before using the machine read the safety information and instructions with special care (Sect.1)



Non-observance of these important instructions may cause accidents.

Do not connect machine to electric mains and pneumatic network until it has been fully assembled and fixed in desired working position. Before connecting up to power supply, check that mains voltage corresponds to that given on machine's rating plate.

**BEFORE OPERATING** see Pict. 1.4.1 - 2.8.3

After making sure that:

- machine is in the right work area.
- preliminary operations have been carried out, see Sect.2.3 "**Preliminary operations**"
- mains disconnecting switch and main switch 0-1 (**17**) of machine are turned onto position (O) (zero)
- blade holder unit (**7-8-9**) is tightened with the knobs (**10**) and is locked with blade fitted correctly, see Sect.5.3 "**Blade adjustment and replacement**".
- emergency button (**15**) is not pressed, otherwise pull it.
- the front protection (**2**) is closed.

Proceed connecting machine to electric mains and to pneumatic network. Start processing the product in the following way:

- Activate switch on mains and main switch 0-1 (**17**) of machine by turning them onto position (**1**) (one). At this stage signal lamp (**27**) lights on to signal that machine is powered up.
- Press start button (**16**) and run control test, see Sect.2.7 "**Daily test**".

**STARTING PROCESSING** see Pict. 2.8.1 - 2.8.2

Product to be processed should be layed with the part to be removed on the top of the infeed belt. The machine carries out its cycle automatically. Should any problems arise, stop machine (**18**) and refer to Sect.3.2 "**Operating instructions**".



Keep hands away from any moving parts.  
Never touch the cutting edge of the blade for any reason whatsoever.



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# SECTION

## 3

# OPERATION



**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**



## 3.1. DESCRIPTION OF ESSENTIAL PARTS



**Before using the machine read the safety information and instructions with special care (Sect.1) .**

**Non-observance of these important instructions may cause accidents.**

**MAIN DISCONNECTING DEVICE.** This device controls power supply to machine. It is located on power socket where machine is connected on. Turning it onto 0 (zero) cuts off electric power to machine.



**It is the only switch that cuts off electricity correctly before effecting maintenance.**

**DESCRIPTION OF CONTROLS AND ESSENTIAL PARTS** see Pict. 2.8.1 - 2.8.2 - 2.8.3

**4) RUBBER ROLLER COMB ASSEMBLY.** It's compose from two comb fixing knobs and from the rubber roller comb. Before removing the comb is necessary unscrewing the knobs.

**10) BLADE HOLDER KNOBS.** The knobs must be fully tightened.



**Screw knobs (10) tightened**

**13) RUBBER ROLLER EXTRACTION HANDWHEEL.** When removing this handwheel (by turning and pulling out it), you can remove rubber roller. Before removing rubber roller you must remove comb assembly (4) also.

**14) OUTFEED BELT REGULATION SYSTEM.** This system enable oufeed belt inclination's adjusting. Changing can be done by unscrewing the three fixing screws and then, after adjusting belt position, re-inserting and tightening screws.

**15) EMERGENCY BUTTON.**It cuts off the work cycle of the machine. When this button is pressed it is not possible, using machine controls, to operate any mechanism.

**16) START BUTTON.** It starts up machine's work cycle. It must be pressed to restart machine every time button (15) it has been pressed.





- 17) MASTER SWITCH.** In its 0 position it cuts off power supply to whole machine. When switch is in position 1, power supply is ON.
- 19) RIND THICKNESS ADJUSTMENT HANDWHEEL.** It allows changing the thickness of the rind removed.
- 23) FILTER-REGULATOR-PRESSURE GAUGE ASSEMBLY.** It Filters and regulate air supply at approximately **6 kg/cmq. (85 PSI)**.
- 27) ON/OFF LIGHT.** Lights up when electric power is ON.



**Never touch the cutting edge of the blade for any reason.**



## 3.2. OPERATING INSTRUCTIONS



**TUBE ROLLER  
CHICKEN, TURKEY**



**STANDARD COD.412A**

**SOFT PINK COD. 412AS**



**SMALL SIZE COD.18625AS**



**STANDARD ROLLER WITH ROUNDED  
FOOT COD.412BS**

*Pict. 3.2.2*



**Before using the machine read carefully instructions and safety information (Sect.1) .**

**Non-observance of these important instructions may cause accidents.**

### **TROUBLE TESTS AND CHECKS** see Pict.3.2.1 - 3.2.2

1. See Sect. 2.8 "**Starting the machine**" to prepare machine for use.
2. See Sect. 3.1 "**Machine controls**" for controls description.
3. Make sure all safety devices have been installed correctly.
4. Check manually if the knobs (**10**) are strong screwed.
5. Check blade is correctly fitted , see Sect. 5.3 "**Blade adjustment and replacement**".
6. Start processing as described in Sect.2.8 "**Starting machine**".
7. Verify quality of processing. If this is unsatisfactory, as there are parts of product to be removed, check following points:
  - The pressure rubber roller exerts on product to be processed is correct. Otherwise use the knob (**22**). For hot products minimal pressure is advised.
  - In the rubber roller assembly the order of fitting each component comply indications in figures included in this section.
  - The shape of rubber roller (**3**) is compatible with product to be processed. ( see Pict. 3.2.2 ).
8. Check air pressure supply is not lower than **6 BAR**.
9. Keep clear the area around machine in order to move freely.
10. Should further problem arise or you need further information, please call **GRASELLI** Technical Dept.



**Never leave the machine connected when it is unattended.  
Do not touch blade's cutting edge for any reason whatsoever.**



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# SECTION

## 4

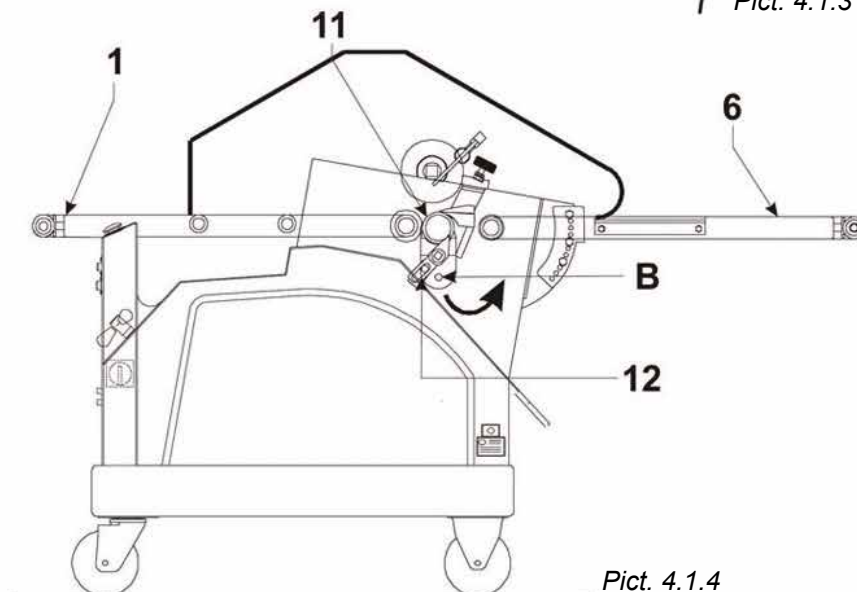
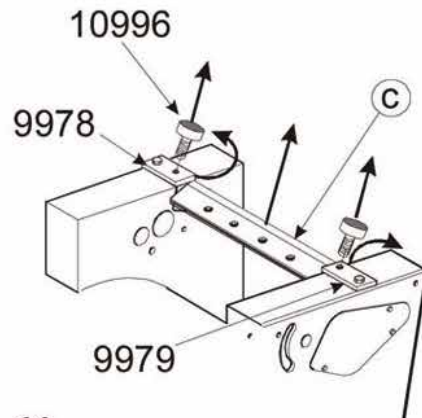
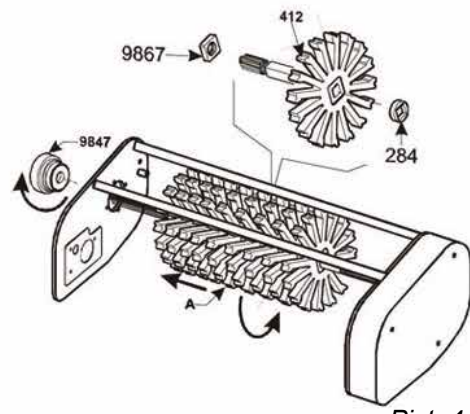
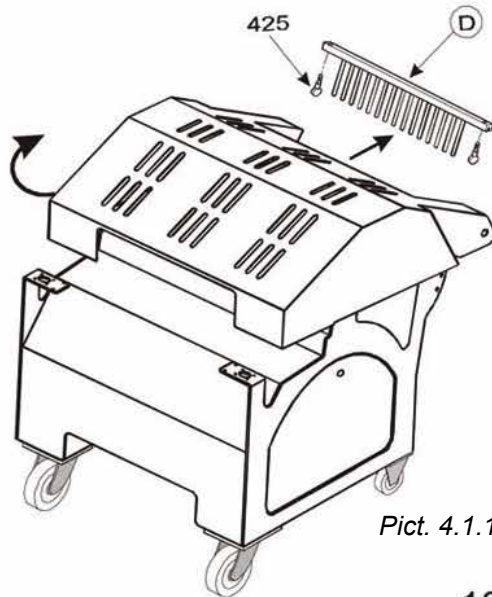
# CLEANING AND WASHING



**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**

## 4.1. CLEANING AND WASHING





## OPERATIONS TO BE DONE AT THE END OF WORK SHIFT

a) **Disconnect the electrical connection.**

- Turn main disconnecting switch onto position 0 (zero).
- Do not rely on the indication of the indicator light as it could be burnt.

b) **Dismantle rubber roller** (see sect. "Replacing rubber roller")

Referring Pict. 4.1.1 - 4.1.2

- Open the front protection.
- Lift the head of rubber roller.
- Unscrew wing nut (**425**) and take out rubber roller comb.
- Turn knob (**9847**) anticlockwise and remove it.
- Take out the rubber roller (**A**) moving it, as shown by arrows.

c) **Dismantle blade holder unit** (see Sect. " Replacing blade holder ")

Referring Pict. 4.1.3

- Partially unscrew screws (**10996**) until plates (**9978-9979**) are free to turn 90° and let blade holder unit (**C**) to be taken out.
- Take out blade holder unit by means of side hooking rings.
- Take care not to damage dismantled parts.

d) **Open stripper roller comb** see Pict. 4.1.4

- This operation is possible after blade holder unit has been removed (see previous point). Pull stripper roller comb opening handle (**B**) in the direction indicated by arrow.

## WASHING AND STERILIZING

a) Wash with hot water (**from 35 to 50C**).

b) Never direct water jet onto blade cutting edge, close to seals or electrical components (damaging hazard).

c) Apply a chemical sterilising agent, whose use is allowed by food sector standards, onto machine and dismantled parts. Leave it working for the necessary time.

d) Rinse detergent off the machine and dismantled parts. This should be done carefully. Use low pressure water jet ( **60 psi from 35 up to 50 gradi**).

e) Spread a film of oil conform to contact with foodstuff (e.g. Vaseline oil) onto blade's cutting edge

**When washing the machine, pay attention not to damage electric wiring or electric components.**

**Do not insist with water jet close to seals in order to avoid water getting inside machine.**

**To maintain machine in excellent condition for a long period of time, carry out operations described in this section daily.**



Parts recommended to be sterilised (Pict. 4.1.1 - 4.1.2 - 4.1.3 - 4.1.4):

- Blade holder unit (**C**)
- Toothroll (**11**).
- Rubber roller and comb (**D**).
- Conveyor belts (**1-6**).
- Stripper roller comb (**12**).



**Never touch the cutting edge of the blades for any reason whatsoever. Replace used blades in a special container.**

**IT IS ABSOLUTELY FORBIDDEN** to use toxic products that may release noxious elements to the health.



**Blades must be stored in a dry place.**





# SECTION

# 5

# MAINTENANCE

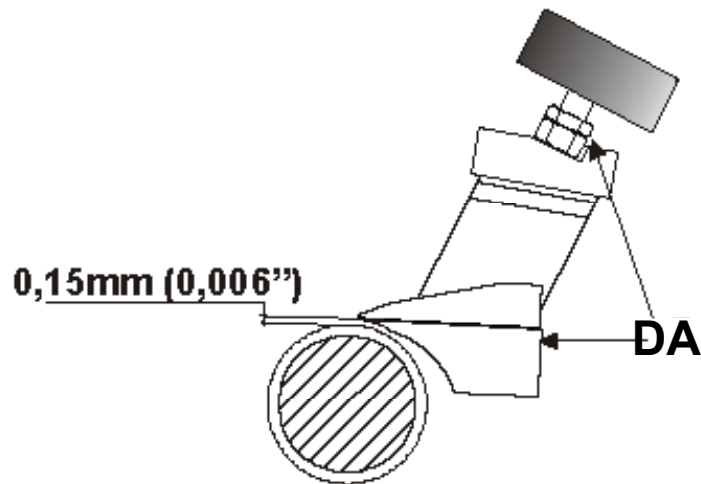


**Read carefully instructions and safety information (Sect.1) before using machine.**

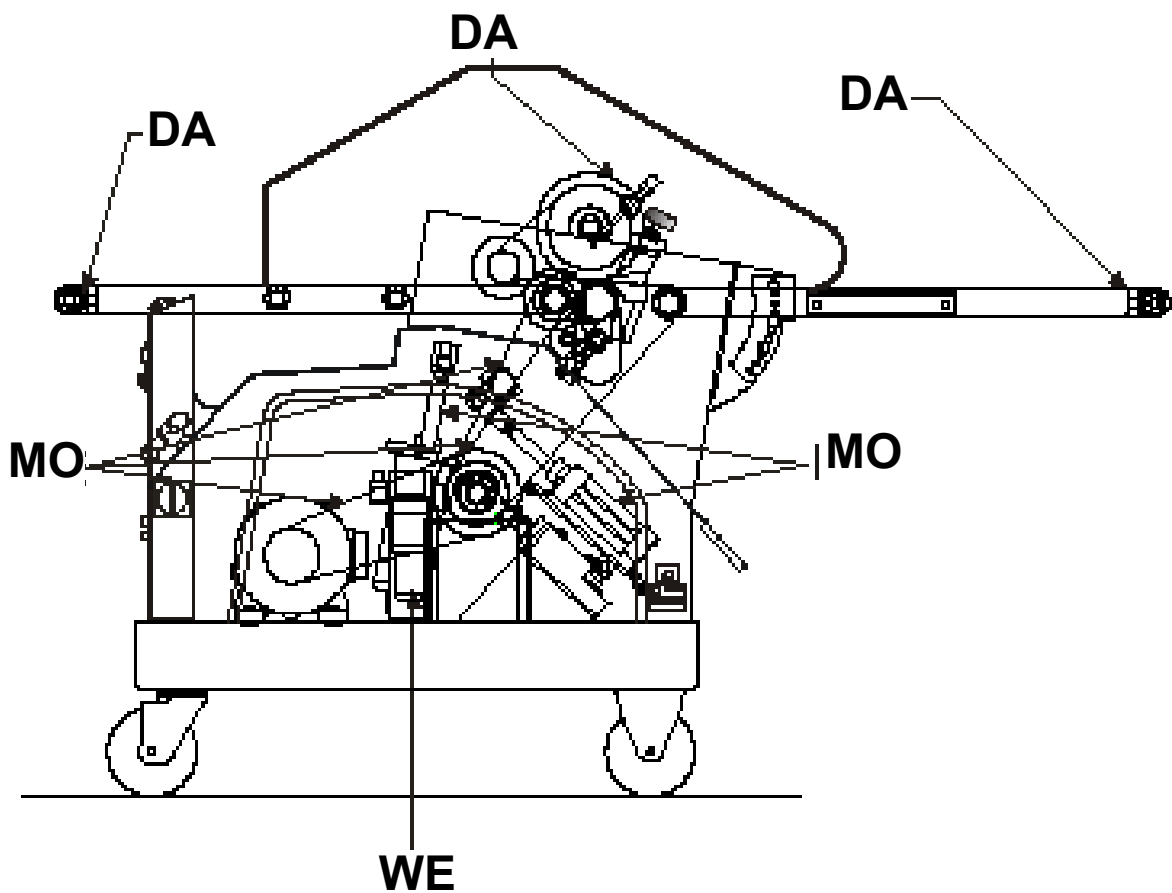
**Disregards for instructions and safety information can cause injury**



## 5.1. POINTS OF PREVENTIVE MAINTENANCE



Pict.5.1.1



Pict..5.1.2



Before using the machine read carefully safety information and instructions (Sect.1).

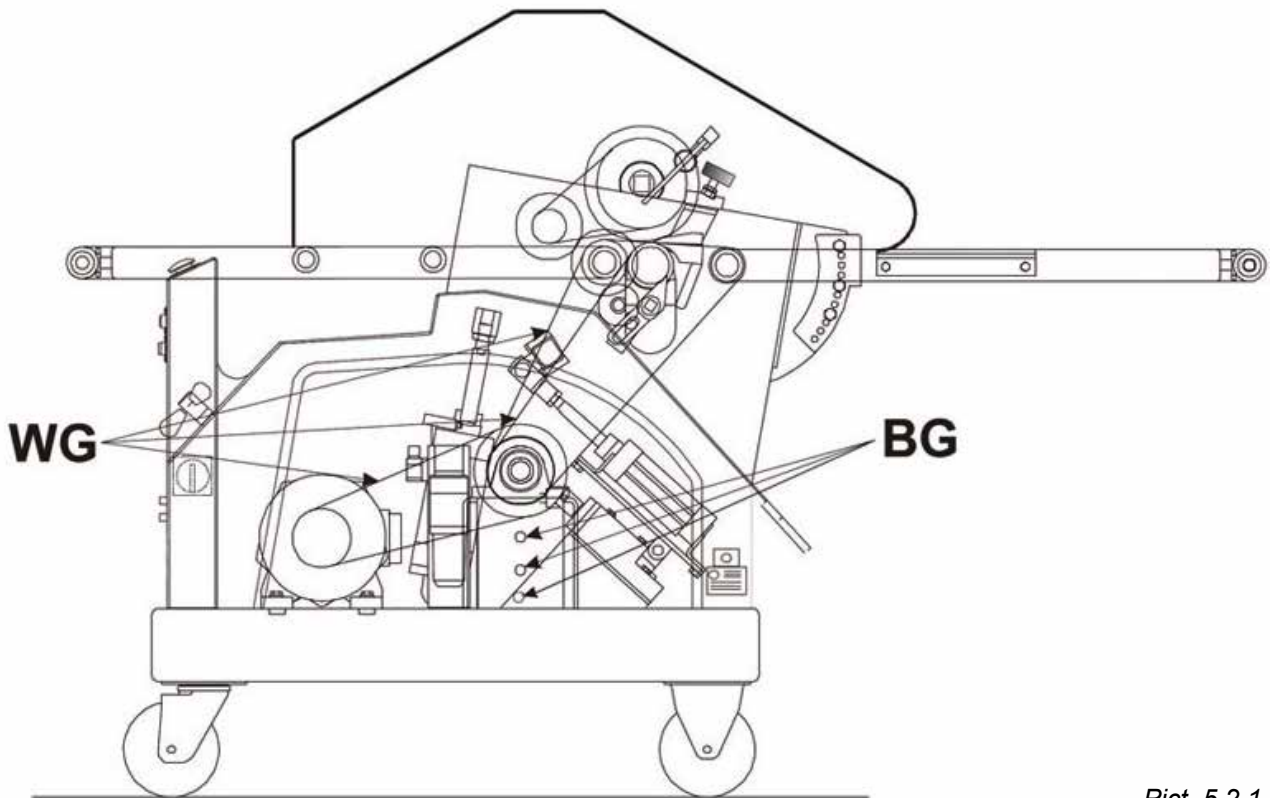
Disregards for instructions and safety information can cause injury.

Please follow the given schedule:

**DA**= Daily   **WE**=Weekly   **Mo**=Monthly

Points of preventive maintenance	DA.	WE.	MO.
Clean machine.	0		
Check operation of all electric components Run <b>daily test</b> ( see Sect. 2.9 ).	0		
Check blade and blade holder state.	0		
Check condition of rubber rollers and conveyor belts.	0		
Drain off condensate water in air filter.		0	
Perform weekly lubrication (see Sect. 5.2).		0	
Check condition of drive components: chains, pinions and gears.			0
Check pneumatic system overall efficiency.			0
Perform monthly lubrication ( see Sect. 5.2 ).			0

## 5.2. LUBRICATION



Pict. 5.2.1

LUBRICANT TYPE	
BG	Bearing grease SKF LGMT2/1 or equivalent.
WG	Chain water proof grease.



Lubrication is essential to keep the machine at peak efficiency over time.

Lubricants that come in contact with food products must have the necessary approvals.

**The table below indicates: :**

- lubrication frequency: DA= Daily WE=Weekly MO=Monthly
- type of lubricant.
- points to lubricate.

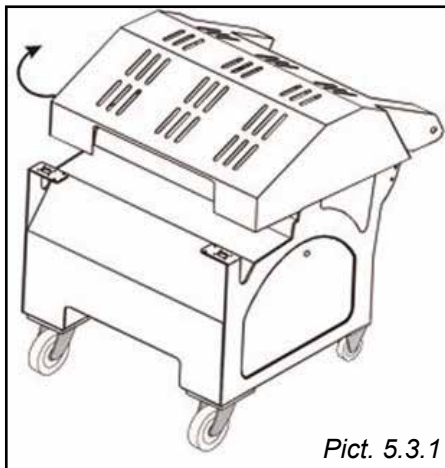
<b>POINT OF LUBRICATION</b>	<b>Lub</b>	<b>DA</b>	<b>WE</b>	<b>MO</b>
Lubricate bushings by means of lubricator placed on right side support pin.	BG		0	0
Lubricate chains.	WG			0



## 5.3. BLADE REPLACEMENT AND ADJUSTMENT

### CAUTION !

Before proceeding with the following operations, disconnect the electric and pneumatic connections. Use the special safety gloves.



Pict. 5.3.1

### BLADE REPLACEMENT

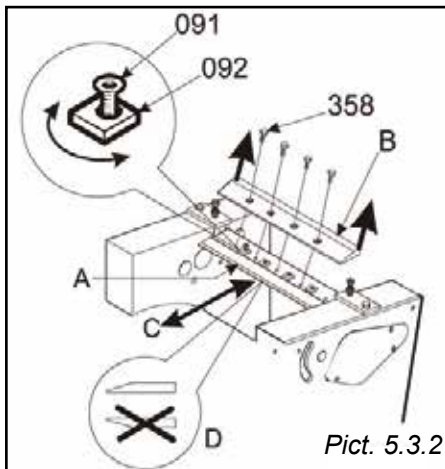
a) Lift rubber roller head (fig.5.3.1).

Referring Pict.5.3.2:

- Loosen screws (358).
- Remove blade holder top plate (B) and take out worn blade (A).
- Clean carefully blade housing seat.
- Fit new blade (A) laying it on registers (092) level must be turned upwards.
- Reassemble all in reverse order to the above description (D).

### SETTING BLADE POSITION

- Lift rubber roller head (fig.5.3.1).
- Loosen screws (358) remove blade holder top plate (B).
- Loose screws (091) and turn registers blocks (092) until you get desired position (fig.5.3.3).



Pict. 5.3.2

Moving blade :

- towards C

you obtain an **increase in thickness removed**

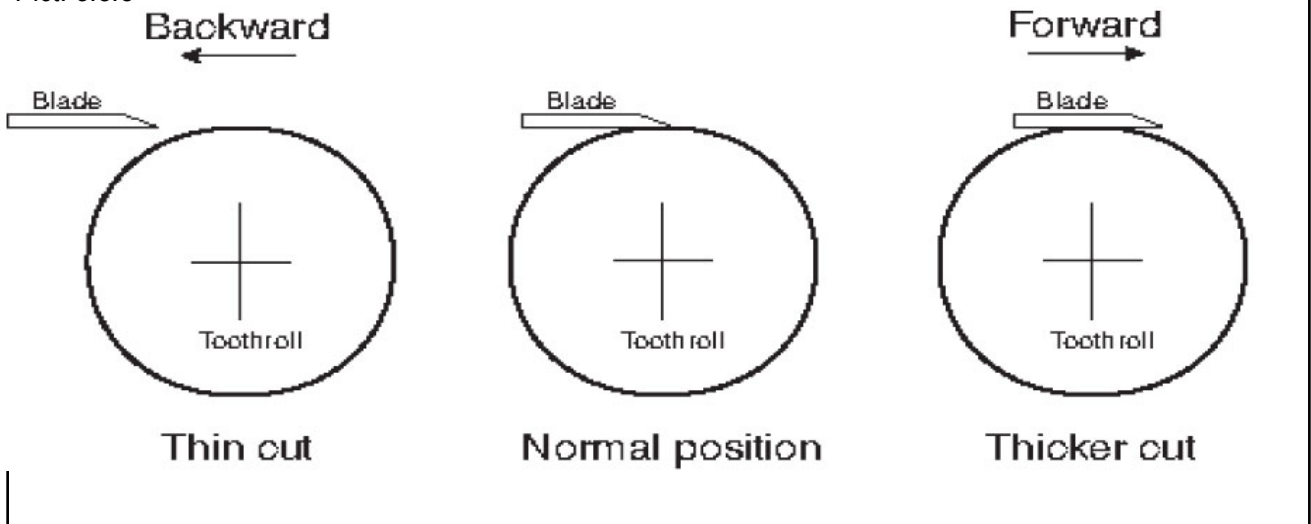
- opposite towards

you obtain an **decrease in thickness removed**

d) Blade edge must be parallel to toothroll teeth.

**Warning: use only 0.7mm thick blades.  
Never contact the cutting edge of blade.**

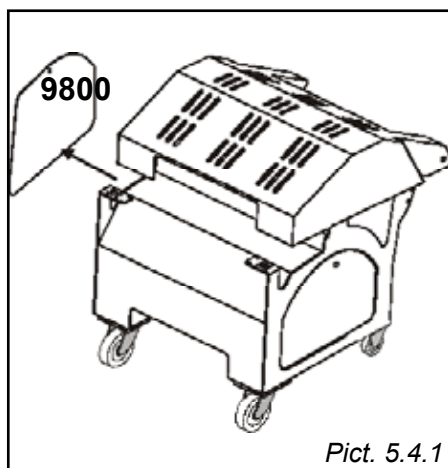
Pict. 5.3.3



## 5.4. BLADE HOLDER REPLACEMENT & ADJUSTMENT

### CAUTION !

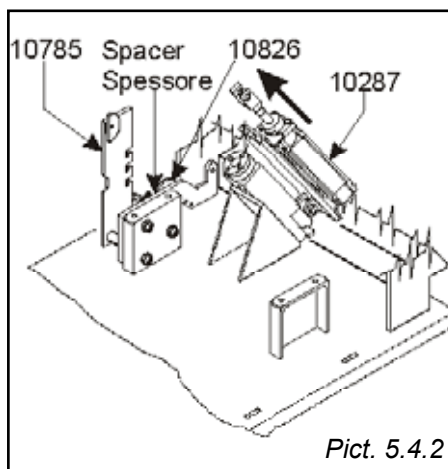
Before proceeding with the following operations, disconnect the electric connections.  
Use the special safety gloves.



Pict. 5.4.1

### BLADE HOLDER UNIT REPLACEMENT

- Open right side cover (9800) (fig.5.4.1).
- Place a spacer between chain stretcher (10785) and washer (10826). Cylinder rod (10287) should be completely outside cylinder (fig.5.4.2).
- Set regulation knob to minimum. Open the front protection. (fig.5.4.3).
- Open rubber roller head (fig.5.4.4).
- Loose regulation screws until you can turn 90 degrees plates (9978- 9979) (fig.5.4.5).
- Remove blade holder (A) from its housing. Put new blade holder in (fig.5.4.6). A small adjustment new blade holder's side guides could be necessary. Adjustment is done by using a file. Pay attention to file not in excess creating a gap between guides and blade holder.

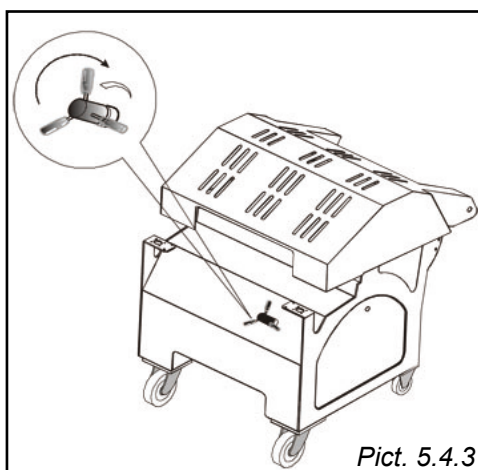


Pict. 5.4.2

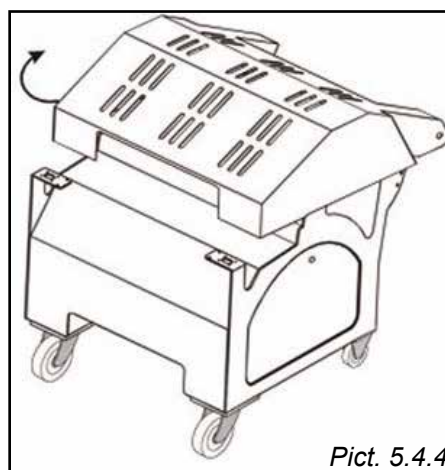
**Blade holder unit adjusting could be done starting from step f) of following sequence ("Blade holder unit adjustment).**

### BLADE HOLDER UNIT ADJUSTMENT

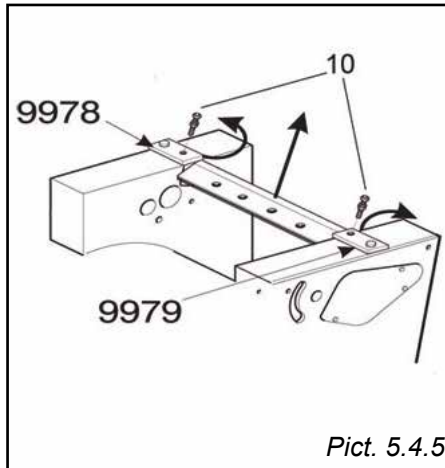
- Open right side cover (9800) (fig 5.4.1).
- Place a spacer between chain stretcher (10785) and washer (10826). Cylinder rod (10287) should be completely outside cylinder ( fig.5.4.2).
- Set regulation knob to minimum (fig.5.4.3). Open the front protection.



Pict. 5.4.3



Pict. 5.4.4



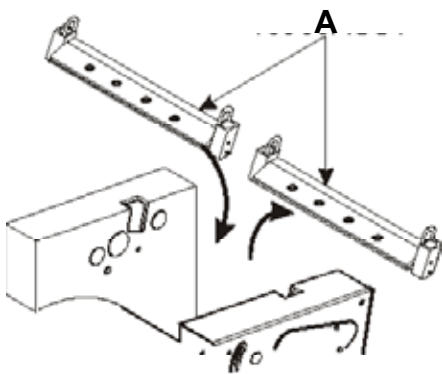
Pict. 5.4.5

**Make sure cylinder rod (10287) is completely extracted outside cylinder and thickness regulation knob is set to minimum.**

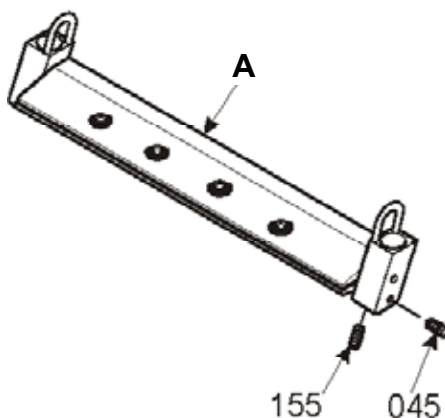
- d) Open rubber roller head (fig.5.4.4).
- e) Loose regulation knobs (10) until you can turn 90 degrees plates (9978-9979) and remove blade holder (fig.5.4.5).
- f) Adjustment is done by loosening dowel (045) and moving grub screw (register) (155) (fig.5.4.7). Proceed until gap between blade holder and toothroll is 0,15 mm ( 0,006" ).
- g) When adjustment is done reassemble parts following step in reverse order.

**For proper machine working make sure knobs (10) are tighten and spacer between chain stretcher ( 10785) and washer (10826) it's been removed.**

**Never contact the cutting edge of blade.**



Pict. 5.4.6



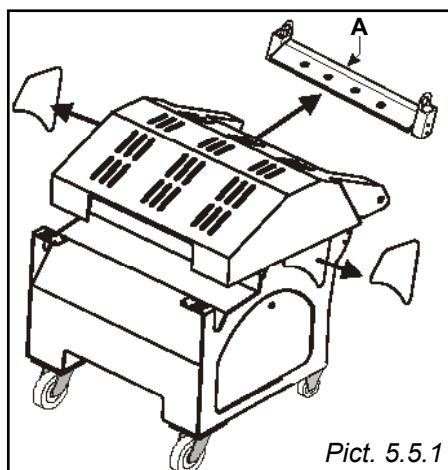
Pict. 5.4.7



## 5.5. TOOTHROLL REPLACEMENT

### CAUTION !

Before proceeding with the following operations, disconnect the electric and pneumatic connections. Use the special safety gloves.



Pict. 5.5.1

### TOOTHROLL REPLACEMENT

Referring Pict.5.5.1

- a) Open rubber roller head.
- b) Remove blade holder ( **A** ) (see sect.5.4).
- c) Remove left and right top cover and left bottom cover.

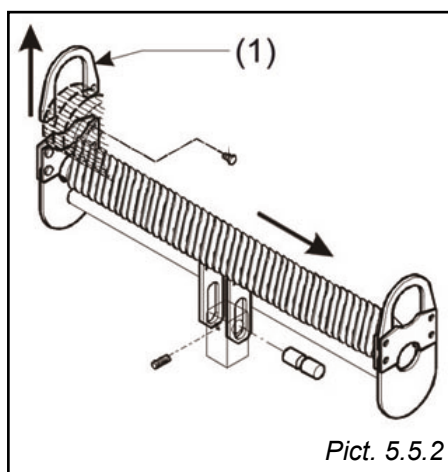
Referring Pict.5.5.2

- d) Loose comb support's locking screws.
- e) Remove block's top side (1).

Referring Pict.5.5.3

on right support of machine:

- f) Remove chain stretcher (10777).
- g) Extract rubber roller driving gear (337) unscrewing fixing screw.
- h) Leave chain (10265).

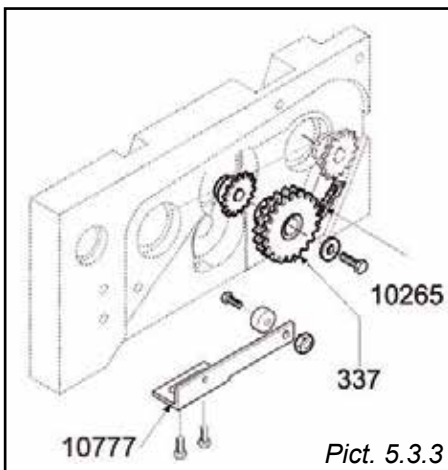


Pict. 5.5.2

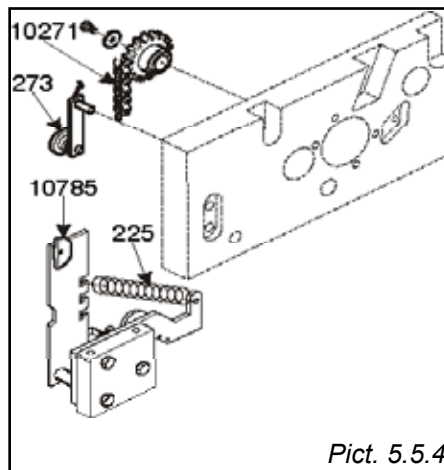
Referring Pict.5.5.4

on left support of machine:

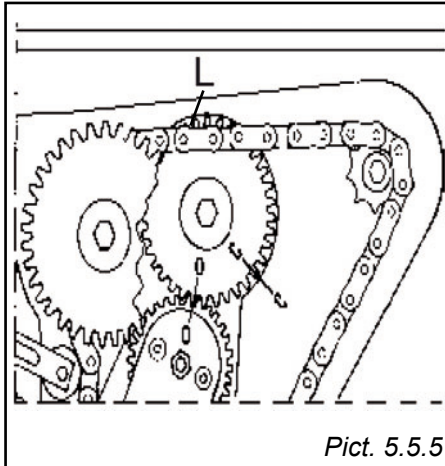
- i) Remove chain stretcher (273).
- l) Unhook spring (225) from chain stretcher (10785).
- m) Remove chain (10271).



Pict. 5.3.3



Pict. 5.5.4



n) Turn cams until cam's mark **O** match gear's mark **O** (fig.5.5.5)

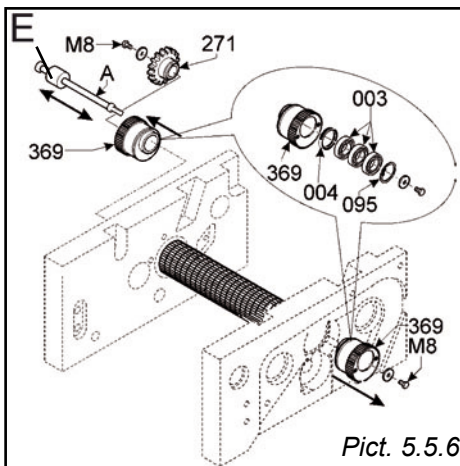
Referring Pict.5.5.6

- o) Loose screws (**M8**) on toothroll ends.
- p) Dismantle toothroll driving pinion (**271**).
- q) Extract cams (**369**). To ease extraction use a hammer extractor (**E**) screwing it into threaded holes on cams.

**To detect between left and right cam, right cam have a C marked. Cam's mark must match C mark on right support.**

- r) Pull out worn toothroll (**A**) and replace it with a new one (fig 5.5.7).
- s) Reassemble all following preceding steps in reverse order.

**Pay attention in making cam's O mark match C mark on right support.**

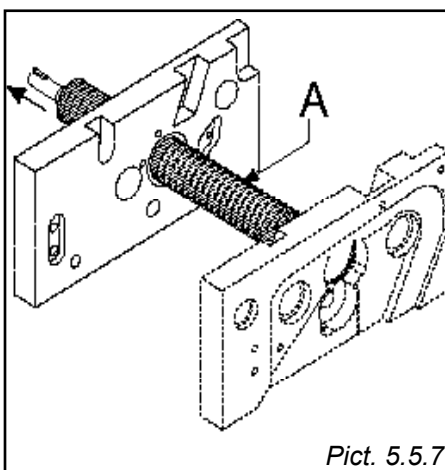


- t) Make the mark on the out stalked cylinder (**10287**) to coincide with the make (**L**) on the higher part of the cam on both sides.
- u) Insert comb into new toothroll grooves could be hard. You must go on in inserting it and heating spacers with a hot water jet ( 90-95°C ).
- v) Verify and , eventually, reset correct blade holder position (see sect.5.4).

**Before start using machine lubricate comb and toothroll. Then start machine and let it run-in for a while.**

#### REPLACEMENT OF TOOTHROLL BEARINGS

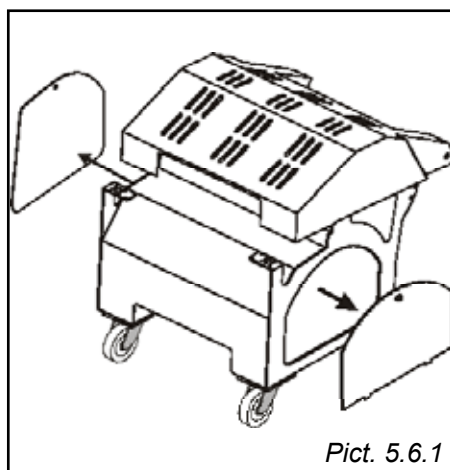
- a) Proceed in the same way as described in former paragraph. After unthreaded cams remove snap ring(**095**), bearings (**003**) and oil seal (**004**).
- b) Replace worn parts and reassemble.



## 5.6. TOOTHROLL'S CYLINDER REPLACEMENT

### CAUTION !

Before proceeding with the following operations, disconnect the electric and pneumatic connections. Use the special safety gloves.



Pict. 5.6.1

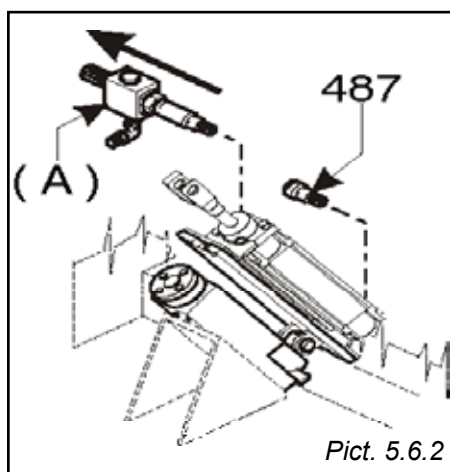
### REPLACEMENT OF TOOTHROLL'S CYLINDER

- Make sure electrical and air supply are locked out.
- Open side covers (fig.5.6.1).
- Remove the upper air inlet fittings (the whole assembly A) and the lower one (487) (fig.5.6.2).

Referring Pict.5.6.3

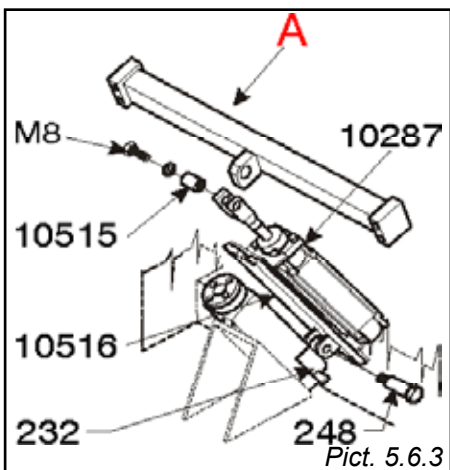
- Undo screw (M8) of pin (10515) connecting cylinder rod (10287) and cam's command bar (A), then extract pin (10515).
- Unscrew pin (248) on bottom side of cylinder (10516).
- Remove cylinder (10287) from support (10516) and replace worn cylinder with new one.
- Remount cylinder into machine following preceding steps in reverse order.

**Pay attention in remounting top and bottom air inlet fittings (A and 478) in the same place as before.**

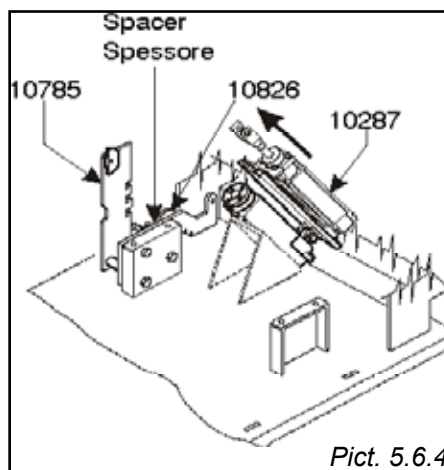


Pict. 5.6.2

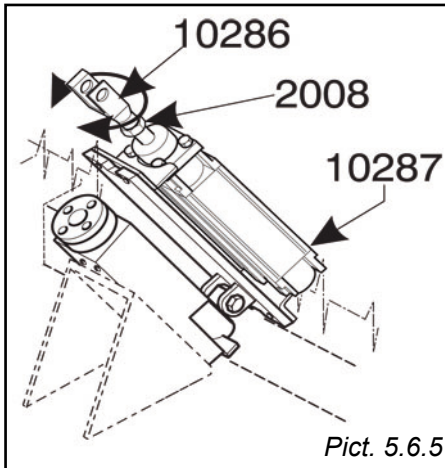
- Restore correct machine work setting by proceeding as following sequence:
    - connect machine to air supply.
    - Place a spacer between chain stretcher (10785) and washer (10826). Cylinder rod (10287) should be completely outside cylinder (fig.5.6.4).
    - Make the mark on the out stalked cylinder (10287) to coincide with the make (L) on the higher part of the cam on both sides.
    - When correct position it's been found tight lock nut (2008).
- Check gap between blade and toothroll using a thickness gauge.



Pict. 5.6.3



Pict. 5.6.4



- i) Remove spacer placed before between chain stretcher (10785) and washer (10826) Cylinder rod (10287) should be completely inside cylinder (fig.5.6.4).

#### REMEDIES TO FAILED OPERATION OF THE SYSTEM

Referring Pict.5.6.7

- a) Check that chain stretcher (10785) operate correctly on valve (10160), eventually you adjust it by operating on limit switch screw (216D) calibration should let valve wheel(10160) run 1 mm further.

- b) Connect machine to air supply.

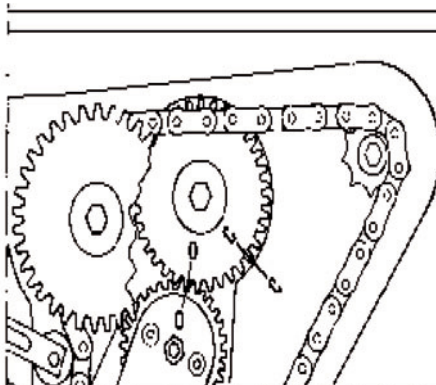
Failed close of toothroll (even activating on chain stretcher) (10785) can be due to:

- valve (10160) valve.

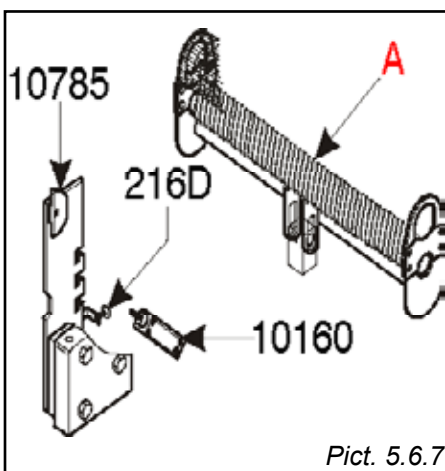
When replacing it check that pneumatic connection is working properly ( Pict.5.6.8 and Sect.6.1).

- garbage on comb that does not let toothroll run freely.

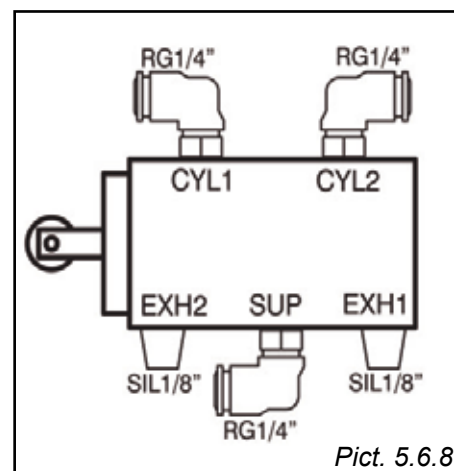
To solve such problem clean comb( A ).



Pict. 5.6.6



Pict. 5.6.7

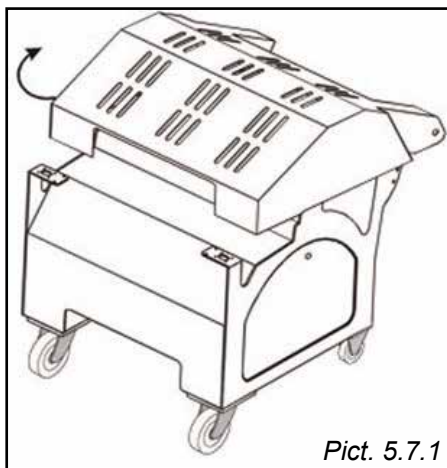


Pict. 5.6.8

## 5.7. COMB REPLACEMENT

### CAUTION !

Before proceeding with the following operations, disconnect the electric and pneumatic connections. Use the special safety gloves.



Pict. 5.7.1

### REPLACEMENT OF COMB'S PART

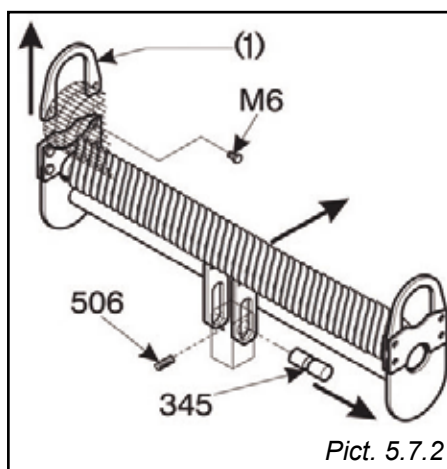
- a) Open the front protection.
- b) Open rubber roller head. (fig.5.7.1)
- c) Remove blade holder.

Referring Pict.5.7.2

- d) Unscrew comb support locking screws.
- e) Leave upper side of block (1).
- f) Unthread comb opening guide pin (345) loosening grub screw (506) which fix it in its position.
- g) Unthread whole comb assembly.

Referring Pict.5.7.3

- h) Mark position of comb center plate (316) and of the plates (6326)
- i) Remove dowel (045) and unscrew comb locking nut (313).
- l) Remove the plastic plates (6326) and spacers and replace them.



Pict. 5.7.2

**Pay attention to arrange replaced prongs, spacers and plates (316) in right working asset as before replacement operation.**

- m) During installation pay attention to put the replaced plates in the right direction and check the position of (316) bars is correct.
- n) Screw comb locking nut (313) until its threaded holes match hole on comb's squared pin. When placed in this position fix comb locking nut by using dowel (045).
- o) After completing the assembly operation, insert comb into toothroll grooves.

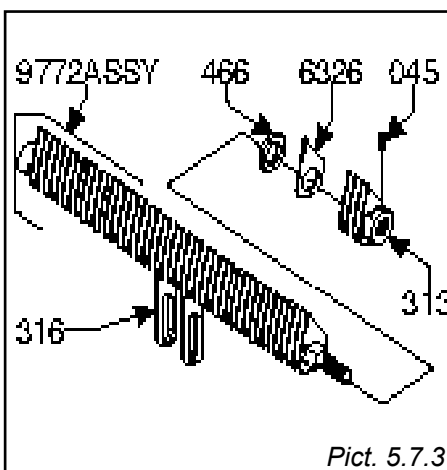
It might be the new comb needs a little adjustment in order to easily enter the grooves of the toothroller. For the best performance is needed in fact that the fingers of the comb enter smoothly the toothroller grooves while the machine is running.

If further problems occur during the insertion of the comb, please do as following:

- insert the comb in toothroll also if is difficult.
- heat spacers with a hot water jet ( 90-95°C ).

Repeat preceding steps until comb's prongs can goes in and out toothroll grooves smoothly.

**Handle dismantled parts with care.**



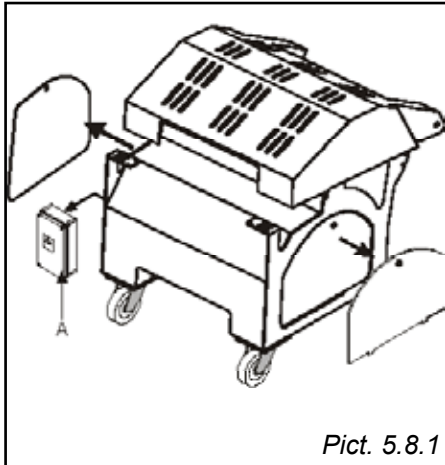
Pict. 5.7.3



## 5.8. MOTOR UNIT REPLACEMENT

### CAUTION !

Before proceeding with the following operations, disconnect the electric and pneumatic connections. Use the special safety gloves.



Pict. 5.8.1

### REPLACEMENT OF REDUCTION GEAR UNIT

Referring Pict.5.8.1

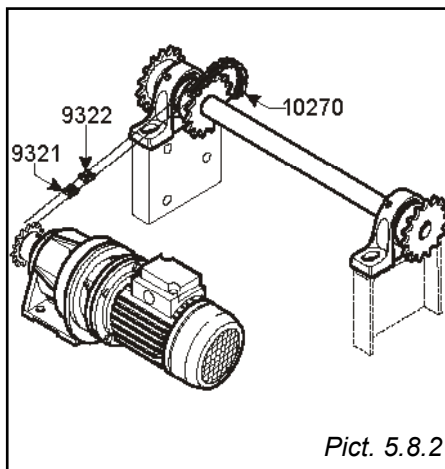
- Remove left and right cover.
- Remove electrical box (A).
- Playing on dummy link (9321, 9322) remove chain (10270) (fig.5.8.2).

Referring Pict.5.8.3

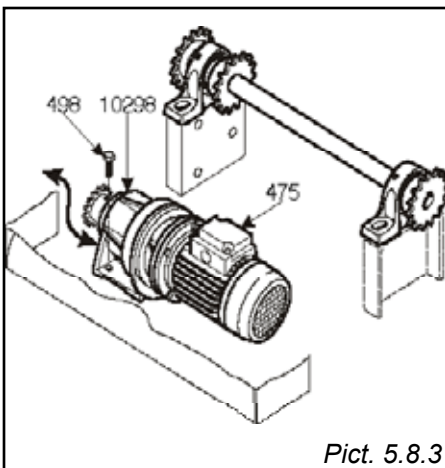
- Unscrew hex screws (498) which fix reduction gear unit to basement.
- Disconnect electrical power supply from motor connector. Extract reduction gear unit from machine.
- Arrange replacement splitting motor (475) and reduction gear unit (10298).
- Reassemble it all in reverse order. Take care of parallelism between reduction gear unit and motor pin by using regulation screws (6437).

Make sure pinion (10540) is aligned with pinion (9873) before fixing, by using locking dowel (fig.5.8.4).

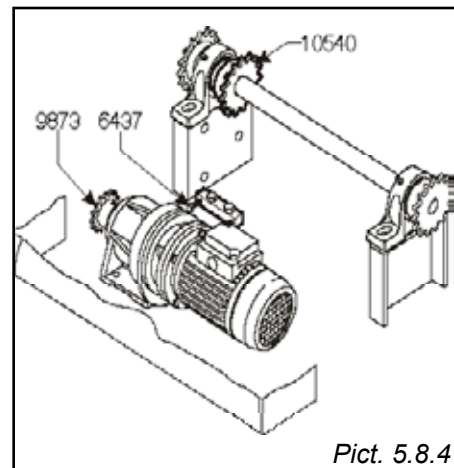
**If a motor with a different voltage to the original one is fitted, check setting of thermal cut-out and transformer power supply voltage.**



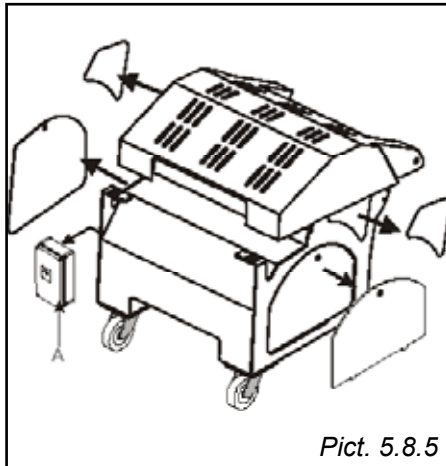
Pict. 5.8.2



Pict. 5.8.3



Pict. 5.8.4



Pict. 5.8.5

## CENTRAL PIN REPLACEMENT

- a) Remove both sides top and bottom covers, then remove electrical box (**A**) (fig.5.8.5).
- b) Playing on dummy link (**9321**, **9322**) to remove chain (**10270**) (fig.5.8.2).

Referring Pict.5.8.6

on the right side of machine:

- c) After unscrewing the chain stretcher (**10777**), turn the chain to the easiest access to the joint and the dummy link (**6319**, **6320**) to remove chain (**10265**).

on the left side of machine:

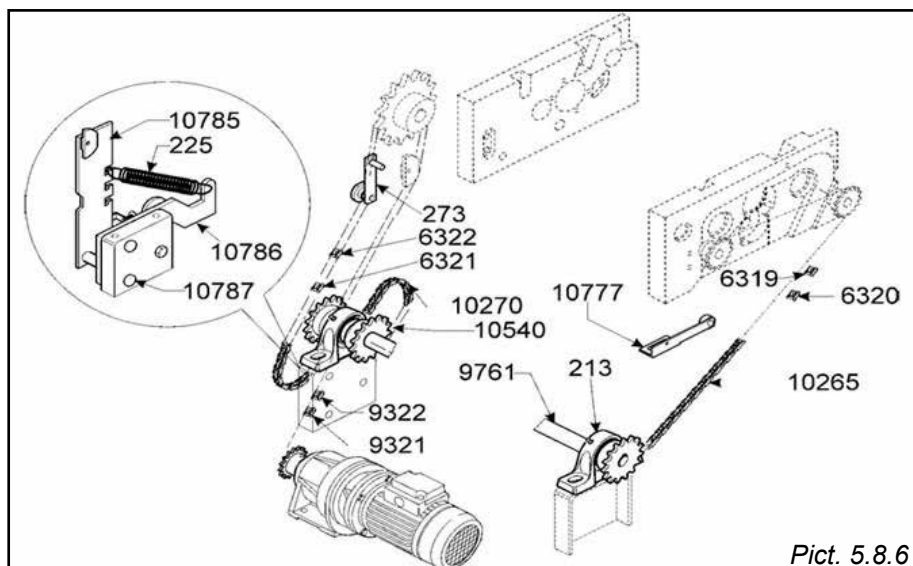
- d) After removing the chain stretcher (**273**) and having then released the spring (**225**) act on the joint and the dummy link to open the chain.
- e) Loose the screw on the support (**213**) remove the pin (**A**) and relative pinions.
- f) After all the required fixing and maintenance operations have been done remount pin (**A**) into machine. Before fixings supports check corresponding pinion alignment.

On the right side of machine:

- g) Fix the chain stretchers (**10785** e **273**), connect the chain and the spring (**225**) in the starting position.

On the right side of machine:

- h) Connect the chain (**10265**).
- i) Fix the chain stretcher (**10777**)
- l) Reassemble all in the reverse order.

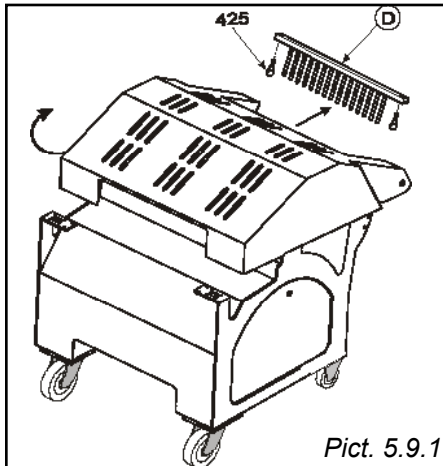


Pict. 5.8.6

## 5.9. RUBBER ROLLER REPLACEMENT

### CAUTION !

Before proceeding with the following operations, disconnect the electric and pneumatic connections. Use the special safety gloves.



### REPLACEMENT OF RUBBER ROLLER ASSEMBLY

Referring Pict. 5.9.1

- Open the front protection.
- Open rubber roller head.
- Unthread rubber roller comb (D) unscrewing comb locking wing nut (425).

Referring Pict. 5.9.2

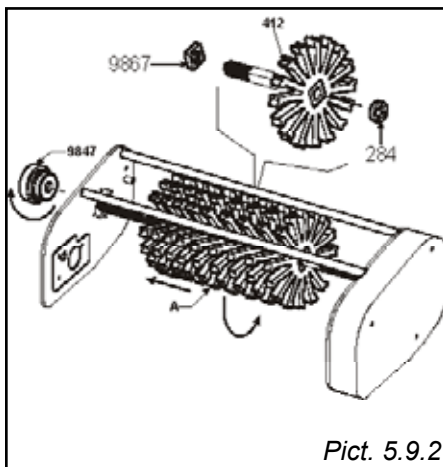
- Unscrew knob (9847) anticlockwise until it's completely loose.
- Remove rubber roller (A) pulling towards the hole formerly occupied by knob (9847) and then pulling outwards.
- Replace worn rubber roller with a new one. Remount it following preceding steps in reverse order.

### REPLACEMENT OF RUBBER ROLLER'S ELEMENTS

- Dismantle rubber roller as indicated in previous paragraph. "Replacement of rubber roller".

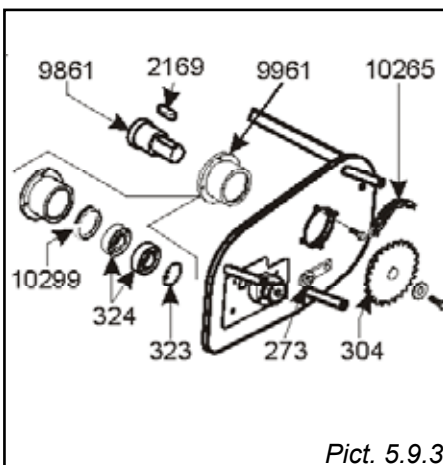
Referring Pict. 5.9.2

- Stop rubber roller pin then unscrew ring nut (9867) using tool supplied with machine.
- Unthread worn rings (412) and spacers (284) and replace worn ring and spacers with new ones paying attention in re-assembling new elements in the same order as before.
- When the work is done tight ring nut and remount rubber roller on machine (see par. "Replacement of rubber roller assembly"). Then reassemble everything following preceding steps in reverse order.

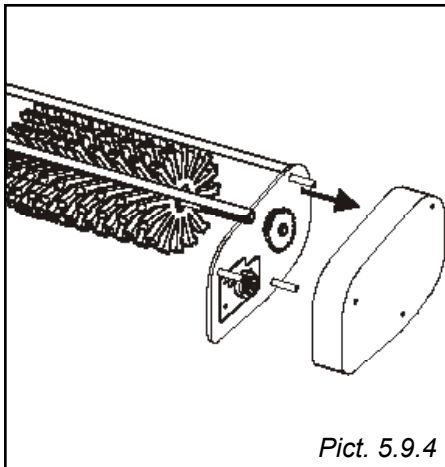


**Rubber roller composition (ring sequence) could be customised for particular processing.**

**When replacing rubber roller pay attention in keeping the same sequence of replaced parts.**







## REPLACEMENT OF RUBBER ROLLER DRIVE PIN

- a) Dismantle rubber roller following sequence as “**Replacement of rubber roller assembly**”.
- b) Dismantle right side guard. (fig. 5.9.3)

Referring Pict. 5.9.4

- c) Loose chain stretcher (**273**) and open chain (**10265**).
- d) Dismantle rubber roller pinion (**304**) and take out key (**2169**).
- e) Unthread rubber roller drive pin (**9861**) and replace it.

Should bush component replacing be required proceed as follows:

- f) Undo the rubber roller support bushing fixing screws.
- g) Leave out snap ring (**323**).
- h) Extract bearings (**324**) and oil seal (**10299**).
- i) Replace worn elements. Then reassemble everything following preceding steps in reverse order. Grease oil seal and bearings before inserting new rubber roller drive pin.



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# SECTION

## 6

# PNEUMATIC SYSTEM



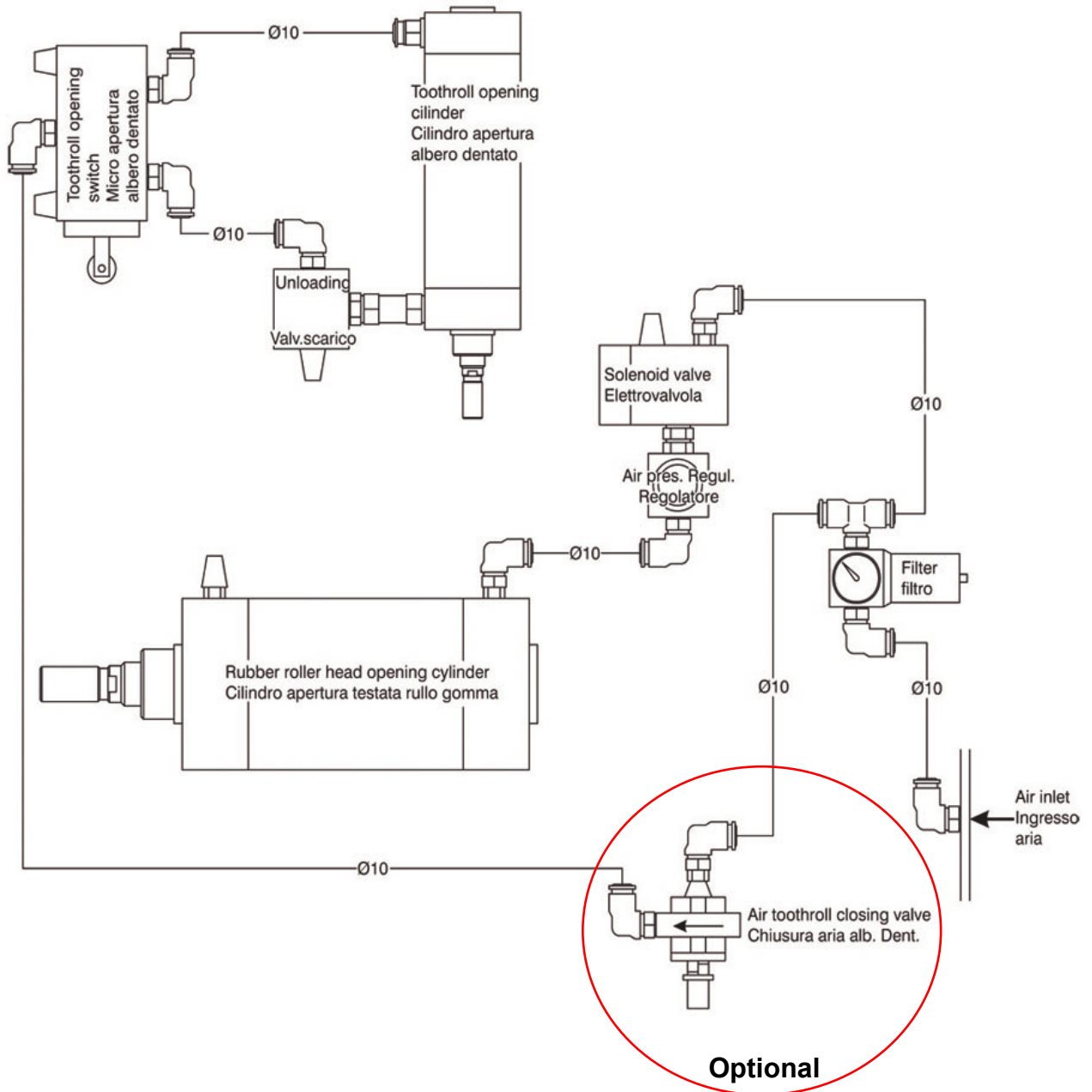
**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**

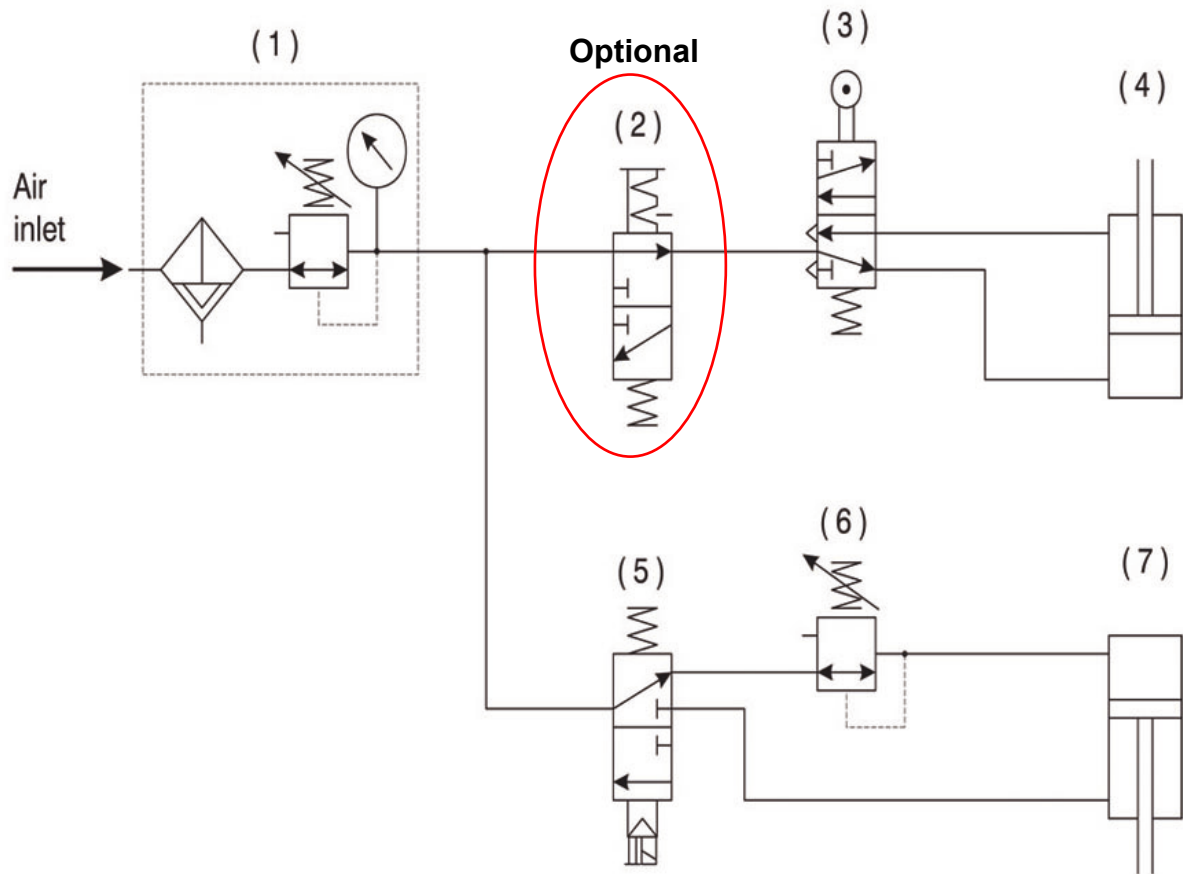


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## 6.1 PNEUMATIC SYSTEM



## 6.2 PNEUMATIC SYSTEM SCHEME



### Components:

- ( 1 ) FILTER WITH REGULATOR
- ( 2 ) TOOTHROOL STOP MOVEMENT VALVE 3/2 (Optional)
- ( 3 ) TOOTHROOL OPENING VALVE 5/2
- ( 4 ) TOOTHROOL OPENING CYLINDER
- ( 5 ) RUBBER ROLLER CONTROL ELECTROVALVE 3/2
- ( 6 ) AIR PRESSURE REGULATOR FOR RUBBER ROLLER
- ( 7 ) RUBBER ROLLER MOVEMENT CYLINDER



# SECTION

# 7

# ELECTRIC WIRING



**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**

**UNI EN ISO 13849-1:2008 - category 1 - PL = C**



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# SECTION

## 8

# FAILURES AND REPAIRS



**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**



## **8. 1. TROUBLE-SHOOTING**

### **a) The machine will not start**

- 1) Electric power connection not correct.
- 2) Safety switches not positioned correctly.
- 3) Emergency buttons pressed.
- 4) Thermal cut-out released.

### **b) The machine does not work correctly**

- 1) Blade not fitted.
- 2) Blade not sharp enough.
- 3) Blade position not correct.
- 4) Blade holder knobs not tightened properly.
- 5) Stripper roller damaged.
- 6) Product not suitable for processing (cut badly, frozen, dry).
- 7) Distance between stripper roller and blade holder not correct.

### **c) Patches of product not removed**

- 1) Blade not fitted correctly.
- 2) Rubber roller not of appropriate type.
- 3) Rubber roller height not correct.
- 4) Pressure exerted by rubber roller on product not correct.



#### **d) Thickness removed too great**

- 1) Blade not fitted correctly.
- 2) Blade position not correct.
- 3) Check the wear on the blade holder springs.
- 4) Blade holder knobs not tightened sufficiently.
- 5) Distance between stripper roller and blade holder too great.
- 6) Failed operation of the stripper roller opening-closing device. (see Sect.5.7).
- 7) Compressed air missing inlet.
- 8) Thickness adjusting wheel fully open.

#### **e) Damaged product**

- 1) Rubber roller pressure too great.
- 2) Rubber rollers positioned badly.
- 3) Incorrect rubber roller for the application.

#### **f) Excessive wear on stripper roller**

- 1) Blade holder damaged.
- 2) Stripper roller bearings to be replaced.
- 3) Incorrect gap between toothroller and blade holder.



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# SECTION

## 9

# SPARE PARTS



**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**

## 9.1. DESCRIPTION OF SPARE PARTS SECTION

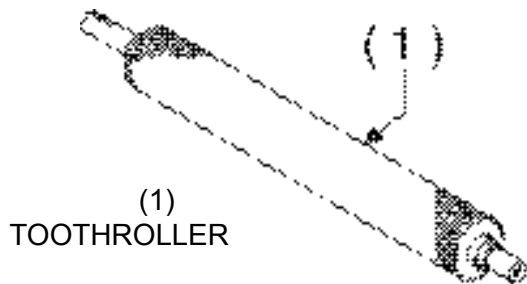
To identify parts easily, the machine has been split up into well defined units by means of exploded drawings.

Each exploded unit is followed by a page giving:

CODE NUMBER.  
PART NAME.  
QUANTITY USED.

The spare parts identified by a letter or a number have differing part numbers according to the variables of the machine.

Example:



/12441	TOOTHROLLER Z=44
/124426	TOOTHROLLER Z=60
/12443	TOOTHROLLER Z=88
/12444	TOOTHROLLER Z=88 30°

\* Shown part numbers are given as mere example and not necessarily real

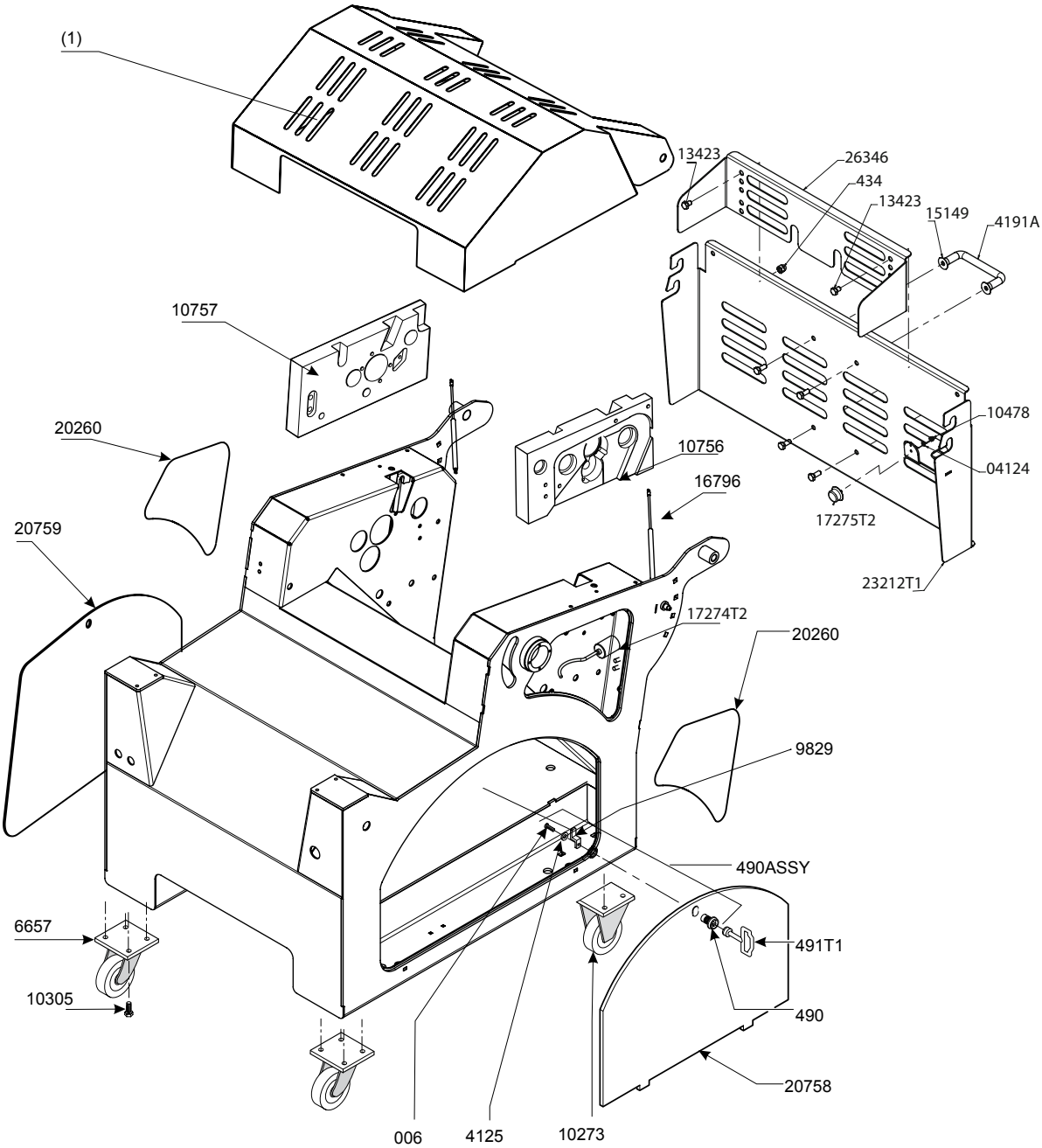
For any further information please contact:

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Via S. D'Acquisto, 2/C - 42020 ALBINEA - Reggio Emilia - Italy  
Tel. 0522 599745 - Fax. 0522 598147  
<http://www.grasselli.com> - Email : [info@grasselli.com](mailto:info@grasselli.com)

Or the area dealer.

# 9.3. BASAMENTO / BASE

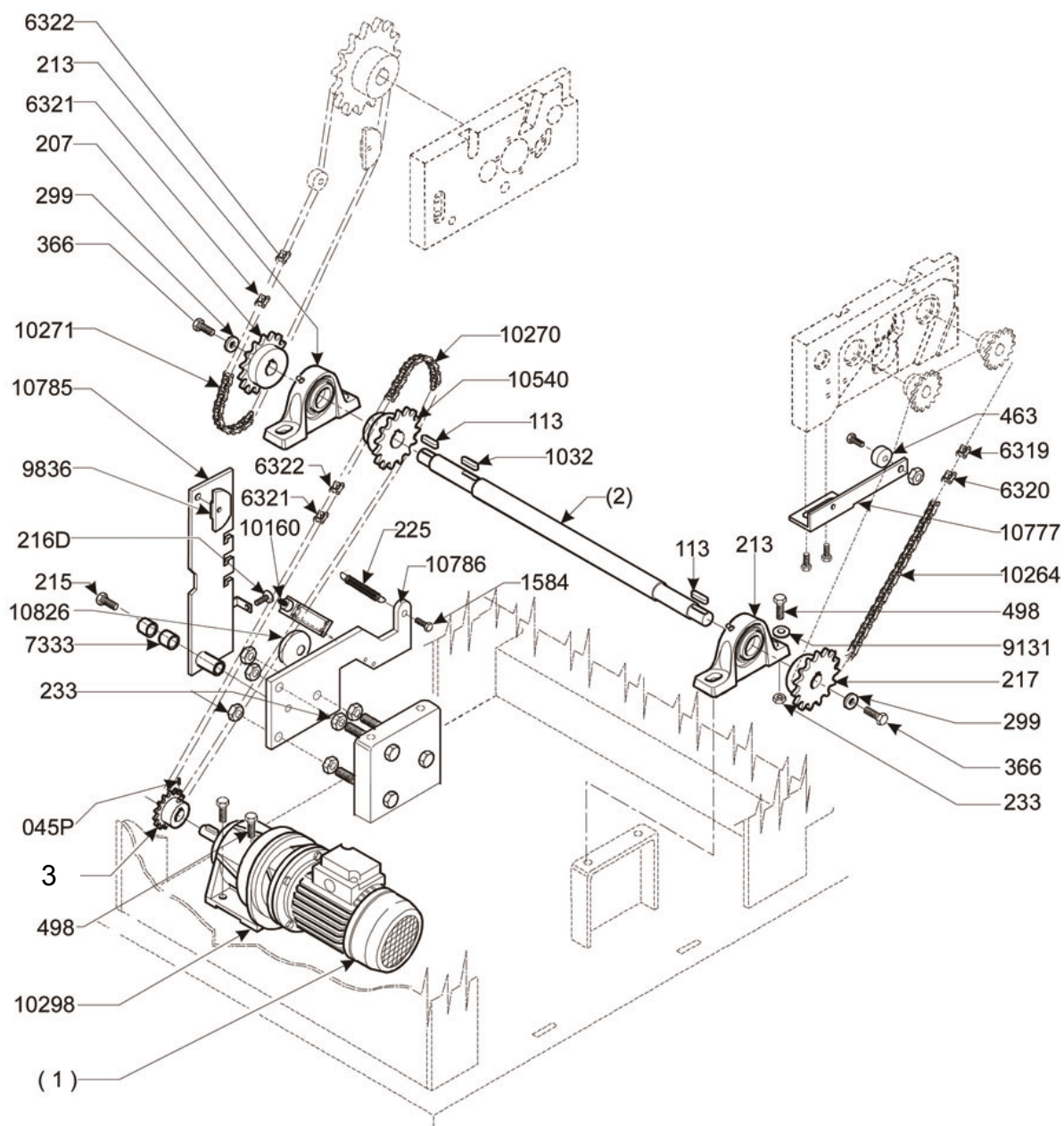


<b>BASAMENTO\ BASE\ CHASSIS\ BASE</b>	
<b>CODE</b>	<b>DESCRIPTION</b>
<b>006</b>	Vite\Screw\Vis\Tornillo TE 05x10
<b>490</b>	Serratura\Spring lock\Serrure\Apriete
<b>490ASSY</b>	Serratura coperchio completa\Spring lock assy\Serrure\Apriete completo
<b>491T1</b>	Chiave serratura\Lock key\Cle\Llave
<b>4125</b>	Rondella\Washer\Rondelle\Arandela
<b>6657</b>	Ruota girevole\Castor wheel\Roue pivotante\Rueda giratoria
<b>9829</b>	Piattino serratura\Plate\Plat pour serrure\Platillo para apriete
<b>10273</b>	Ruota fissa\Wheel\Roue fixe\Rueda fija
<b>10305</b>	Vite\Screw\Vis\Tornillo TE 10x16
<b>10756</b>	Supporto sx\Left support\Support gauche\Soporte izq.
<b>10757</b>	Supporto dx\Right support\Support droit\Soporte drch.
<b>16796</b>	Molla gas\Gas spring\Ressort\Muelle
<b>20260</b>	Coperchio superiore\Upper carter\Couvercle cote superieur\Tapa lat. superior
<b>20758</b>	Coperchio inferiore dx\Right carter\Couvercle cote inferieur droit\Tapa lat. inferior drch.
<b>20759</b>	Coperchio superiore sx\Left carter\Couvercle cote inferieur gauche\Tapa lat. inferior izq.

<b>1</b>	<b>20263</b>	Protezione anteriore\Infeed guard model\Protection avant\Proteccion delantera NAB 520
	<b>21303</b>	Protezione anteriore\Infeed guard model\Protection avant\ Proteccion delantera NAB 720



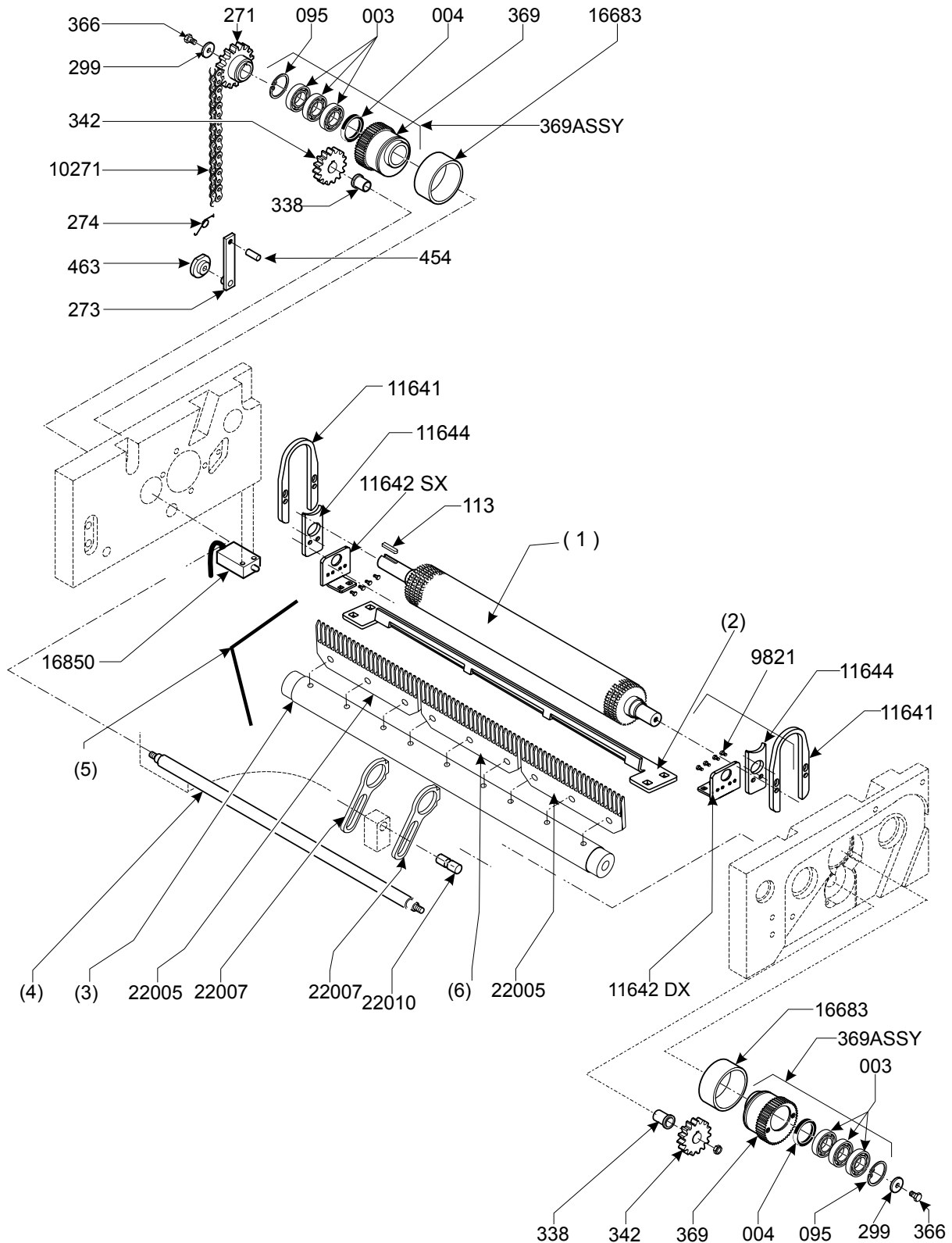
## 9.4. MOVIMENTAZIONE PRINCIPALE / MOTOR UNIT



MOVIMENTAZIONE PRINCIPALE\ MOTOR UNIT\ MOTORISATION PRINCIPALE\ TRANSMISION PRINCIPAL	
CODE	DESCRIPTION
031	Dado\Nut\Ecrou\Tuerca M08
045P	Vite\Screw\Vis\Tornillo 08x10
113	Linguetta\Key\Clavette\Lengüeta
207	Pignone albero dentato\Toothroll pinion\Pignon\Piñón
213	Supporto con cuscinetto\Support with bearing\Support\Soporte
215	Vite\Screw\Vis\Tornillo TE 12x50
216D	Vite schiaccia micro apertura\Screw\Vis de capteur\Tornillo
217	Pignone motore nastri\Pinion\Pignon\Piñón
225	Molla Tendicatena\Spring\Ressort tendeur de chaine\Muelle tensacadena
233	Dado autobloccante\Nut\Ecrou\Tuerca
299	Rondella piana\Washer\Rondelle\Arandela
366	Vite\Screw\Vis\Tornillo 08x16
463	Rotella tendicatena\Nylon wheel\Roue tendeur de chaine\Ruedecilla tensacadena
498	Vite\Screw\Vis\Tornillo 12x40
1032	Linguetta speciale\Special key\Clavette\Lengüeta
1584	Vite\Screw\Vis\Tornillo 08x55
6319	Falsa maglia\Dummy link\Faux maillon\Contra eslabón
6320	Maglia di giunzione\Connector link\Maillon jonction\Unión 5/8"
6321	Maglia di giunzione\ Connector link\ Maillon jonction\ Unión 3/4"
6322	Maglia di giunzione\ Connector link\ Maillon jonction\ Unión 1/2"
7333	Bronzina leva tendicinghia\Self lubricating bush\Douille\Casquillo
9131	Rondella\Washer\Rondelle\Arandela
9836	Tastatore tendicatena\Chain stretcher wheel\Roue tendeur de chaine\Ruedecilla tensacadena
10160	Valvola "SMC" apertura albero\SMC valve\Soupape\Válvula
10264	Catena movimento nastri\Belt chain\Chain entr. tapis\Cadena mov. cintas
10270	Catena riduttore\Gearbox chain\Chain motoreducteur\Cadena motorreductor
10271	Catena albero dentato\Toothroller chain\Chaine entr. arbre a dentis\Cadena mov. ejedentado
10298	Riduttore motovario\Gearbox\Reducteur\Reductor motovario
10540	Pignone motore\Motor pinion\Pignon\Piñón
10785	Tendicatena con albero dentato\Chain stretcher arm\Plat\ Tendeur de chaine\Tensacadena completo
10786	Piastra per fulcro tendicatena\Fixing plate\Plat fixation soupape\Plato sujeción válvula
10777	Squadretta fissaggio tenditore\Stretcher angle fixing plate\Plat\Plato tensacadena
10826	Rondella per fermo tendicatena\Washer\Butee pour tendeur de chaine\Retén para tensacadena

1	475	Motore\Motor\Moteur\Motor 3CV 220-460V 50-60Hz
	6323	Motore\Motor\Moteur\Motor 3CV 200V 50Hz
	6324	Motore\Motor\Moteur\Motor 3CV 200V 60Hz
	6325	Motore\Motor\Moteur\Motor 3CV 575 60Hz
2	9761	Albero intermedio\Jack shaft\Axe intermediaire\Árbol intermediario NAB 520
	11842	Albero intermedio\Jack shaft\Axe intermediaire\Árbol intermediario NAB 720
3	9873	Pignone motoriduttore\Gearbox pinion\Pignon\Piñón Z=15 3/4"
	17723T1	Pignone motoriduttore\Gearbox pinion\Pignon\Piñón Z=21 3/4"
	9900	Pignone motoriduttore\Gearbox pinion\Pignon\Piñón Z=18 3/4"

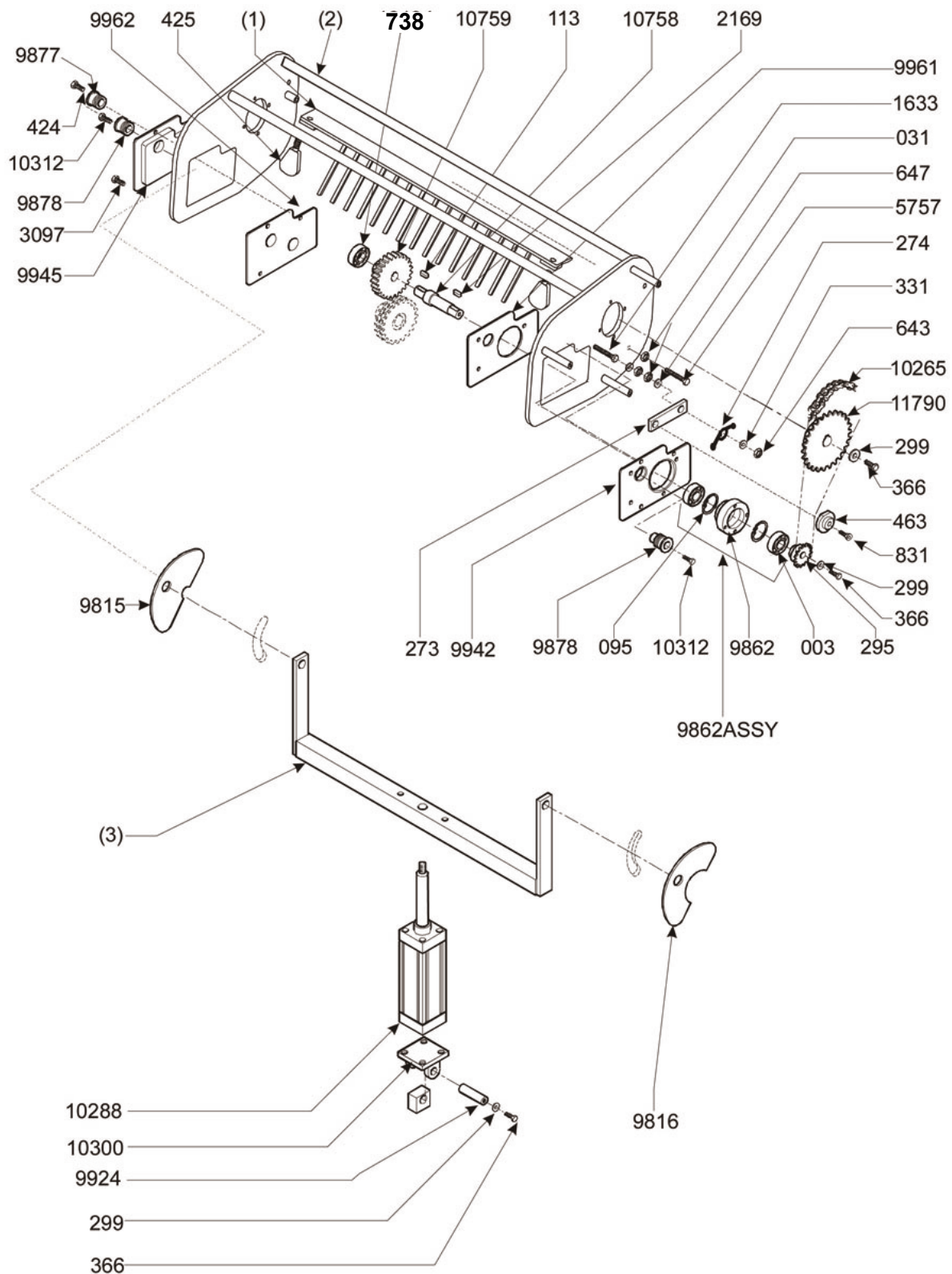
## 9.5. ALBERO DENTATO E PETTINE / TOOTHROLLER AND COMB



<b>ALBERO DENTATO - PETTINE\ TOOTHROLLER - COMBI ROULEAU DENTE - PEIGNE\ RODILLO DENTATDO - PEINE</b>	
<b>CODE</b>	<b>DESCRIPTION</b>
<b>003</b>	Cuscinetto\Bearing\Roulement\Cojinete
<b>004</b>	Paraolio\Oil seal\Para-huile\Sello de aceite
<b>095</b>	Seeger\Seeger\Circlip\Seeger
<b>113</b>	Linguetta\Key\Clavette\Lengüeta
<b>271</b>	Pignone mov. albero dentato\Toothroller driving pinion\Pignon arbre\Pinón
<b>273</b>	Tendicatena\Chain stretcher arm\Plat tendeur de chaine\Tensacadena~
<b>274</b>	Molla tendicatena\Chain stretcher spring\Ressort tendeur de chaine\Muelle tensacadena
<b>299</b>	Rondella\Plane washer\Rondelle\Arandela 08x32x2,5
<b>338</b>	Bronzina collare sinterizzata\Self lub. bush\Coussinet\Chumacera
<b>342</b>	Ingranaggio movimento eccentrico\Cam driving gear\Engr. mouv. excentrique\Engr. mov. excéntrico
<b>366</b>	Vite\Screw\Vis\Tornillo 08x16
<b>454</b>	Distanziale\Spacer\Entretoise\Distanciador
<b>16683</b>	Bronzina eccentrico albero dentato\Self lub. bush\Coussinet\Chumacera
<b>369ASSY</b>	Eccentrico albero completo\Toothed arbor cam complete\Coussinet complet\Casquillo completo
<b>369</b>	Eccentrico per rullo dentato\Toothed arbor cam\Coussinet arbre\Casquillo eje
<b>463</b>	Rotella plastica tendicatena\Nylon wheel\Roue tendeur chaine\Ruedecilla tensacadena
<b>506</b>	Vite\Screw\Vis\Prisionero STEI 06x10
<b>9821</b>	Vite per supporto pettine\Screw\Vis\Tornillo TE 08x10
<b>10271</b>	Catena albero dentato\Toothroller chain\Chaine entr. arbre a dents\Cadena mov. eje dentado
<b>11641</b>	Lamiera sup. pettine\Comb plate\Tole interne sup. peigne\Chapa sop. peine
<b>11644</b>	Piatto inferiore pettine\Bottom plate\Plate ferm. peigne.\Chapa peine
<b>11642DX</b>	Lamiera interna dx\Right comb support plate\Plat ferm. peigne droite\Chapa drch. soporto peine
<b>11642SX</b>	Lamiera interna sx\Left comb support plate\Plat ferm. peigne gauche\Chapa izq. soporto peine
<b>16850</b>	Fincorsa pizzato\Limit switch\Fin de course pizzato\Interruptor
<b>22005</b>	Lamiera laterale\Lateral plate\Peine lateral\Chapa lateral
<b>22007</b>	Lamiera centrale di guida\Central plate\Guide peine\Chapa central
<b>22010</b>	Perno guida apertura a pettine\Comb opening pin\Axe point d'appui peigne\Perno fulcro peine

<b>1</b> <b>NAB520</b>	<b>346</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=44 AG.
	<b>2099</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=32 AG. - pollo e tacchino
	<b>2101</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=60 AG.
	<b>2102</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=88 AG.
	<b>2103</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=88 30°
<b>1</b> <b>NAB720</b>	<b>11857</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=44 AG.
	<b>12277</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=32 AG. - pollo e tacchino
	<b>12278</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=60 AG.
	<b>14240</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=88 AG.
	<b>14241</b>	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=88 30°
<b>2</b>	<b>11709</b>	Piatto apertura pettine\Comb plate\Levrier ouverture peigne\Plato abertura peine NAB 520
	<b>11861</b>	Piatto apertura pettine\Comb plate\Levrier ouverture peigne\Plato abertura peine NAB 720
<b>3</b>	<b>22008</b>	Perno pettine completo\Comb pin\Arbre peine\Perno peine NAB 520
	<b>22006</b>	Perno pettine completo\Comb pin\Arbre peine\Perno peine NAB 720
<b>4</b>	<b>341</b>	Perno movimenti eccentrici\Cam drive pin\Pivot coussinet\Perno mov. excéntricos NAB 520
	<b>11856</b>	Perno movimenti eccentrici\Cam drive pin\Pivot coussinet\Perno mov. excéntricos NAB 720
<b>5</b>	<b>22008ASSY</b>	Pettine completo\Complet comb\Peine complet\Peine completo NAB 520
	<b>22006ASSY</b>	Pettine completo\Complet comb\Peine complet\Peine completo NAB 720
<b>6</b> <b>NAB520</b>	<b>22009</b>	Lamiera centrale di guida\Central plate\Peine central\Chapa central
<b>6</b> <b>NAB720</b>	<b>22004</b>	Lamiera centrale di guida\Central plate\Peine central\Chapa central

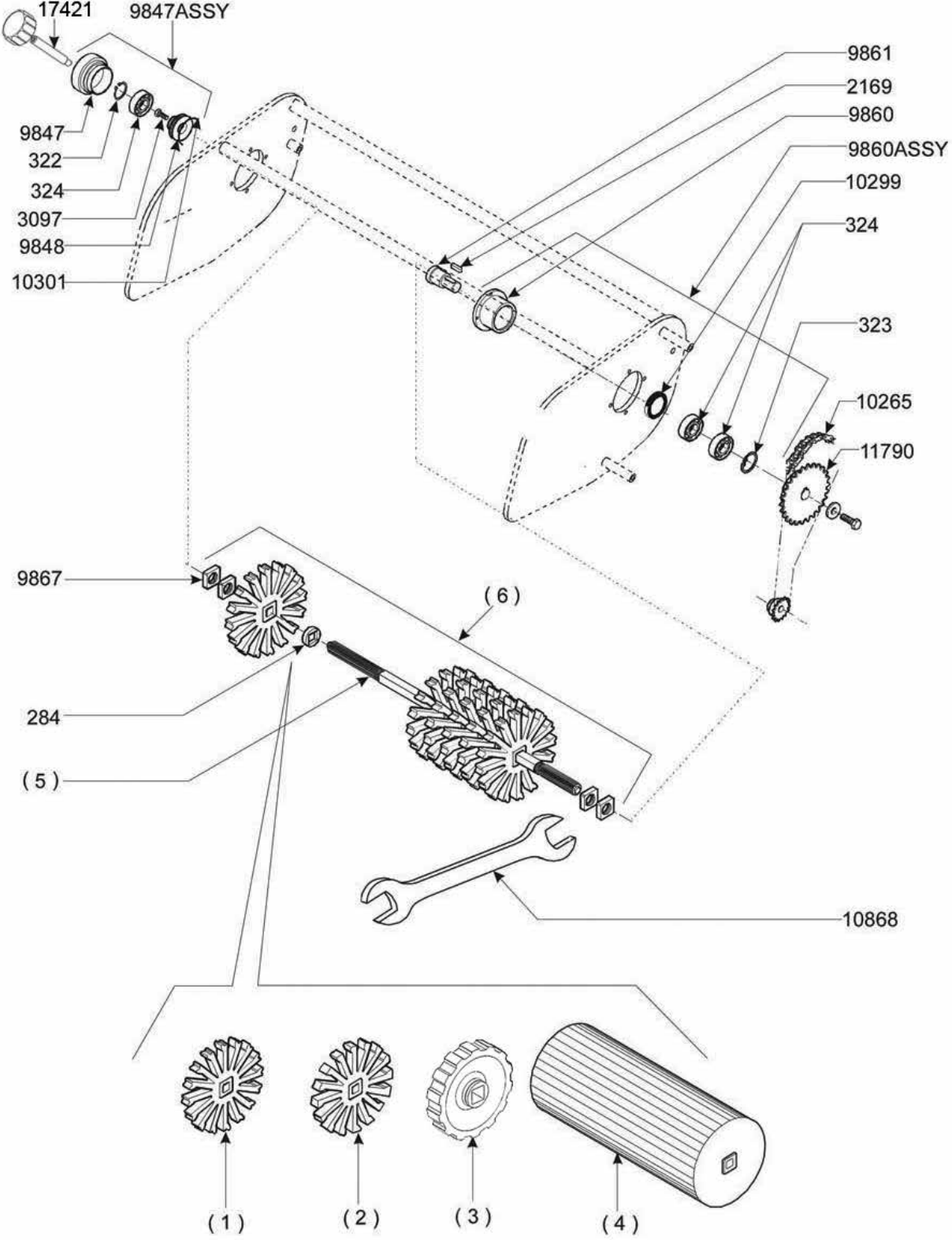
# 9.6. GRUPPO RULLO GOMMA / RUBBER ROLLER UNIT



GRUPPO RULLO GOMMA\ RUBBER ROLLER UNIT\ GROUPE ROULEAU EN CAOUTCHOUC\ GRUPO RODILLO GOMA		
CODE	DESCRIPTION	
003	Cuscinetto\Bearing\Roulement\Cojinete 600-2RS	
031	Dado\Nut\Ecrou\Tuerca	
095	Seeger\Seeger\Circlip\Seeger	
113	Linguetta\Key\Clavette\Lengüeta	
273	Tendicatena\Chain stretcher arm\Plat\ tendeur de chaine\Tensacadena	
274	Molla Tendicatena\Chain stretcher spring\Ressort tendeur de chaine\Muelle tensacadena	
295	Pignone fiancata rullo\Rubber roller pinion\Pignon\Piñón	
299	Rondella\Plane washer\Rondelle\Arandela	
331	Rondella\Plane washer\Rondelle\Arandela	
366	Vite\Screw\Vis hexagonal\Tornillo 08x16	
424	Vite\Screw\Vis\Tornillo 18x40	
425	Vite bloccaggio pettine\Screw\Vis\Tornillo	
463	Rotella tendicatena\Nylon wheel\Roue tendeur de chaine\Ruedecilla tensacadena	
643	Dado autobloccante\Nut\Ecrou\Tuerca	
647	Rondella\Washer bore\Rondelle\Arandela	
831	Vite\Screw\Vis\Tornillo TSCE 08x30	
1633	Vite\Screw\Vis hexagonal\Tornillo TE 08x50	
2169	Linguetta\Key\Clavette\Lengüeta	
3097	Vite\Screw\Vis\Tornillo TE 08x10	
5757	Vite\Screw\Vis\Tornillo TCCE 08x40	
9815	Lamiera sinistra chiusura asola\Left plate\Tole fer. boutonierre\Plancha cierre izq.	
9816	Lamiera destra chiusura asola\Right plate\Tole fer. boutonierre\Plancha cierre drch.	
9862	Mozzo fulcro fiancata\Reverse unit bush\Coussinet point d'appui R.C.\Casquillo fulcro	
9862ASSY	Mozzo fulcro completo\Reverse unit bush assy\Groupe coussinet\Casquillo completo	
9877	Distanziale\Spacer\Entretoise\Distanciador	
9878	Distanziale\Spacer\Entretoise\Distanciador	
9924	Perno\Fulcrum pin\Point d'appui\Fulcro	
9942	Piatto compl. scorrimento dx\Right regulation plate\Plate droit couliss.\Plato drch. desl. lado	
9945	Piatto compl. scorrimento sx\Left regulation plate\Plate gauche couliss.\Plato izq. desl. lado	
9961	Lamiera destra\Right plate\Tole protection droite\Plancha drch.	
9962	Lamiera sinistra\Left plate\Tole protection gauche\Plancha izq.	
738	Cuscinetto\Bearing\Roulement\Cojinete	
10265	Catena rullo gomma\Rubber roller chain\Chaine\Cadena	
10288	Cilindro Festo\Oil cylinder\Cylindre\Cilindro	
10300	Flangia oscillante\Cylinder foot\Bride supp. cylindre\Brida sop. cilindro	
10312	Vite\Screw\Vis\Tornillo TE 18x50	
10758	Albero per fulcro\Pin\Goujon\Eje rodillo goma	
10759	Ingranaggio\Reverse gear\Engrenage de inversion\Engranaje Z=52	
11790	Pignone\Pinion\Pignon\Piñón Z=35	
1	14029	Pettine in lamiera\Rubber roller comb\Peine\Peine en plancha NAB 520
	11848	Pettine in lamiera\Rubber roller comb\Peine\Peine en plancha NAB 720
2	20586	Testata rullo gomma compl.\Head roller comb\Tete rouleau\Cabezal completa NAB 520
	21304	Testata rullo gomma compl.\Head roller comb\Tete rouleau\Cabezal completa NAB 720
3	9759	Quadro compl. apertura testata\ Bras principa\Cuadro principal NAB 520
	11841	Quadro compl. apertura testata\ Bras principa\Cuadro principal NAB 720



# 9.7. RULLO GOMMA / RUBBER ROLLER





RULLO GOMMA\ RUBBER ROLLER\ ROULEAU EN CAOUTCHOUC\ RODILLO GOMA	
CODE	DESCRIPTION
284	Distanziale plastica stele\Spacer\Entretoise\Distanciador
322	Seeger esterno\Seeger\Circlip\Seeger
323	Seeger interno\Seeger\Circlip\Seeger
324	Cuscinetto\Bearing\Roulement\Cojinete
2169	Linguetta\Key\Clavette\Lengüeta
3097	Vite\Screw\Vis\Tornillo 08x10
9847	Pomolo\Rubber roller knob\Pommeau extraction\Pomo extracción
9847ASSY	Pomello\Rubber roller knob assy\Pommeau extraction compl.\Pomo completo
9848	Bussola\Support spacer\Coussinet ferm. pommeau\Casquillo cierre pomo
9860	Mozzo\Bush\Coussinet support R.C.\Casquillo sostén rodillo goma
9860ASSY	Mozzo assemblato\Bush assy\Coussinet complet\Casquillo completo
9861	Presa di forza\Drive gear\Prise de force\Eje de fuerza
9867	Ghiera sx\Ring nut\Frette ferm. R.C.\Virola
10265	Catena rullo gomma\Rubber roller chain\Chaine\Cadena
10299	Paraolio\Oil seal\Para-huile\Sello de aceite VITON
10301	Anello\O-ring\Para-huile\Junta torica VITON
11790	Pignone\Pinion\Pignon\ Piñón
10868	Chiave per ghiera serraggio rullo\Rubber roller spanner\Clé de serrage\Llave de ajuste
17421	Pomello\Rubber roller knob\Pommeau extraction\Pomo

RULLO CON PIEDE A SCARPETTA\ TOOTH FOOT\ ROULEAU AVEC DES DOIGTS EN FORME DE PIED \ RUEDA CON PIE A ZAPATOS			
1	NAB520	NAB720	
	412A	412A	Rullo bianco\Tooth foot hard white\Blanc dur\Rodillo blanco con punta
	412AS	412AS	Rullo rosa\Tooth foot soft pink\Rose moelleux\Rodillo rosa con punta
	412AB	412AB	Rullo blu\Tooth foot blue\bleu moelleux\Rodillo azul con punta

RULLO CON PIEDE ARROTONDATO\ ROUND TOOTH FOOT\ ROULEAU AVEC DES DOIGTS PLATS \ RUEDA CON PIE REDONDEADO			
2	NAB520	NAB720	
	412B	412B	Rullo bianco\Round foot hard white\Blanc dur\Rodillo blanco pie redondeado
	412BS	412BS	Rullo rosa\Round foot soft pink\Rose moelleux\Rodillo rosa pie redondeado

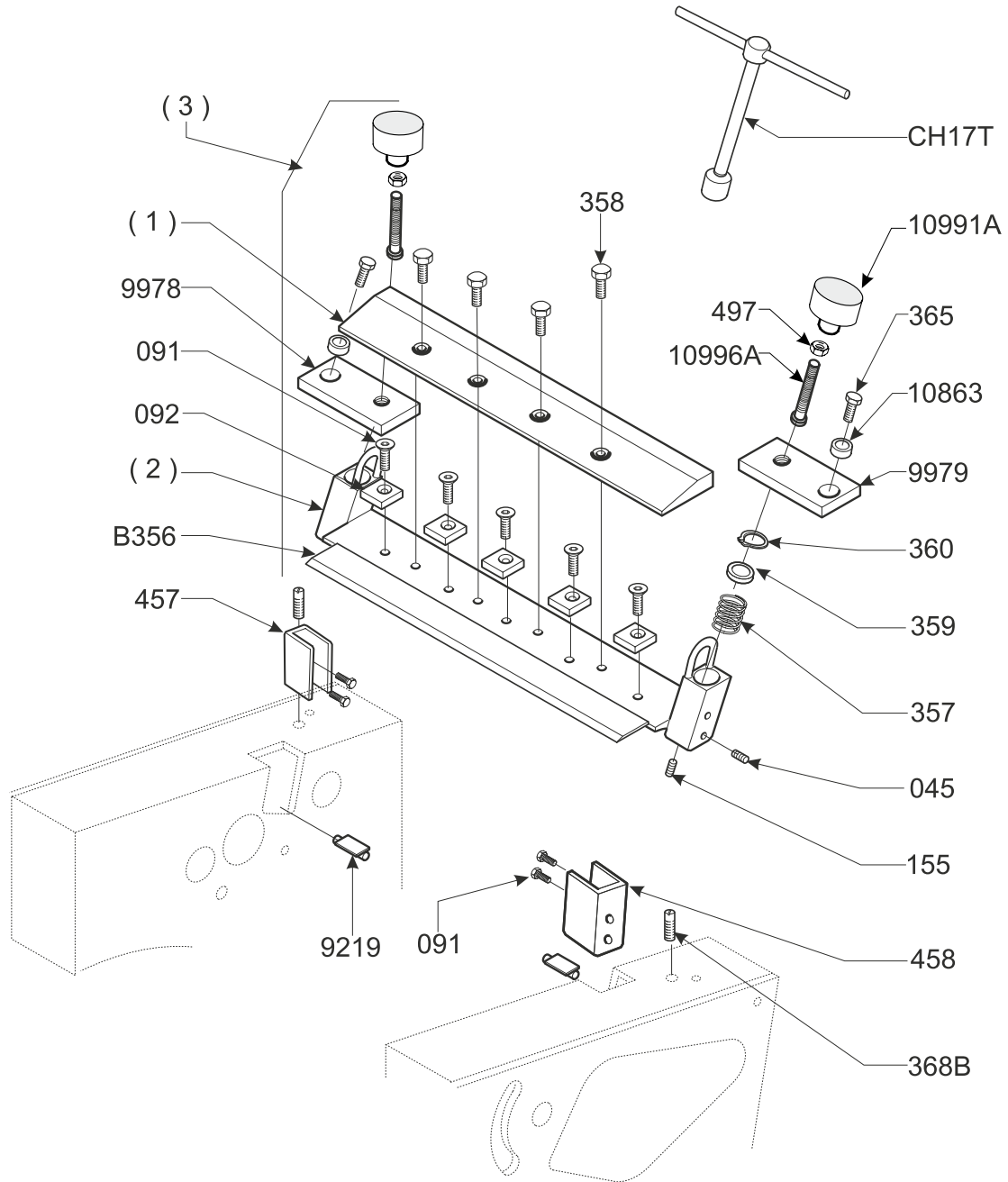
RULLO AD INGRANAGGIO\ TOOTH GEAR\ ROULEAU VITESSE \ RUEDA ENGRANAJE			
3	NAB520	NAB720	
	412D	412D	Rullo bianco\Tooth foot hard white\Blanc dur\Rodillo blanco con punta
	412DS	412DS	Rullo rosa\Tooth foot soft pink\Rose moelleux\Rodillo rosa con punta
	412DB	412DB	Rullo blu\Tooth foot blue\bleu moelleux\Rodillo azul con punta

RULLO A TUBO\ TUBE ROLLER\ ROULEAU A TUBE\ TUBO GOMA			
4	NAB520	NAB720	
	477	13093	Rullo gomma rosa\Tube roller pink\Rouleau a tube rose\Tubo rosa

ALBERO PER RULLO GOMMA\HEAD ROLLER SHAFT\AXE ROULEAU CAOUTCHOUC\EJE PARA RODILLO GOMA			
5	NAB520	NAB720	
	9768	11843	Albero per rullo gomma\Head roller shaft\Axe rouleau caoutchouc\Eje para rodillo goma

RULLO COMPLETO\ COMPLETE RUBBER ROLLER\ ROULEAU COMPLET\ RODILLO GOMA COMPLETO			
6	NAB520	NAB720	
	9768A	11843A	Rullo con 412A (1) \ Roller with 412A (1) \ Rouleau avec 412A (1) \ Rodillo con 412A (1)
	9768AS	11843AS	Rullo con 412AS (1) \ Roller with 412AS (1) \ Rouleau avec 412AS (1) \ Rodillo con 412AS (1)
	9768AB	11843AB	Rullo con 412AB (1) \ Roller with 412AB (1) \ Rouleau avec 412AB (1) \ Rodillo con 412AB (1)
	9768B	11843B	Rullo con 412B (2) \ Roller with 412B (2) \ Rouleau avec 412B (2) \ Rodillo con 412B (2)
	9768BS	11843BS	Rullo con 412BS (2) \ Roller with 412BS (2) \ Rouleau avec 412BS (2) \ Rodillo con 412BS (2)
	9768D	11843D	Rullo con 412D (3) \ Roller with 412D (3) \ Rouleau avec 412D (3) \ Rodillo con 412D (3)
	9768DS	11843DS	Rullo con 412DS (3) \ Roller with 412DS (3) \ Rouleau avec 412DS (3) \ Rodillo con 412DS (3)
	9768DB	11843DB	Rullo con 412DB (3) \ Roller with 412DB (3) \ Rouleau avec 412DB (3) \ Rodillo con 412DB (3)
	9768ASSY	11843ASSY	Rullo a tubo con perno\Tube roller with pin\Rouleau a tube avec axe\Tubo goma con perno
9768AM	11843AM	Rullo misto 412A-412AS\Mixed roller 412A-412AS\Rouleau mixte 412A-412AS\Tubo misto 412A-412AS	

## 9.8. PORTA LAMA / BLADE HOLDER



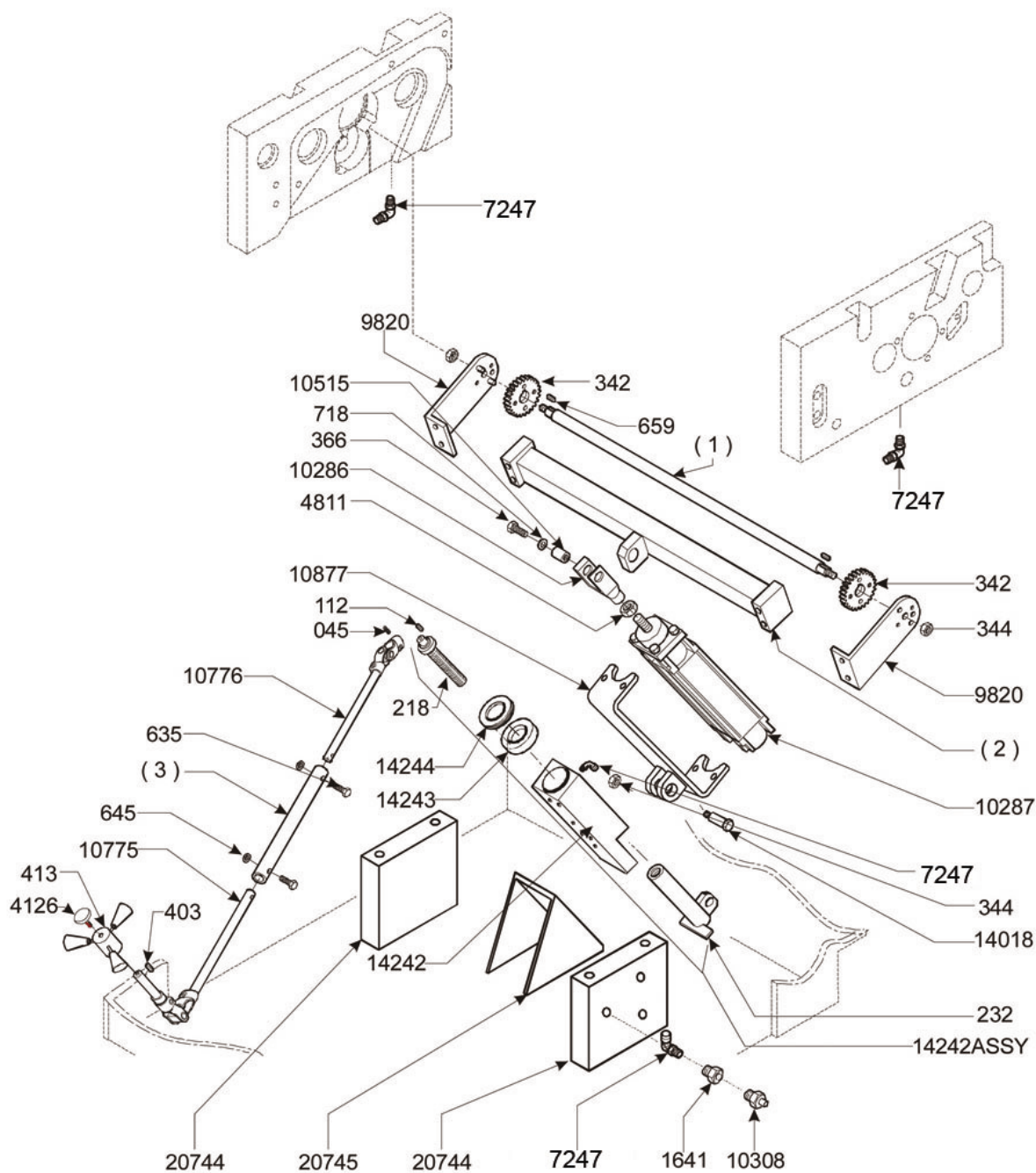
PORTA LAMA\ BLADE HOLDER\ PORTE-LAME\ PORTA CUCHILLA	
CODE	DESCRIPTION
045	Vite\Screw\Vis sans tete\Prisionero STEI 08x10
091	Vite\Screw\Vis\Tornillo TSCE 06x10
092	Piastrina appoggio lama\Blade stop\Plaque\Plaqueta
155	Grano appoggio lama\Grub screw\Vis sans tete\Prisionero
357	Molla portalama\Blade holder spring\Ressort\Muelle
358	Vite serraggio coperchio\Blade tightening screw\Vis\Tornillo
359	Rondella premimolla\Washer\Rondelle\Arandela
360	Seeger\Seeger\Circlip\Seeger
365	Vite\ Screw\Vis\Tornillo TE 14x50
368B	Vite piastrina\Screw\Axe\Tornillo
457	Blocco scorrimento sx\Left blade holder guide\Guide gauche\Guía izq.
458	Blocco scorrimento dx\Right blade holder guide\Guide droite\Guía drch.
497	Dado\Nut\Ecrou\Tuerca
B356	Lama\Blade\Lame\Cuchilla
9219	Piastrina completa\Holder sheet\Plaque appui cube\Plaqueta apoyo
9978	Piastrina sx\Left plate\Plaque gauche\Plaqueta izquierda
9979	Piastrina dx\Right plate\Plaque droite\Plaqueta derecha
10863	Distanziale\Spacer\Entretoise\Distanciador
10991A	Pomello\Knob\Manette\Pomo esférico
10996A	Barra filettata\Threaded pin\Vis speciale\Eje roscado
CH17T	Chiave a T\Blade spanner\Clef pour lame\Llave tornillos porta cuchilla

1	355	Piatto serralama con beccucci\Blade holder cover\Couvercle lame\Tapa cuchilla
	355 CD	Piatto serralama\ Blade holder cover\Couvercle lame\Tapa cuchilla

2	10966	Piatto portalama saldato\Blade holder base\Plaque porte-lame\Tapa porta cuchilla
	10966 CD	Piatto portalama\Blade holder base\Plaque porte-lame\Tapa porta cuchilla

3	10966ASSY	Portalama completo\Blade holder assy\Porte-lame complet\ Porta cuchilla completo
	10966CDASSY	Portalama completo\Blade holder CD assy\ Porte-lame complet\Porta cuchilla completo

## 9.9. SISTEMA D'APERTURA (SOLO PER NAB NO VER. CD - DD) / OPENING SYSTEM (ONLY FOR NAB NO VER. CD - DD)



SISTEMA APERTURA\ OPENING SYSTEM\ DISPOSITIF D'OUVERTURE\ SISTEMA ABERTURA	
CODE	DESCRIPTION
045	Vite\Dowel\Vis sans tete\Tornillo STEI 08x10
112	Linguetta\Key\Clavette\Lengüeta
218	Perno centrale\Cylinder adj. screw\Axe central traineau\Perno central corredera
232	Perno saldato\Cylinder adj. support\Axe couliss. traineau\Perno desliz. corredera
242	Vite\Screw\Vis\Tornillo TE 08x80
342	Ingranaggio mov. eccentrico\Cam driving gear\Engrenage\Engranaje Z=43
344	Dado autobloccante\Nut\Ecrou\Tuerca
366	Vite\Screw\Vis\Tornillo TE 08x16
403	Linguetta\Key\Volant\Lengüeta
413	Volantino regolazione cotenna\Thickness adj. handweel\Pommeau\Volantín
635	Vite\Screw\Vis\Tornillo TE 06x25
645	Dado\Nut\Ecrou\Tuerca
659	Linguetta\Key\Clavette\Lengüeta UNI 6604
718	Rondella\Washer\Rondelle\Arandela
1641	Riduzione\Reducer\Raccord\Unión 1/4"F - 1/8"M
4126	Pomello\Knob\Pommeau\Pomo
4811	Dado basso\Nut\Ecrou\Tuerca
9820	Leva mov. eccentrico\Cam motion arm\Levier deplacement exc.\Palanca para movimiento exc
10286	Forcella cilindro\Fork\Fourchette\Horquilla
10287	Cilindro festo\Toothroll opening cylinder\Cylindre ouverture\Cilindro apertura 163372DNC
10515	Perno forcella\Pin\Axe de point d'appui\Perno de fulcro
10308	Ingrassatore\Grease cap\Graisseur\Engrasador
10775	Perno completo anteriore\Drive pin\Axe avant pommeau\Perno delnt. pomo reg.
10776	Perno completo posteriore\Knob pin\Axe arriere pommeau\Perno post. pomo reg.
10877	Supporto per cilindro\Support\Support\Soporte
7247	Raccordo doppio girevole\Fastening\Raccord\Unión
14242	Slitta registro cilindro\Adj. slide\Butee pour vis regl. traineau\Corredera
14243	Anello per appoggio perno\Pin slide ring\Couvercle pour traineau\Tapa para corredera
14244	Ghiera per fermo\Pin ring nut\Couvercle\Retén para tornillo regul. corredera
14242ASSY	Slitta regolazione cotenna\Adj. slide assy\Traineau assy\Corredera completa
14018	Perno forcella cilindro\Pin\Axe de point d'appui cylindre\Perno
20744	Supporto completo per supporti orientabili\Support\Support arbre moteur\Soporto completo
20745	Supporto completo per slitta\Support\Support pour cyl. ouverture\Soporto compl. para corredera

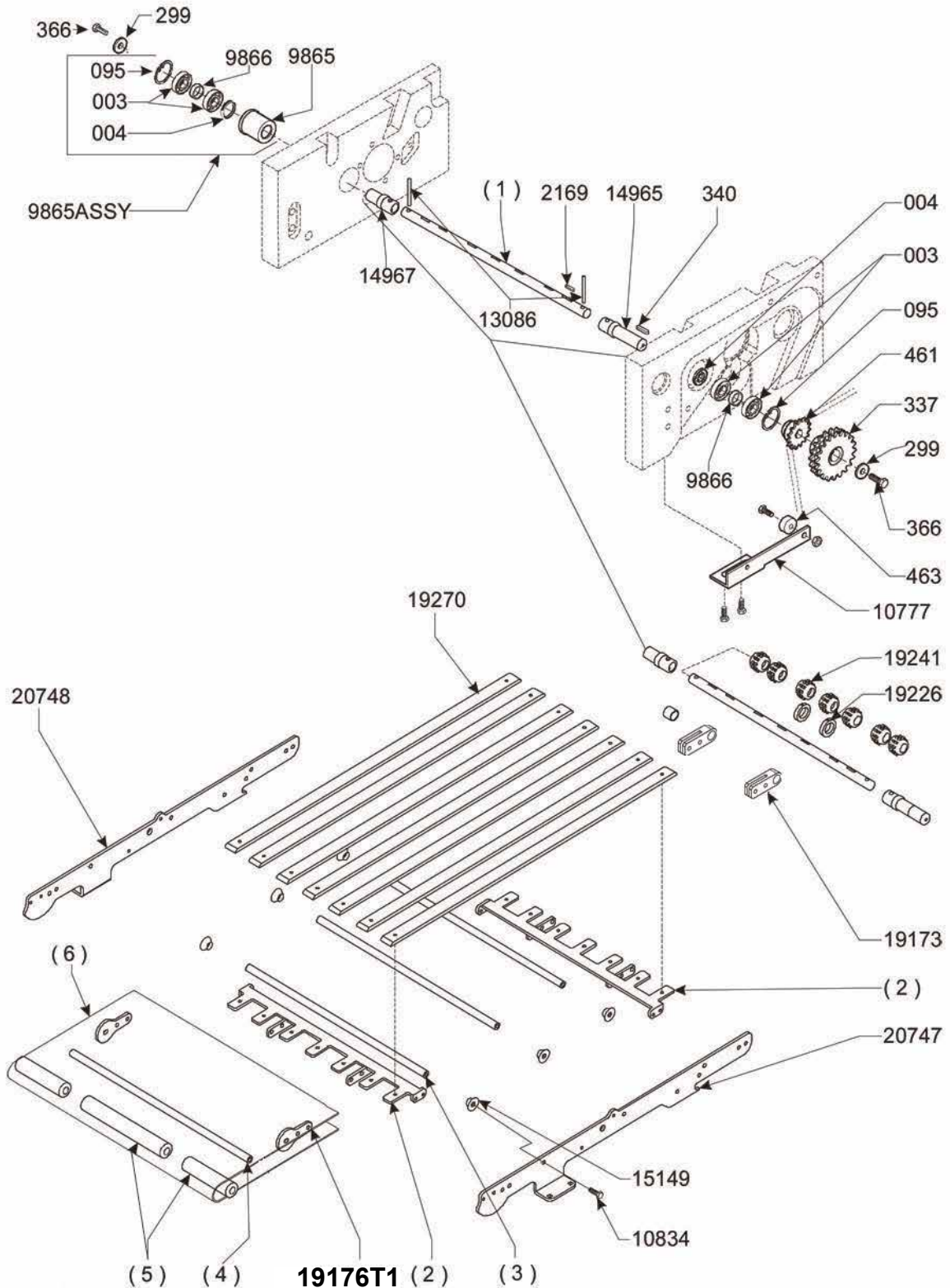
1	341	Perno movimenti eccentrici\Cam drive pin\Pivot coussinet\Perno mov. excéntricos NAB 520
	11856	Perno movimenti eccentrici\Cam drive pin\Pivot coussinet\Perno mov. excéntricos NAB 720

1	9755	Tubolare completo apertura albero dentato\Tube\Bras\Tubo NAB 520
	11840	Tubolare completo apertura albero dentato\Tube\Bras\Tubo NAB 720

3	10725	Manicotto unione perni\Connecting sleeve\Manchon\Manguito NAB 520
	11860	Manicotto unione perni\Connecting sleeve\Manchon\Manguito NAB 720

# 9.10. NASTRO D'ENTRATA / NFEED BELT - 1800 mm

(ONLY V. 720)





NASTRO ENTRATA\ INFEED BELT\ TAPIS ROULANT D'ENTREE\ CINTA DE ENTRADA	
CODE	DESCRIPTION
003	Cuscinetto\Bearing\Roulement\Cojinete 6005-2RS
004	Paraolio\Oil seal\Joint d'et ancheite\Sello aceite
095	Seeger\Seeger\Circlip\Seeger
299	Rondella\Washer\Rondelle\Arandela
337	Ingranaggio mov. rullo\Rubber roller driving gear\Engranage\Engranajez Z=52
340	Linguetta\Key\Clavette\Lengüeta
366	Vite\Screw\Vis\Tornillo TE 08x16
463	Rotella tendicatenaNylon wheel\Roue\Ruedecilla tensacadena
2169	Linguetta\Key\Clavette\Lengüeta
9865	Bussola\Belt drive bush\Coussinet\Casquillo
9866	Distanziale interno bussola\Spacer\Entretoise\Distanciadior
9865ASSY	Bussola nastro completa\Belt drive bush assy\Coussinet compl.\Casquillo completo
10777	Squadretta fissaggio tenditore\Plate\Plat\Plato tensacadena
10834	Vite per rotella\Screw\Vis\Tornillo
13086	Spina elastica\Peg\Goujon\Pasador
14965	Presa di forza\Belt drive pin\Prise de force\Toma de fuerza
14967	Perno supporto albero\Pin\Pivot support rouleau\Perno soporto eje de cinta
15149	Tondo raggiato\Bush\Douille\Casquillo
461	Pignone\Pinion\Pignon\Piñión Z=14
19173	Supporto compl. perno motore\Support plate\Plaque support rouleau\Soporto compl. perno motor
19176T1	Lamiera esterna\Ext. support plate\Plaque ext. support rouleau libre\Plaqua ext. soporto perno
19226	Ghiera\Nut\Bague\Tuerca
19241	Pignone\Pinion\Pignon\Piñión HABASIT
19270	Piatto appoggio nastro\Nylon plate\Plaque de plastique\Plato soporto cinta
20747	Fianco dx per telaio\Right side for frame\Chassis droit\Bastidor der.
20748	Fianco sx per telaio\Left side for frame\Chassis gauche\Bastidor izq.

1	19275	Albero motore\Shaft\Rouleau moteur\Arbol NAB 720
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2	21301	Lamiera traversa\Support plate\Plaque\Plaqua arbol NAB 720
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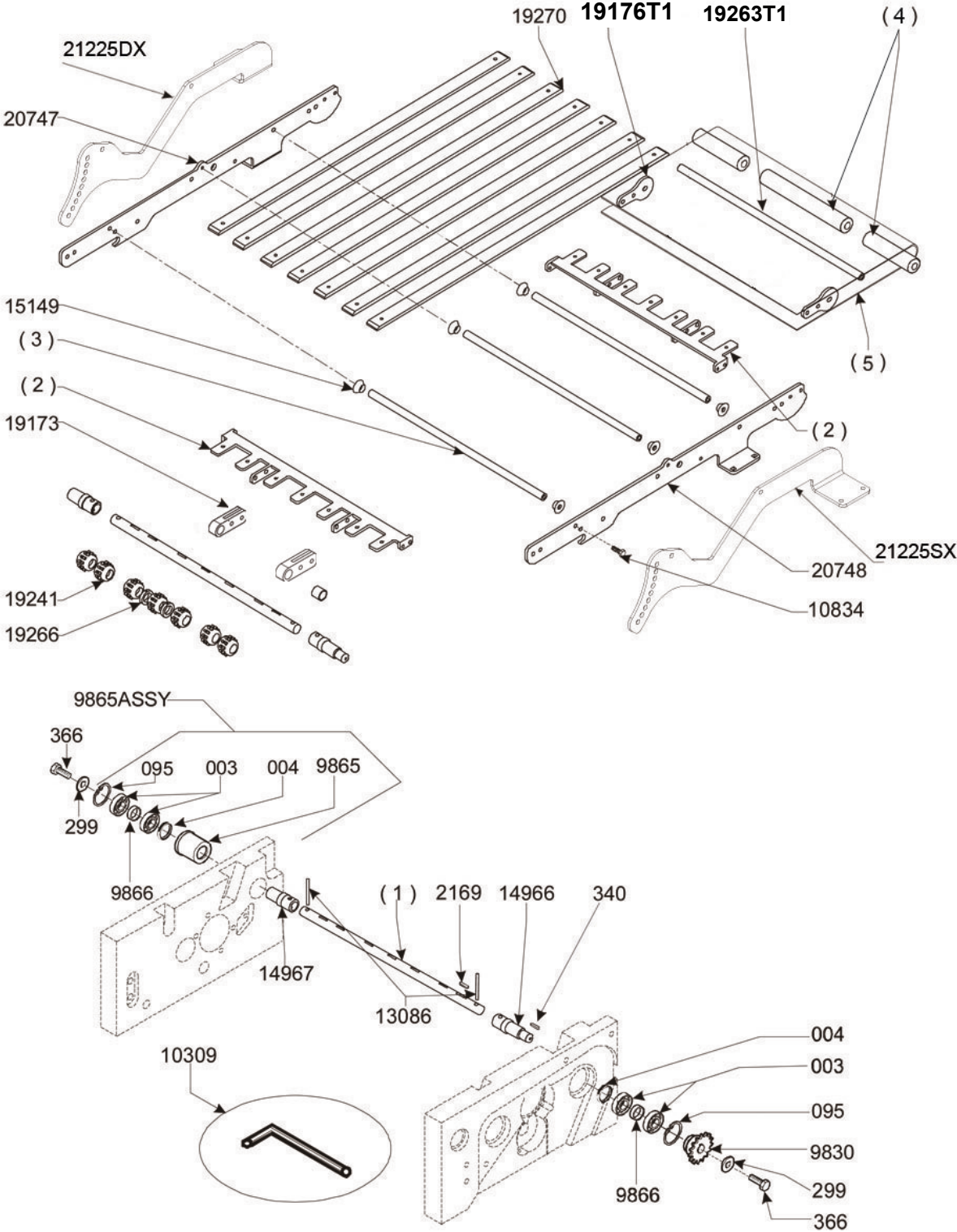
3	21302	Tondo per telaio\Frame fixing bar\Cheville support chassis\Eje motor por la cinta NAB 720
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4	19278	Perno rullo folle\Idle roller pin\Cheville rouleau libre\Perno rodillo libere NAB 720
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5	19277	Rullo folle\Idle roller\Rouleau libre\Rodillo libere L=232 Ø 15 NAB 720
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6	147M1233BAC700	Nastro modulare\Modular belt habasit\Ruban\Cinta 700 mm
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# 9.11. NASTRO D'USCITA / OUTFEED BELT- 1800 mm





NASTRO USCITA\ OUTFEED BELT\ TAPIS ROULANT DE SORTIE\ CINTA DE SALIDA	
CODE	DESCRIPTION
003	Cuscinetto\Bearing\Roulement\Cojinete 6005-2RS
004	Paraolio\Oil seal\Joint d'et ancheite\Sello aceite
095	Seeger\Seeger\Circlip\Seeger
299	Rondella\Washer\Rondelle\Arandela
340	Linguetta\Key\Clavette\Lengüeta
366	Vite\Screw\Vis\Tornillo TE 08x16
2169	Linguetta\Key\Clavette\Lengüeta
9830	Pignone\Pinion\Pignon\Piñón
9865	Bussola\Belt drive bush\Coussinet\Casquillo
9866	Distanziale interno bussola\Spacer\Entretoise\Distanciator
9865ASSY	Bussola nastro completa\Belt drive bush assy\Coussinet compl.\Casquillo completo
10834	Vite per rotella\Screw\Vis\Tornillo
13086	Spina elastica\Peg\Goujon\Pasador
14967	Perno supporto albero\Pin\Pivot support rouleau\Perno soporto eje de cinta
15149	Tondo raggiato\Bush\Douille\Casquillo
10309	Chiave regolazione\Belt regulation key\ USAG
19173	Supporto compl. perno motore\Support plate\Plaque support rouleau\Soporto compl. perno motor
19176T1	Lamiera esterna\Ext. support plate\ Plaque ext. support rouleau libre\Plaqua ext. soporto perno
19263T1	Perno rullo folle\Idle roller pin\Cheville rouleau libre\Perno rodillo libere
14966	Presa di forza\Belt drive pin\Prise de force\Toma de fuerza
19266	Ghiera\Nut\Bague\Tuerca
19241	Pignone\Pinion\Pignon\Piñón HABASIT
19270	Piatto appoggio nastro\Nylon plate\Plaque de plastique\Plato soporto cinta
20562	Lamiera traversa\Belts frame support plate\Plaque\Plaqua soporto rodillo libere
20747	Fianco dx per telaio\Right side for frame\Chassis droit\Bastidor der.
20748	Fianco sx per telaio\Left side for frame\Chassis gauche\Bastidor izq.
21225DX	Fianco dx per supporto nastro\Outfeed belt right side\Chassis droit support tapis\Bastidor der. soporte cinta
21225SX	Fianco sx per supporto nastro\Outfeed belt left side\Chassis gauche support tapis\Bastidor izq. soporte cinta

1	19261	Albero motore\Shaft\Rouleau moteur\Arbol NAB 520
	19275	Albero motore\Shaft\Rouleau moteur\Arbol NAB 720

2	20562	Lamiera traversa\Support plate\Plaque\Plaqua arbol NAB 520
	21301	Lamiera traversa\Support plate\Plaque\Plaqua arbol NAB 720

3	20561	Tondo per telaio\Frame fixing bar\Cheville support chassis\Eje motor por la cinta NAB 520
	21302	Tondo per telaio\Frame fixing bar\Cheville support chassis\Eje motor por la cinta NAB 720

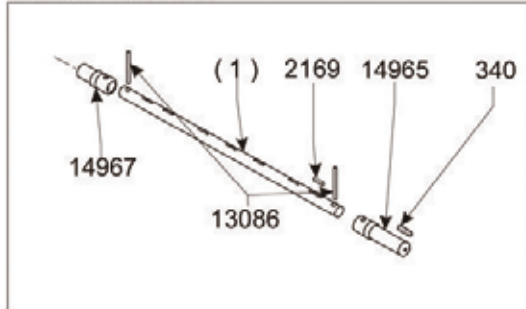
4	23340	Rullo folle\Idle roller\Rouleau libre\Rodillo libere L=Ø 15 NAB 520
	19277	Rullo folle\Idle roller\Rouleau libre\Rodillo libere L=Ø 15 NAB 720

5	147M1233BAC500	Nastro modulare\Modular belt habasit\Ruban\Cinta 500 mm
	147M1233BAC700	Nastro modulare\Modular belt habasit\Ruban\Cinta 700 mm

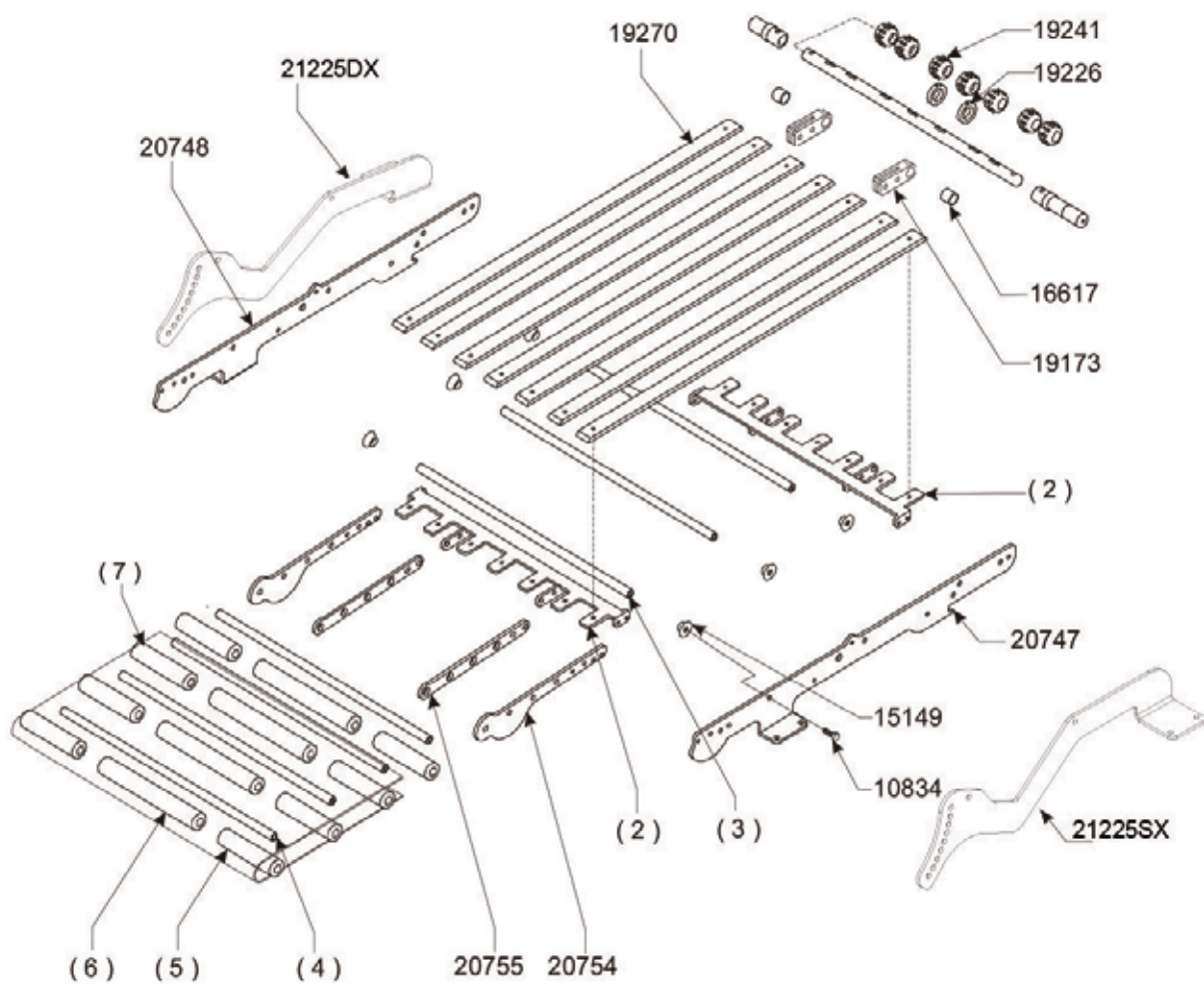
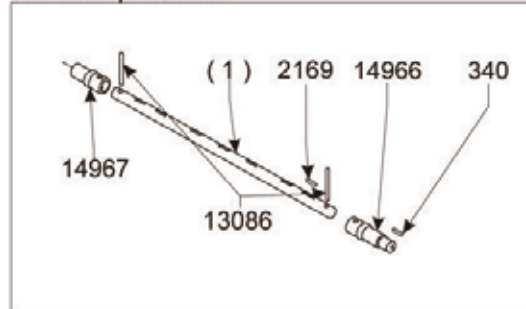
## 9.12. NASTRO / BELT - 2260 mm

(ONLY V. 720)

Versione anteriore



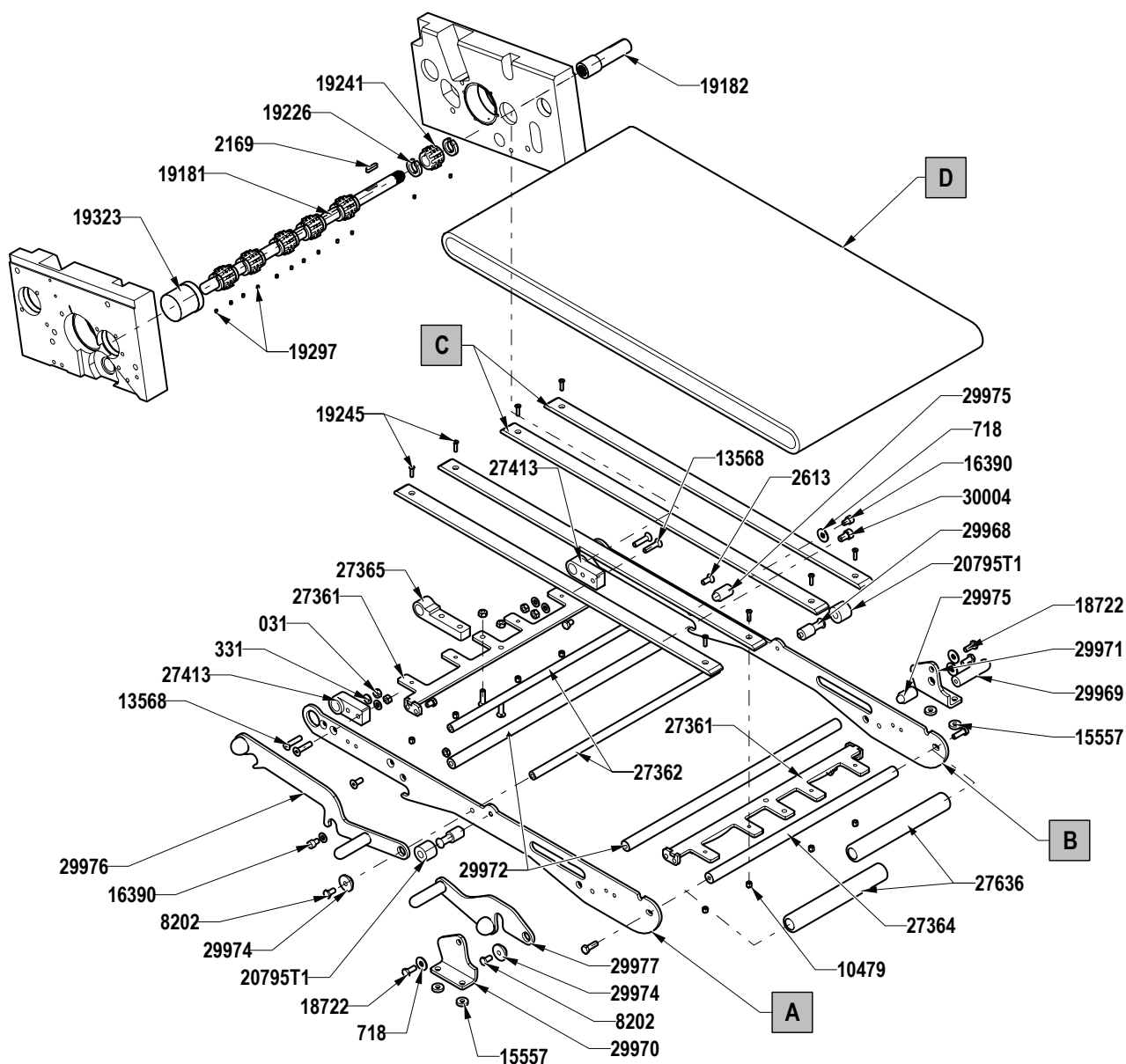
Versione posteriore



NASTRO\ BELT\ TAPIS ROULANT\CINTA	
CODE	DESCRIPTION
24824	Albero motore\Shaft\Rouleau moteur\Arbol
24834	Perno supporto albero\Pin\Pivot support roleau\Perno soporto eje de cinta
13086	Spina elastica\Peg\Goujon\Pasador
10170	Spina\Peg\Goujon\Pasador
2169	Linguetta\Key\Clavette\Lengüeta
24833	Pres a di forza ant.\Belt drive pin\Prise de force avant\Toma de fuerza delant.
24829	Perno supporto albero\Pin\Pivot support roleau\Perno soporto eje de cinta
24823	Albero motore\Shaft\Rouleau moteur\Arbol
522	Spina\Peg\Goujon\Pasador
24825	Pres a di forza post.\Belt drive pin\Prise de force arrièr e\Toma de fuerza post.
10834	Vite per rotella\Screw\Vis\Tornillo
15149	Tondo raggiato\Bush\Douille\Casquillo
19173	Supporto compl. perno motore\Support plate\Plaque support rouleau\Soporto compl. perno motor
19226	Ghiera\Nut\Bague\Tuerca
19241	Pignone\Pinion\Pignon\Piniñ on HABASIT
19270	Piatto appoggio nastro\Nylon plate\Plaque de plastique\Plato soporto cinta
20747	Fianco dx per telaio\Right side for frame\Chassis droit\Bastidor der.
20748	Fianco sx per telaio\Left side for frame\Chassis gauche\Bastidor izq.
20754	Lamiera esterna\Ext. support plate\ Plaque ext. support rouleau libre\Plaqua ext. soporto perno
20755	Lamiera interna\Int. support plate\ Plaque int. support rouleau libre\Plaqua int. soporto perno
21225DX	Fianco dx per supporto nastro\Outfeed belt right side\Chassis droit support tapis\Bastidor der. soporte cinta
21225SX	Fianco sx per supporto nastro\Outfeed belt left side\Chassis gauche support tapis\Bastidor izq. soporte cinta

1	19275	Albero motore\Shaft\Rouleau moteur\Arbol NAB 720
2	21301	Lamiera traversa\Support plate\Plaque\Plaqua arbol NAB 720
3	21302	Tondo per telaio\Fram e fixing bar\Cheville support chassis\Eje motor por la cinta NAB 720
4	19278	Perno rullo folle\Idle roller pin\Cheville rouleau libre\Perno rodillo libere NAB 720
5	19277	Rullo folle\Idle roller\Rouleau libre\Rodillo libere L=232 Ø 15 NAB 720
6	19277	Rullo folle\Idle roller\Rouleau libre\Rodillo libere L=232 Ø 15 NAB 720
7	147M1233BAC700	Nastro modulare\Modular belt habasit\Ruban\Cinta 700 mm

# 9.13 NASTRO ANTERIORE APRIBILE / FRONT OPENING BELT (ONLY V. 520)



NASTRO ANTERIORE APRIBILE \ OPENABLE FRONT BELT	
CODE	DESCRIPTION
031	DADO\HEXAGON NUT M08
331	RONDELLA PIANA\WASHER BORE 08X17X1.5
718	RONDELLA PIANA\WASHER 08X24X2
2169	LINGUETTA\KEY 06X16X25
2613	VITE\SCREW TSCE 08X20
8202	VITE\SCREW TE 08X16
10479	DADO CIECO\HEXAGON CUP NUT M08
13568	VITE\SCREW TSCE 08X35
15557	DISTANZIALE\SPACER
16390	VITE\SCREW TCCE 08X12
18722	VITE\SCREW TE M8X20
19181	PERNO MOTORE\MOTOR PIN
19182	PRESA DI FORZA\DRIVE PIN
19226	GHIERA\RING NUT
19241	PIGNONE\PLASTIC SPROCKET Z10
19245	VITE\SCREW TSTC 05X20
19297	VITE\SCREW STEI 04X05
19323	TAPPO\CAP
27361	TRAVERSA TELAIO\FRAME CROSS PIECE
27362	TONDO\ROUND
27364	PERNO RULLO FOLLE\IDLE ROLLER PIN
27365	SUPPORTO PERNO MOTORE\MOTOR PIN SUPPORT
27413	SUPPORTO LATERALE PERNO\LATERAL SUPPORT PIN
27636	CREMAGLIERA\RACK
29968	TONDO\PIN FOR RUBBER
29969	TONDO BLOCCO NASTRO APRIBILE\PIN FOR BELT BLOCK
29970	LAMIERA PIEGATA SX\LEFT BENDED PLATE
29971	LAMIERA PIEGATA DX\RIGHT BENDED PLATE
29972	TONDO FULCRO NASTRO\FULCRUM PIN
29974	BUSSOLA\BUSH
29975	TONDO\GUIDE PIN
29976	LEVA INTERNA\INTERNAL LEVER
29977	LEVA ESTERNA\EXTERNAL LEVER
30004	VITE\SCREW TCCE M10X14
20795T1	DISTANZIALE GOMMA BIANCA\RUBBER SPACER

A	27366SXT1	FIANCO SX APRIBILE\LEFT FOLDING SIDE L=1800
	20631T1	FIANCO SX APRIBILE\LEFT FOLDING SIDE L=2260

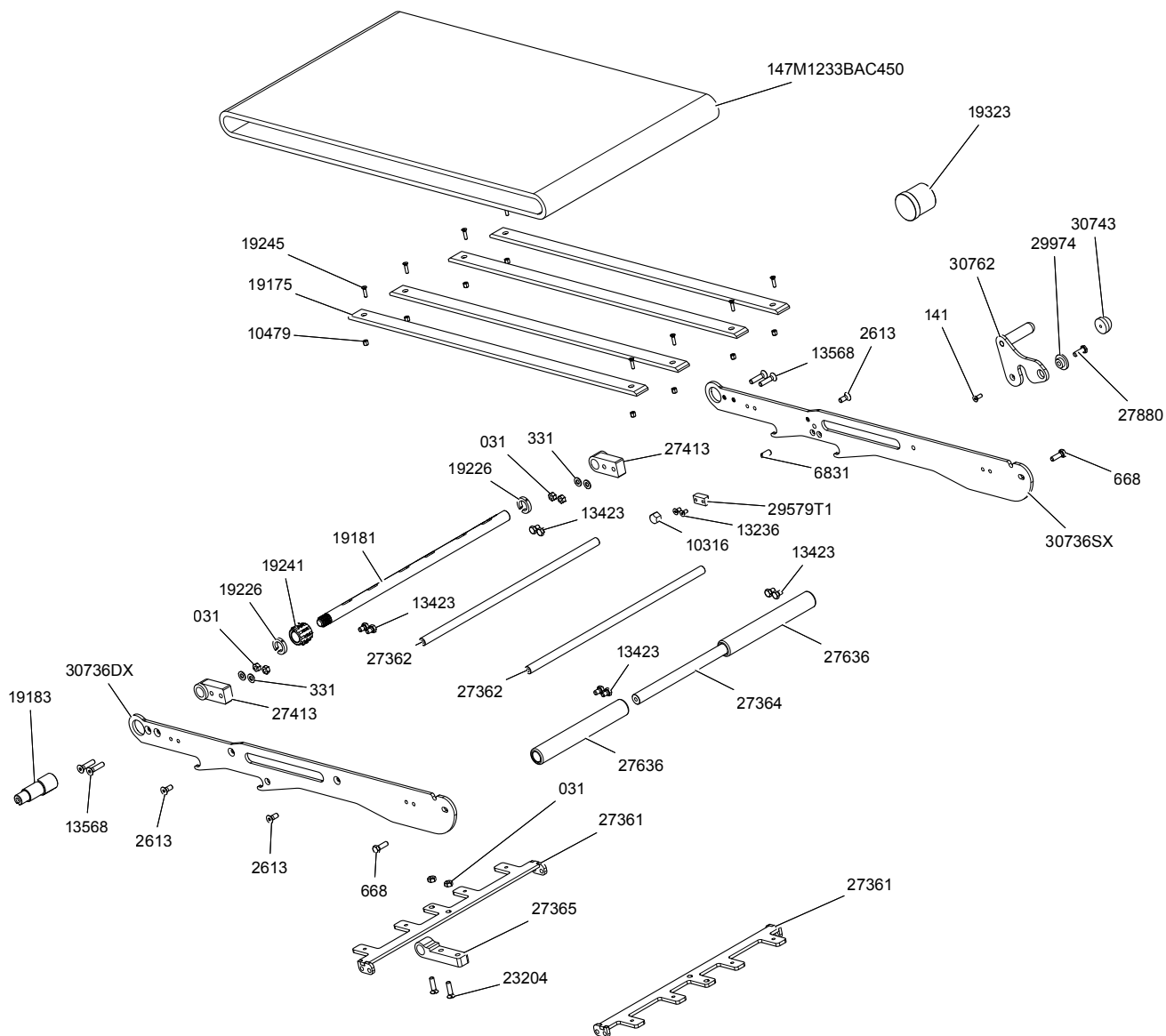
B	27366DXT1	FIANCO DX APRIBILE\RIGHT FOLDING SIDE L=1800
	20630T1	FIANCO DX APRIBILE\RIGHT FOLDING SIDE L=2260

C	19175	PIATTO IN PLASTICA\PLASTIC PLATE L=1800
	19262	PIATTO IN PLASTICA\PLASTIC PLATE L=2260

D	147M1233BAC450	NASTRO MODULARE\BLUE MODULAR BELT L=450
	147M1233BAC650	NASTRO MODULARE\BLUE MODULAR BELT L=650

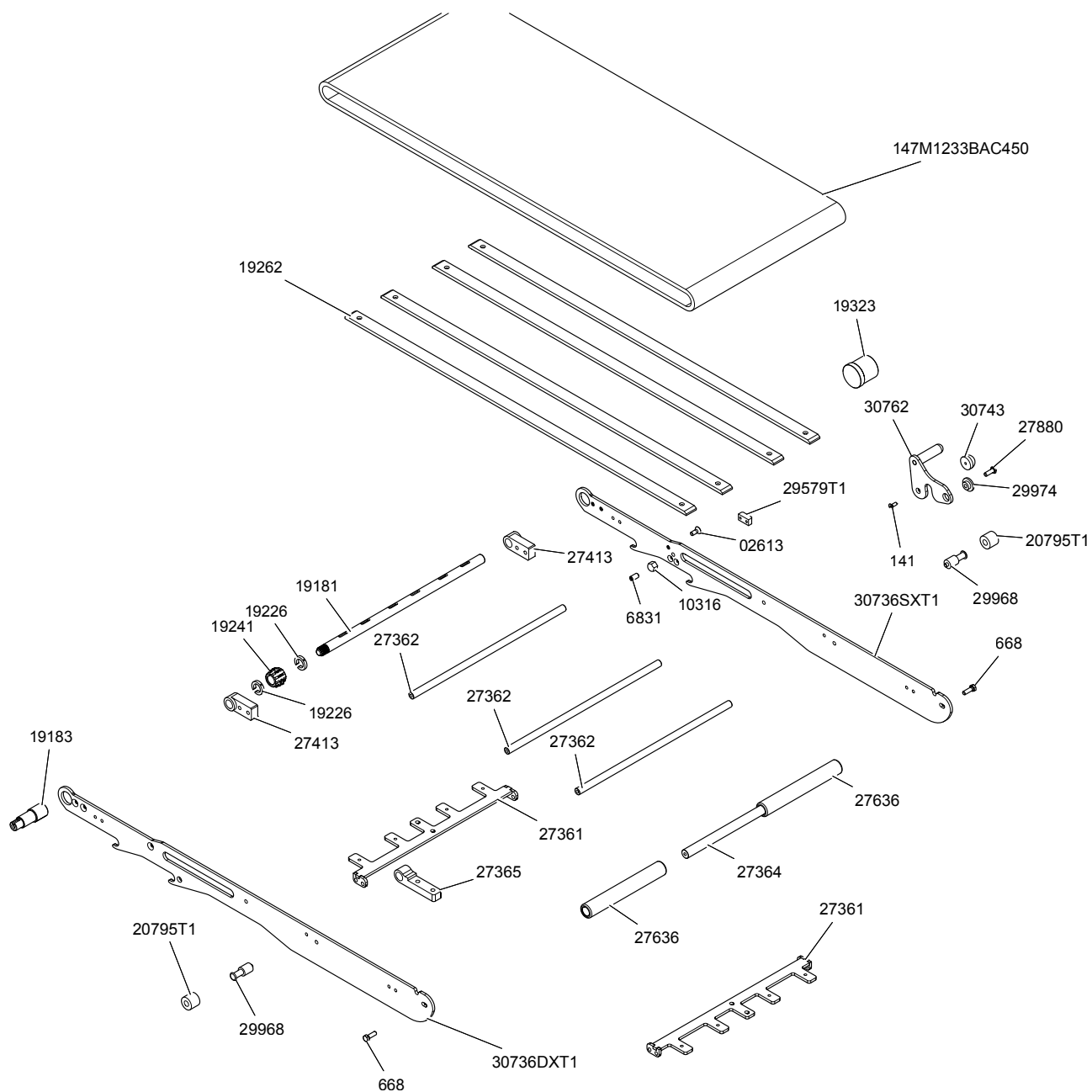
# 9.14 NASTRO POSTERIORE APRIBILE 1800 mm (solo per NAB520)

## REAR OPENABLE BELT 1800 mm (only NAB520)



# 9.15 NASTRO POSTERIORE APRIBILE 2260 mm (solo per NAB520)

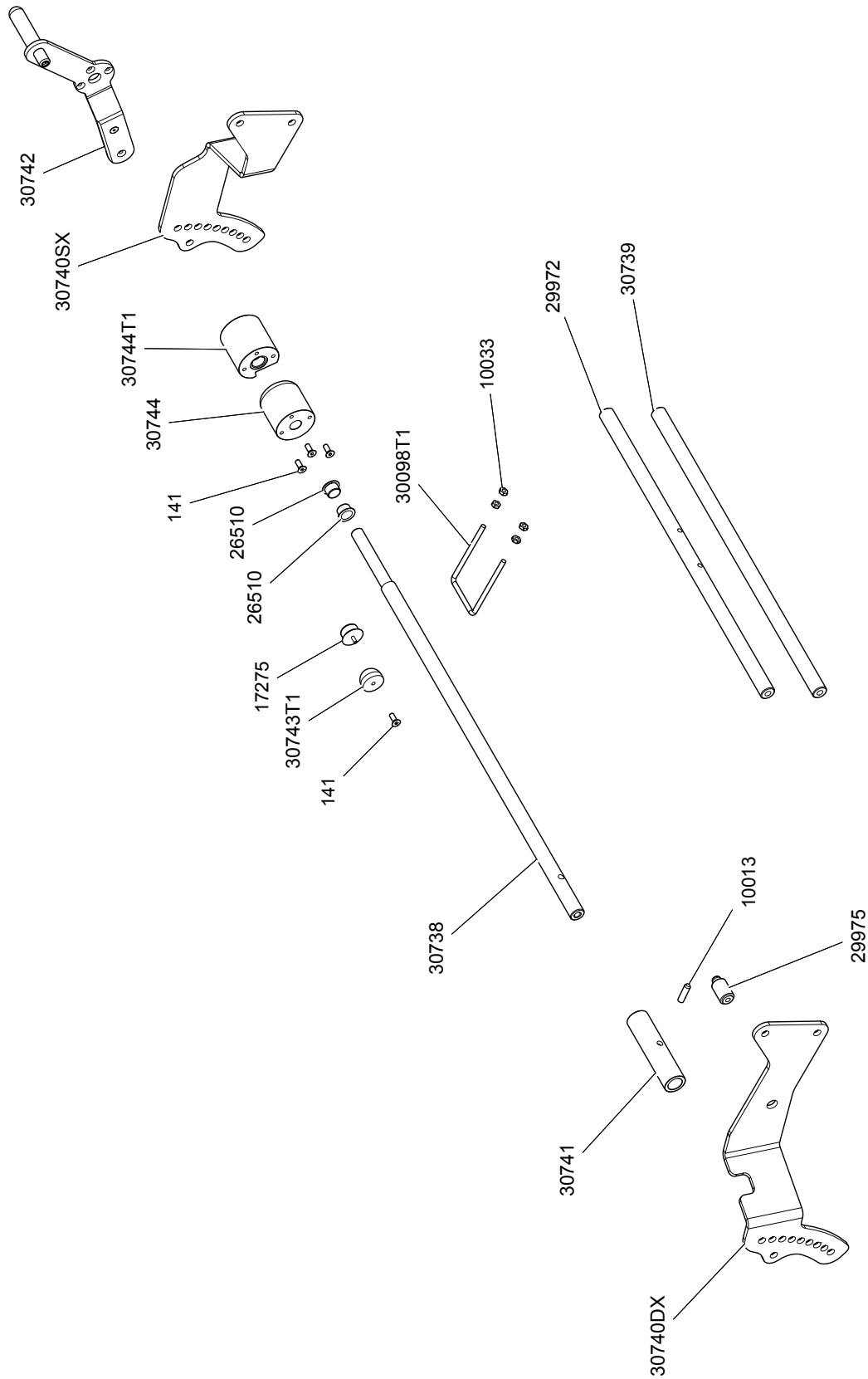
## REAR OPENABLE BELT 2260 mm (only NAB520)



<b>NASTRO POSTERIORE APRIBILE / OPENABLE OUTFEED BELT</b>	
<b>CODE</b>	<b>DESCRIPTION</b>
<b>031</b>	DADO M08 / HEXAGON NUT M08
<b>141</b>	VITE TSCE 06X16 / FLAT SOCKET HEAD CAP SCREW 06X16
<b>147M1233BAC450</b>	NASTRO MODULARE HABASIT TIPO M1233 BLU LARG.=450 / BLUE MODULAR BELT M1233 WIDTH=450
<b>331</b>	RONDELLA PIANA 08X17X1.5 / WASHER 08X17X1.5
<b>668</b>	VITE TE 08X25 / HEXAGON HEAD SCREW 08X25
<b>2613</b>	VITE TSCE 08X20 / FLAT SOCKET HEAD CAP SCREW 08X20
<b>6831</b>	GRANO CON SFERA M10 / SOCKET SET SCREW WITH BALL M10
<b>10316</b>	DADO CIECO M10 / HEXAGON CAP NUT M10
<b>10479</b>	DADO CIECO M05 / HEXAGON CAP NUT M05
<b>13236</b>	VITE TSCE 06X12 / FLAT SOCKET HEAD CAP SCREW 06X12
<b>13423</b>	VITE TE 08X12 / HEXAGON CAP SCREW 08X12
<b>13568</b>	VITE TSCE 08X35 / FLAT SOCKET HEAD CAP SCREW 08X35
<b>19175</b>	PIATTO IN PLASTICA / PLASTIC PLATE
<b>19181</b>	PERNO MOTORE PER NASTRO MODULARE / MOTOR PIN
<b>19183</b>	PRESA DI FORZA PER NASTRO POSTERIORE APRIBILE / POWER TAKE-OFF
<b>19226</b>	GHIERA PER FERMO PIGNONE NASTRO MODULARE / STOP SPACER
<b>19241</b>	PIGNONE / PLASTIC SPROCKET
<b>19245</b>	VITE TSTC 05X20 / SCREW 5X20
<b>19262</b>	PIATTO IN PLASTICA PER APPOGGIO NASTRO / PLASTIC STRIP FOR MODULAR BELT
<b>19323</b>	TAPPO / CAP
<b>20795T1</b>	DISTANZIALE GOMMA BIANCA / RUBBER SPACER
<b>23204</b>	VITE TSTC 08X30 / FLAT SOCKET HEAD CAP SCREW 08X30
<b>27361</b>	TRAVERSA TELAIO / BAR
<b>27362</b>	TONDO COLLEGAMENTO TELAIO / BELT FRAME SHAFT
<b>27364</b>	PERNO RULLO FOLLE / IDLE ROLLER PIN
<b>27365</b>	SUPPORTO PERNO MOTORE / PLASTIC SUPPORT
<b>27413</b>	SUPPORTO LATERALE PERNO MOTORE / SIDE SUPPORT
<b>27636</b>	CREMAGLIERA / RACK
<b>27880</b>	VITE TE 08X25 CON TESTA ABBASSATA / SPECIAL HEXAGONAL HEAD SCREW 08X25
<b>29579T1</b>	PIATTO PER FERMO LEVA CHIUSURA NASTRO ANTERIORE APRIBILE / PLATE FOR LEVER STOP
<b>29968</b>	TONDO SUPPORTO DISTANZIALE IN GOMMA / PIN FOR RUBBER SPACER
<b>29974</b>	BUSSOLA PER FUCRO LEVE NASTRO APRIBILE / BUSH
<b>30736SXT1</b>	FIANCO SINISTRO NASTRO MODULARE APRIBILE POSTERIORE LUNGHEZZA 2260 / LEFT SIDE FOR OPENING REAR BELT 2260
<b>30736DXT1</b>	FIANCO DESTRO NASTRO MODULARE APRIBILE POSTERIORE LUNGHEZZA 2260 / RIGHT SIDE FOR OPENING REAR BELT 2260
<b>30736SX</b>	FIANCO SINISTRO NASTRO MODULARE APRIBILE POSTERIORE LUNGHEZZA 1800 / LEFT SIDE FOR OPENING REAR BELT 1800
<b>30736DX</b>	FIANCO DESTRO NASTRO MODULARE APRIBILE POSTERIORE LUNGHEZZA 1800 / RIGHT SIDE FOR OPENING REAR BELT 1800
<b>30743</b>	PERNO SFERICO IN PLASTICA PER LEVA NASTRO APRIBILE / PLASTIC PIN
<b>30762</b>	LEVA CORTA COMPLETA PER APERTURA NASTRO POSTERIORE APRIBILE / SHORT LEVER FOR OPENABLE BELT

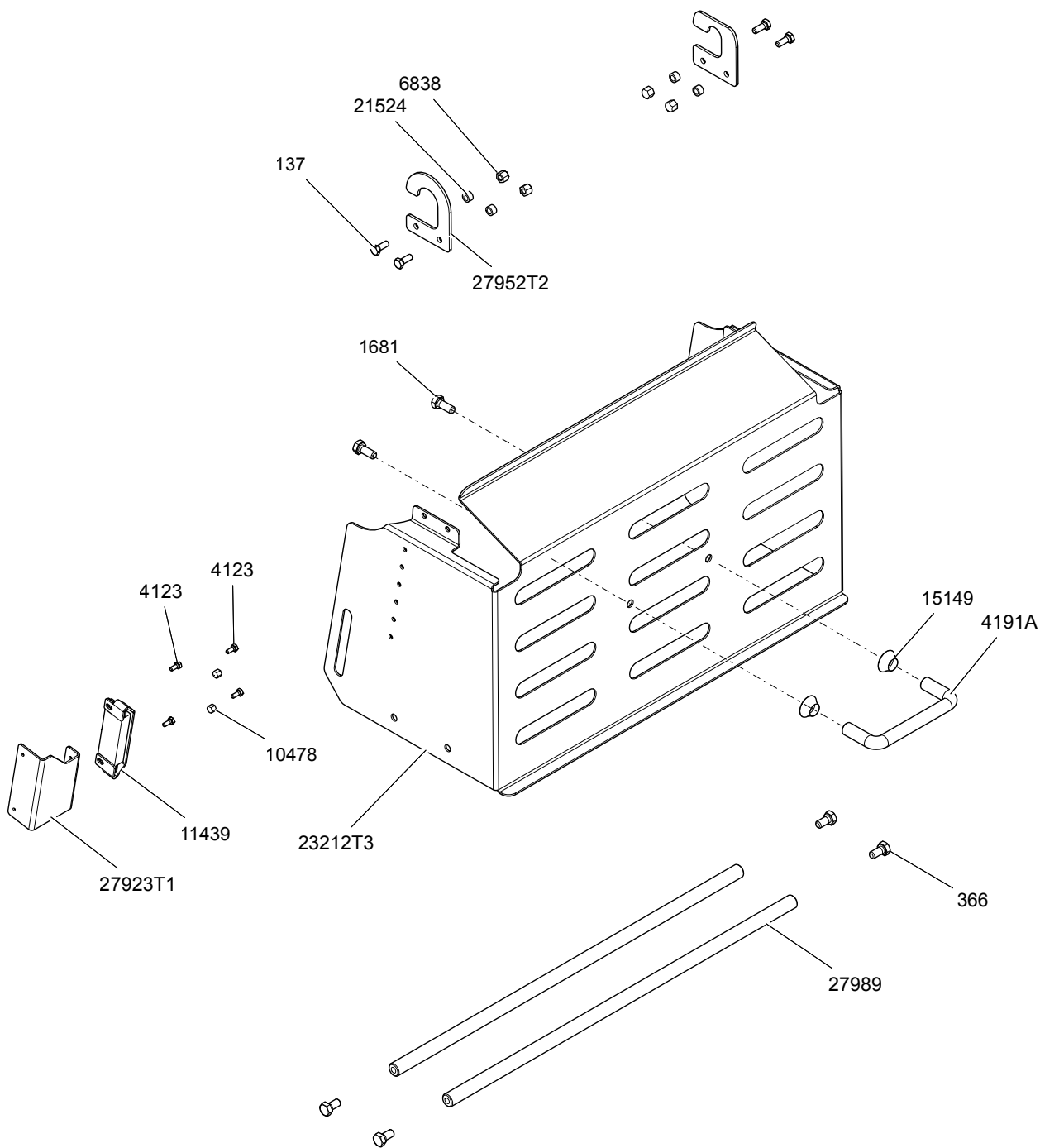


# 9.16 SUPPORTO NASTRO POSTERIORE APRIBILE (solo per NAB520) OPENABLE OUTFEED BELT SUPPORT (only NAB520)



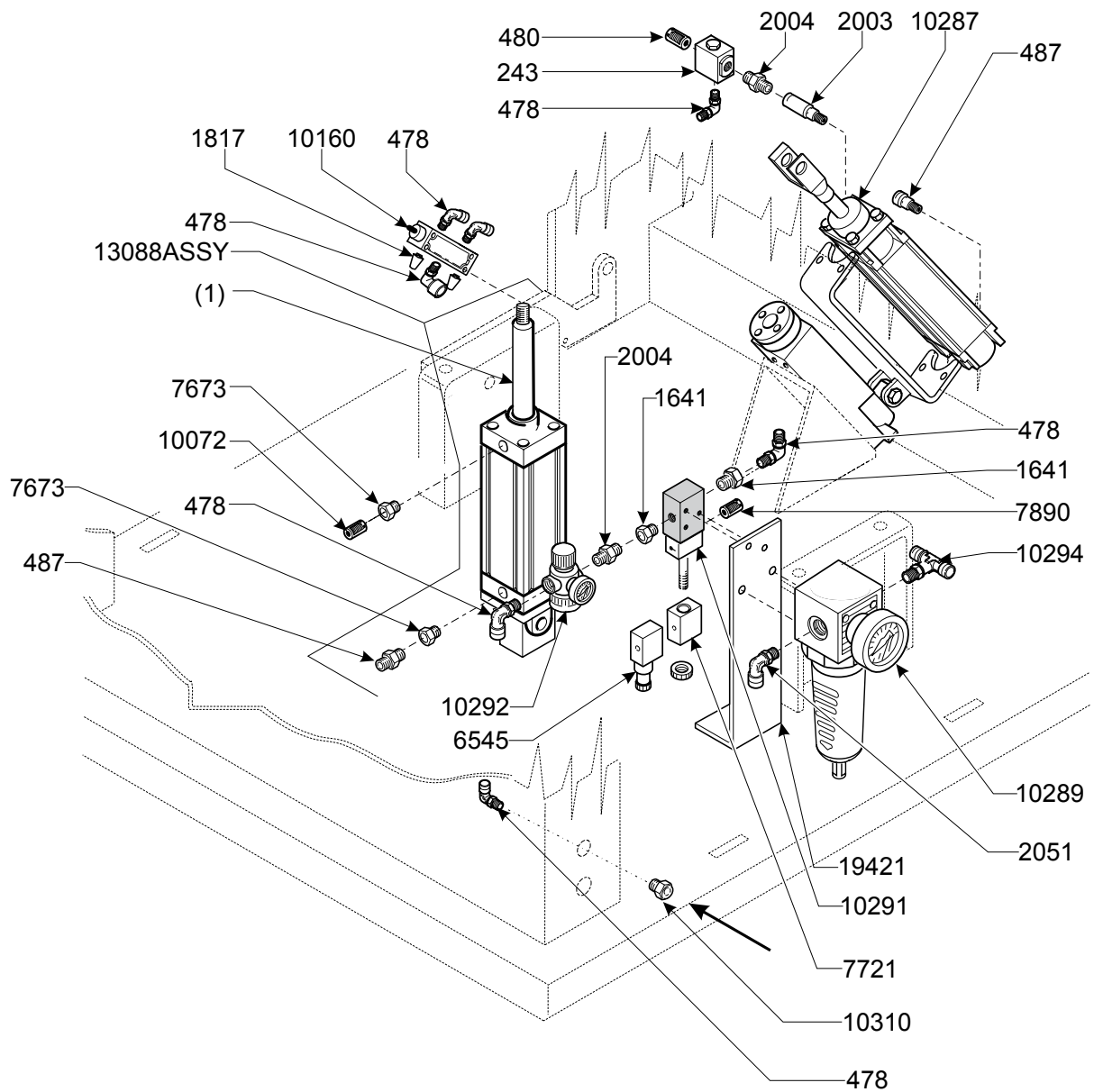
<b>SUPPORTO NASTRO POSTERIORE APRIBILE / OPENABLE OUTFEED BELT SUPPORT</b>	
<b>CODE</b>	<b>DESCRIPTION</b>
<b>10013</b>	SPINA CILINDRICA 08X30 / PARALLEL PIN 08X30
<b>10033</b>	DADO BASSO M06 / HEXAGON JAM NUT M06
<b>141</b>	VITE TSCE 06X16 / FLAT SOCKET HEAD CAP SCREW 06X16
<b>17275</b>	MAGNETE / STAINLESS STEEL MAGNET
<b>26510</b>	BOCCOLA IGUS / BUSH IGUS
<b>29972</b>	TONDO FULCRO NASTRO APRIBILE / FULCRUM PIN
<b>29975</b>	TONDO CENTRAGGIO NASTRO APRIBILE / GUIDE PIN
<b>30098T1</b>	TONDO PIEGATO PER APERTURA NASTRO MODULARE APRIBILE POSTERIORE / BENDED PIN
<b>30738</b>	TONDO FULCRO LEVA CHIUSURA NASTRO POSTERIORE APRIBILE / PIN FOR OPENABLE BELT
<b>30739</b>	TONDO APPOGGIO NASTRO POSTERIORE APRIBILE APERTO / PIN FOR OPENABLE BELT
<b>30740DX</b>	LAMIERA DX SUPPORTO NASTRO MODULARE POSTERIORE APRIBILE / RIGHT SIDE SUPPORT
<b>30740SX</b>	LAMIERA SX SUPPORTO NASTRO MODULARE POSTERIORE APRIBILE / LEFT SIDE SUPPORT
<b>30741</b>	DISTANZIALE 20,3 X 30 X 122 INOX CON FORO PER SPINA / SPACER
<b>30742</b>	LEVA COMPLETA PER APERTURA NASTRO POSTERIORE APRIBILE / LEVER FOR OPENABLE BELT
<b>30743T1</b>	PERNO SFERICO INOX PER LEVA NASTRO APRIBILE / INOX PIN
<b>30744</b>	TONDO IN POM PER LEVA NASTRO POSTERIORE APRIBILE / PLASTIC BLOCK FOR LEVER
<b>30744T1</b>	TONDO FRESATO INOX PER MAGNETE LEVA NASTRO POSTERIORE APRIBILE / INOX BLOCK FOR MAGNET

# 9.17 CARTER POSTERIORE PER NASTRO APRIBILE (solo per NAB520) REAR CARTER FOR OPENABLE BELT (only NAB520)



<b>CARTER POSTERIORE PER NASTRO APRIBILE / REAR CARTER FOR OPENABLE BELT</b>	
<b>CODE</b>	<b>DESCRIPTION</b>
<b>137</b>	VITE TE 06X16 / HEXAGON CAP SCREW 06X16
<b>366</b>	VITE TE 08X16 / HEXAGON HEAD SCREW 08X16
<b>1681</b>	VITE TE 08X20 / HEXAGON HEAD SCREW 08X20
<b>4123</b>	VITE TE 04X10 / HEXAGON HEAD SCREW 04X10
<b>6838</b>	DADO CIECO M06 / HEXAGON CAP NUT M06
<b>10478</b>	DADO CIECO M04 / HEXAGON CAP NUT M04
<b>11439</b>	LAMIERA DI PROTEZIONE MAGNETE SUL COPERCHIO / COVER MAGNET GUARD
<b>21524</b>	DISTANZIALE 6.5X10X6 / SPACER DIMENSION 6.5X10X6
<b>23212T3</b>	PROTEZIONE INFERIORE NASTRO POSTERIORE APRIBILE 1800 TIPO THERMODRIVE / PLATE FOR REAR PROTECTION
<b>27923T1</b>	LAMIERA SPECIALE SUPPORTO MAGNETE CODIFICATO RETTANGOLARE / PLATE FOR MAGNET
<b>27952T2</b>	LAMIERA DESTRA AGGANCIO PROTEZIONE POSTERIORE APRIBILE TIPO THERMODRIVE / RIGHT SIDE HOOK PLATE
<b>27989</b>	TONDO CHIUSURA PROTEZIONE POSTERIORE / PIN

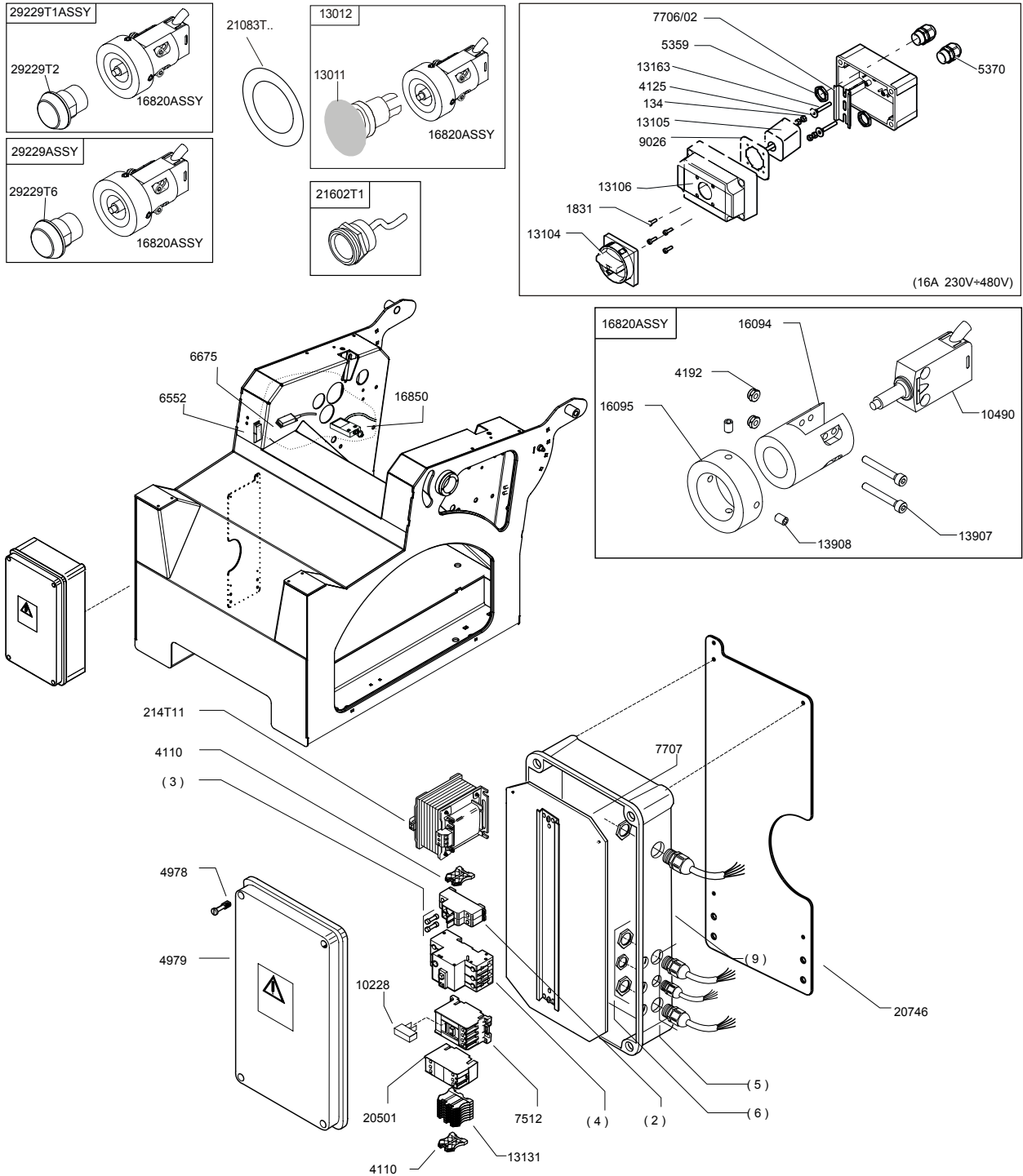
# 9.18. CIRCUITO PNEUMATICO / PNEUMATIC SYSTEM



IMPIANTO PNEUMATICO\ PNEUMATIC SYSTEM\ CIRCUIT PNEUMATIQUE\ INSTALACION NEUMATICA	
CODE	DESCRIPTION
243	Scarico rapido\Air distribution block\Decharge rapide\Vaciado rápido 1/4"
478	Raccordo a L girevole\Connector\Raccord\Empalme Ø 10 - 1/4"
480	Silenziatore in bronzo\Bronze silencer\Silencieux de bronze\Silenciador 1/4"
487	Raccordo diritto tubo\Connector\Raccord\Unión Ø 10 - 1/4"
1641	Riduzione\Reducer\Reducteur\Reducción 1/4"F - 1/8"M
1817	Silenziatore in bronzo\Bronze silencer\Silencieux de bronze\Silenciador 1/8"
2003	Prolunga 1/4 maschio-femmina\Extension\Rallonge\Unión
2004	Nipples\Nipples\Raccord filete\Unión 1/4" conico
2051	Raccordo a L girevole\Fastening\Raccord\Unión Ø 10 - 3/8"
6545	Connettore luminoso elettrovalvola\Led connector\Connecteur de led\Conector luminoso
7673	Riduzione\Union\Reducteur\Reducción 3/8"M - 1/4"F
7721	Bobina festo\Coil\Bobin et connecteur\Bobinas MSFW-24AC-OD
7890	Silenziatore nylon\Silencer\Silencieux\Silenciador 1/8"
10072	Silenziatore nylon\Silencer\Silencieux\Silenciador 1/4"
10160	Valvola\Valve\Soupape\Válvula "SMC"
10287	Cilindro\Toothroll opening cylinder\Cylindre\Cilindro FESTO 163372
10289	Filtro regolatore\Filter regulator\Filter manomètre\Filtro-regulador FESTO
10291	Elettrovalvola\Solenoid valve\Bobine\Electrvalvula FESTO
10292	Regolatore di pressione\Regulator\Regler\Regulador
10294	Raccordo girevole T tubo\Push-in fitting T\Raccord T\Unión Ø 10 - 3/8"
10310	Raccordo passalamiera\Fitting\Raccord\Reducción 1/4"
13088ASSY	Gruppo cilindro testata completo\Cylinder assy\Cylindre complet\Cilindro completo
19421	Staffa per supporto filtro\Holder\Patte de suspension\Pata de suspensión

1	13088	Cilindro\Cylinder\Cylindre\Cilindro TECNAIR
	10288	Cilindro\Cylinder\Cylindre\Cilindro FESTO

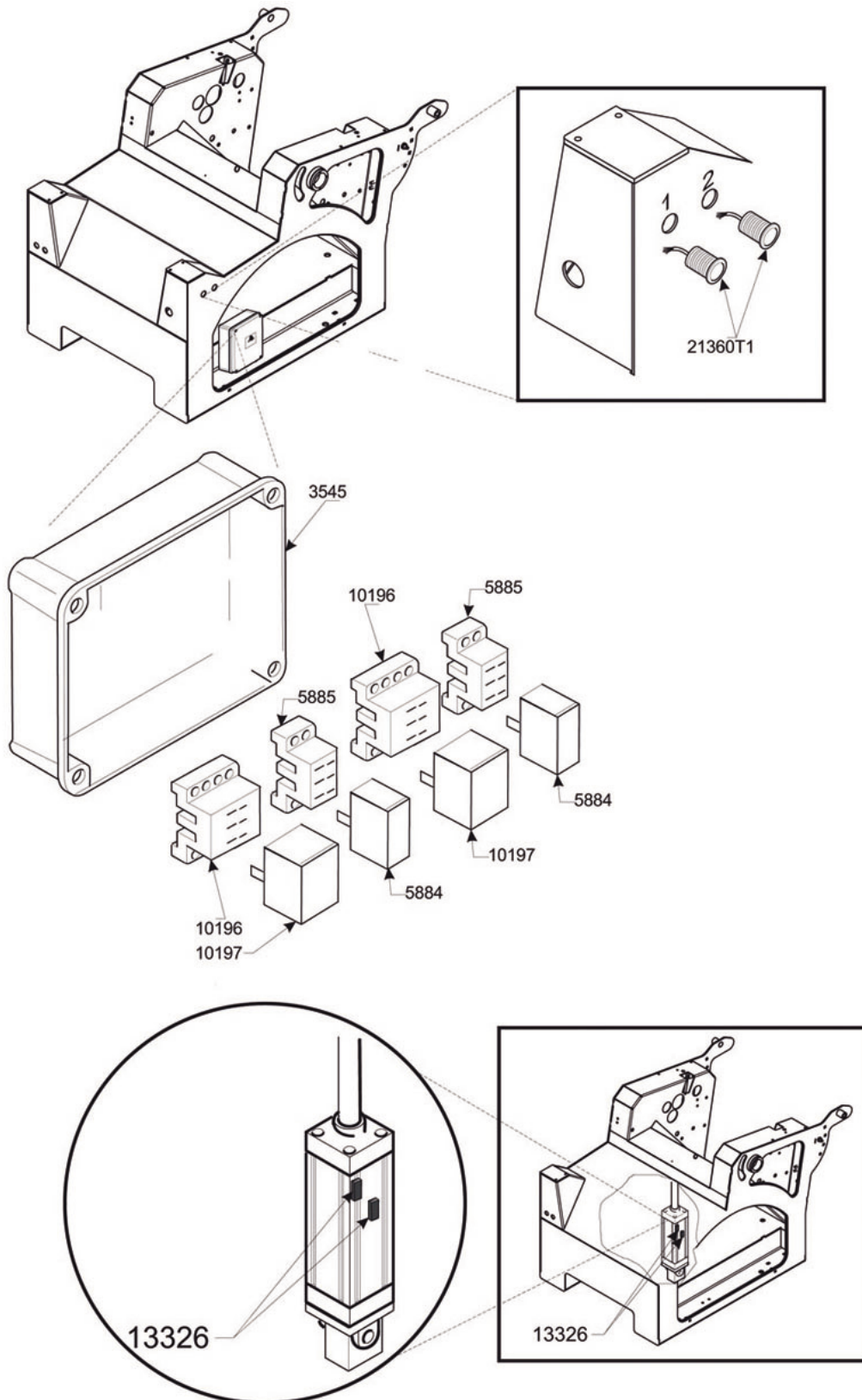
# 9.19 CIRCUITO ELETTRICO / ELECTRIC SYSTEM



IMPIANTO ELETTRICO\ ELECTRIC SYSTEM\ CIRCUIT ELECTRIQUE\ INSTALACION ELECTRICA		
CODE	DESCRIPTION	
10011	SELETTORE BRETER COMPLETO\SELECTOR 0-1\SELECTEUR\INTERRUPTOR GENERAL	
10210	SCATOLA PICCOLA\SELECTOR BOX\BOITIER POUR SELECTEUR\CAJA PARA INTERRUPTOR	
10228	ANTIDISTURBO\ANTI JAMMING\FILTER DE TELERUPTEUR\FILTRE LECTRICO 3ZT1916	
10490	FINECORSA COMPLETO\LIMIT SWITCH ASSY\FIN DE COURSE PIZZATO\TAPA DE GOMA	
13011	FUNGO EMERGENZA ITW 76-9430 R SENZA CONTATTI E GHIERA / EMERGENCY BUTTON	
13012	PULSANTE EMERGENZA\EMERCENCY BUTTON\BOUTON ROUGE "ITW"\PULSANTE DE EMERGENCIA	
13104	MANOPOLA BRETER LFS2-N-6-175 / KNOB	
13105	INTERRUTTORE BRETER LA2-16-1753 / SWITCH	
13106	CASSETTA IMPIANTO ELETTRICO WIMEX 125X75X100 / ELECTRICAL BOX	
13131	MORSETTO\PORT\BORNE\BORNE	
13163	VITE STEI 05X30 INOX A2 UNI 5923 PUNTA PIANA / DOWEL 5X30 PP	
134	DADO M05 INOX A2 UNI 5588 / HEXAGON NUT M05 INOX A2 UNI 5588	
13907	VITE TCCE 04X30 INOX A2 UNI 5931 / SOCKET HEAD SCREW	
13908	VITE STEI 05X08 INOX A2 UNI 5927 PUNTA CONICA / GRUB SCREW	
16094	SUPPORTO FISSAGGIO MICRO PULSANTE EMERGENZA SELETTORE / SUPPORT	
16095	GHIERA PER SUPPORTO MICRO / PLASTIC NUT	
16820ASSY	SUPPORTO COMPLETO DI MICRO PIZZATO PER PULSANTI / LIMIT SWITCH BUTTON SUPPORT ASSY	
16850	FINECORSA PIZZATO\LIMIT SWITCH\FIN DE COURSE\TOPE DE DECORRIDO	
17121	GHIERA PER PULSANTI\RING NUT\BAGUE BOUTONS\TUERCA	
17274T2	SENSORE\SENSOR\SENSOUR\SENSOR SCHMERSAL	
17275T2	MAGNETE\MAGNET\AIMANT\IMÁN\MANGET BPS 303 SS SCHMERSAL	
1831	VITE TCTC 04X16 INOX A2 UNI 6107 / SCREW WITH SLOT 04X16 INOX A2 UNI 6107	
20501	CENTRALINA\TRIGGER BOX\CENTRALE\CENTALINA SCHMERSAL	
20746	LAMIERA SOSTEGNO SCATOLA ELETTRICA\MICRO SWITCH SUPPORT\PLAQUETTE SUR LE CHASSIS\PLAQUA SOPORTO CAJA	
21083T.	DISCO EMERGENZA FRANCESE-TEDESCO-SPAGNOLO / FRENCH-SPANISH-GERMAN DISC EMERGENCY STOP	
214T11	TRASFORMATORE\TRANSFORMER\TRANSFORMATEUR\TRASFORNADOR OMT032040EE02	
21602T1	SPIA ROSSA-VERDE COMPLETA INOX AC/DC / STAINLESS STEEL RED-GREEN PANEL INDICATOR AC/DC	
29229ASSY	PULSANTE INOX COMPLETO / STAINLESS STEEL PUSH BUTTON ASSY	
29229T1ASSY	PULSANTE DI STOP\STOPPING BUTTON	
29229T2	PULSANTE ROSSO SENZA FINECORSA / STAINLESS STEEL RED BUTTON WITHOUT LIMIT SWITCH	
29229T6	PULSANTE NEUTRO SENZA FINECORSA / STAINLESS STEEL PUSH BUTTON WITHOUT LIMIT SWITCH	
4110	MORSETTO\TERMINAL BLOCK\BLOC\BORNE TERMINAL WAGO 281-601	
4125	RONDELLA PIANA 05X15X1.5 UNI 6592 INOX A2 / WASHER	
4192	DADO AUTOBLOCCANTE M04 INOX A2 UNI 7474 / SELF-LOCKING NUT M04 INOX A2 UNI 7474	
4978	VITE CASSETTA ELETTRICA\SCREW\VIS DE PLASTIQUE\TORNILLO TAPA	
4979	COPERCHIO\ELECTRICAL BOX COVER\COUVERCLE DE BOÎTE\TAPA WIMEX	
5359	GHIERA PG13.5 OTTONE / NUT PG 13.5	
5370	PRESSACAVO SKINTOP PG13.5 / CABLE GLAND PG13.5	
6552	MAGNETE\MAGNET	
6675	SENSORE MAGNETICO\MAGNETIC SENSOR	
7512	TELERUTTORE\CONTACTOR\TELERUPTEUR\TELERUPTOR SIEMENS 3RT1016-1AB01	
7706/02	BARRA OMEGA / BAR	
7707	PIASTRA DI FONDO\ELECTRICAL BOX PLATE\PLAT\PLAQUA	
9026	LAMIERA PER FISSAGGIO SCATOLA INTERRUPTORE / PLATE	
2	6279	PORTAFUSIBILE BIPOLARE\TWO-POLE FUSE-HOLDER\PORTE-FUSIBLE\PORTA FUSIBLE BIPOLAR 10X38
	6280	PORTAFUSIBILE TRIPOLARE\THREE-POLE FUSE-HOLDER\ PORTE-FUSIBLE\PORTA FUSIBLE TRIPOLAR 10X38
3	6281	FUSIBILE\FUSE\FUSIBLE\FUSIBLE 10X38 2A 500V
	6282	FUSIBILE\FUSE\FUSIBLE\FUSIBLE 10X38 4A 500V
	6283	FUSIBILE\FUSE\FUSIBLE\FUSIBLE 10X38 10A 500V
4	5237	SALVAMOTORE\MOTOR PROTECTOR\THERMIQUE\SALVAMOTOR SIEMENS 3RV1011-1AA10 1-1.6A
	5238	SALVAMOTORE\MOTOR PROTECTOR\THERMIQUE\SALVAMOTOR SIEMENS 3RV1011-1CA10 1.8-2.5A
	5239	SALVAMOTORE\MOTOR PROTECTOR\THERMIQUE\SALVAMOTOR SIEMENS 3RV1011-1EA10 2.8-4A
	5240	SALVAMOTORE\MOTOR PROTECTOR\THERMIQUE\SALVAMOTOR SIEMENS 3RV1011-1GA10 4-6A
	13549	SALVAMOTORE\MOTOR PROTECTOR\THERMIQUE\SALVAMOTOR SIEMENS 3RV1011-0HA10 0.5-0.8A
	10492	SALVAMOTORE\MOTOR PROTECTOR\THERMIQUE\SALVAMOTOR SIEMENS 3RV1011-0JA10 0.7-1A
5	4116	PASSACAVO\CABLE GLAND\PASSE-CABLE\PASACABLE SKINTOP PG9
	4117	PASSACAVO\CABLE GLAND\PASSE-CABLE\PASACABLE SKINTOP PG11
	4188	PASSACAVO\CABLE GLAND\PASSE-CABLE\PASACABLE SKINTOP PG7
	5130	PASSACAVO\CABLE GLAND\PASSE-CABLE\PASACABLE SKINTOP PG16
	5370	PASSACAVO\CABLE GLAND\PASSE-CABLE\PASACABLE SKINTOP PG13.5
6	4683	GHIERA OTTONE\RING NUT\ECROU\TUERCA ANULAR PG9
	4684	GHIERA OTTONE\RING NUT\ECROU\TUERCA ANULAR PG11
	5131	GHIERA OTTONE\RING NUT\ECROU\TUERCA ANULAR PG16
	5681	GHIERA OTTONE\RING NUT\ECROU\TUERCA ANULAR PG7
	5359	GHIERA OTTONE\RING NUT\ECROU\TUERCA ANULAR PG13.5
9	6279	CASSETTA IMPIANTO ELETTRICO\ELECTRICAL BOX\BOITIER\CAJA ELECTRICA



## 9.20 POSIZIONE RULLO GOMMA VARIABLE / POSITION RUBBER ROLLER (optional)



IMPIANTO ELETTRICO PISTONE OLEODINAMICO\ ELECTRIC SYSTEM PISTON HYDRAULIC\ CIRCUIT ELECTRIQUE TAILLE ROULEAU DE CAOUTCHOUC\ INSTALACION ELECTRICA PISTÓN OLEODINÁMICO	
CODE	DESCRIPTION
3545	Cassetta impianto elettrico\Electric system box\Boitier\Caja de instalacion electrica
5884	Relè\Relay\Relay\Relè Omron G2R-1-SN 24V AC
5885	Zoccolo\Base\Socle\Base P2RF-05-E
10196	Zoccolo relè\Relay base\Socle relay\Base relè PYF14AE
10197	Relè\Relay\Relay\Relè Omron MY4 24V AC
13326	Sensore Cilindro testata\Sensor\Sensor\Sensor DSM2C525 MPM
21360T1	Pulsante\Star button\Bouton piezo start\Pulsante de puesta en marcia



## ***Model NAB 520 DD***



**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**



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# SECTION 10 COMMANDS

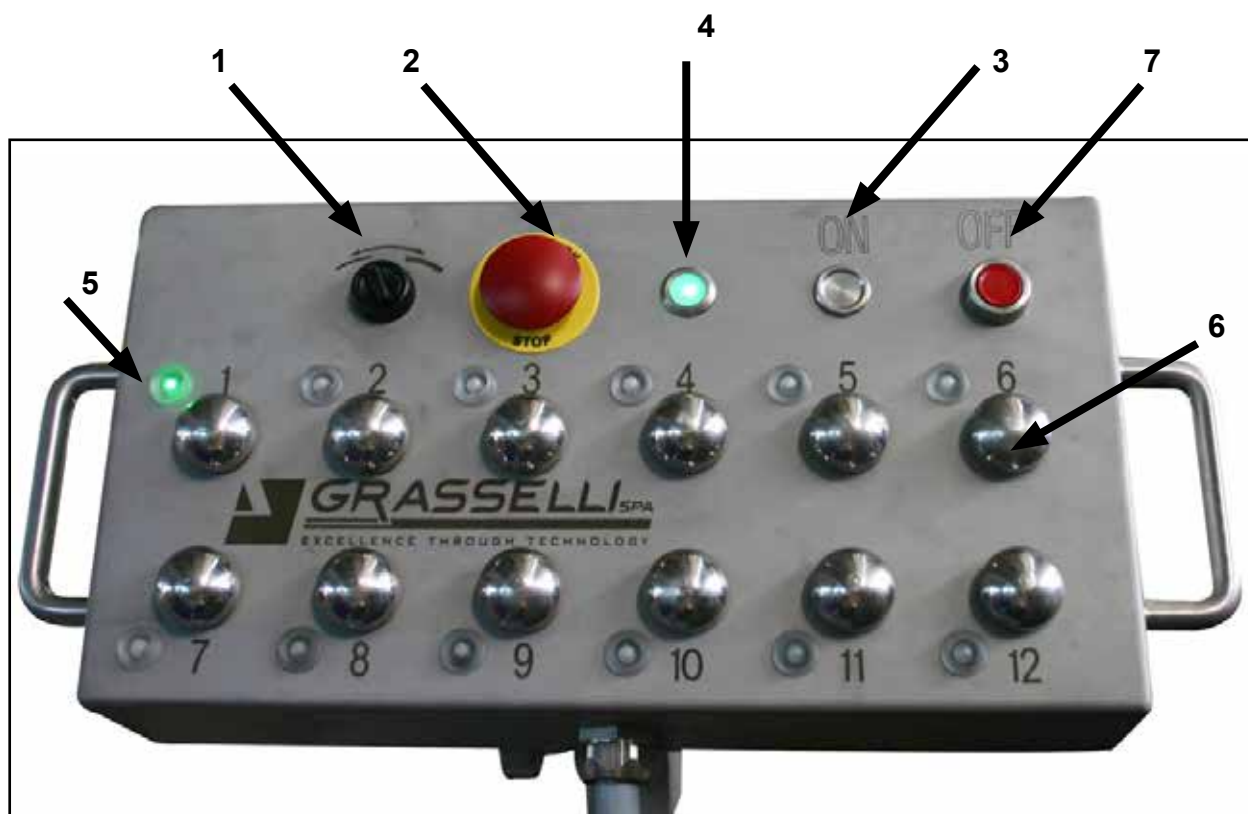


**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**

## 10.1. COMMANDS

- 1) Defatting - derinding selector
- 2) Emergency button
- 3) Start button
- 4) ON/OFF light
- 5) Position light
- 6) Defatting selector button
- 7) Stopping button





# SECTION

# 11

# SPARE PARTS

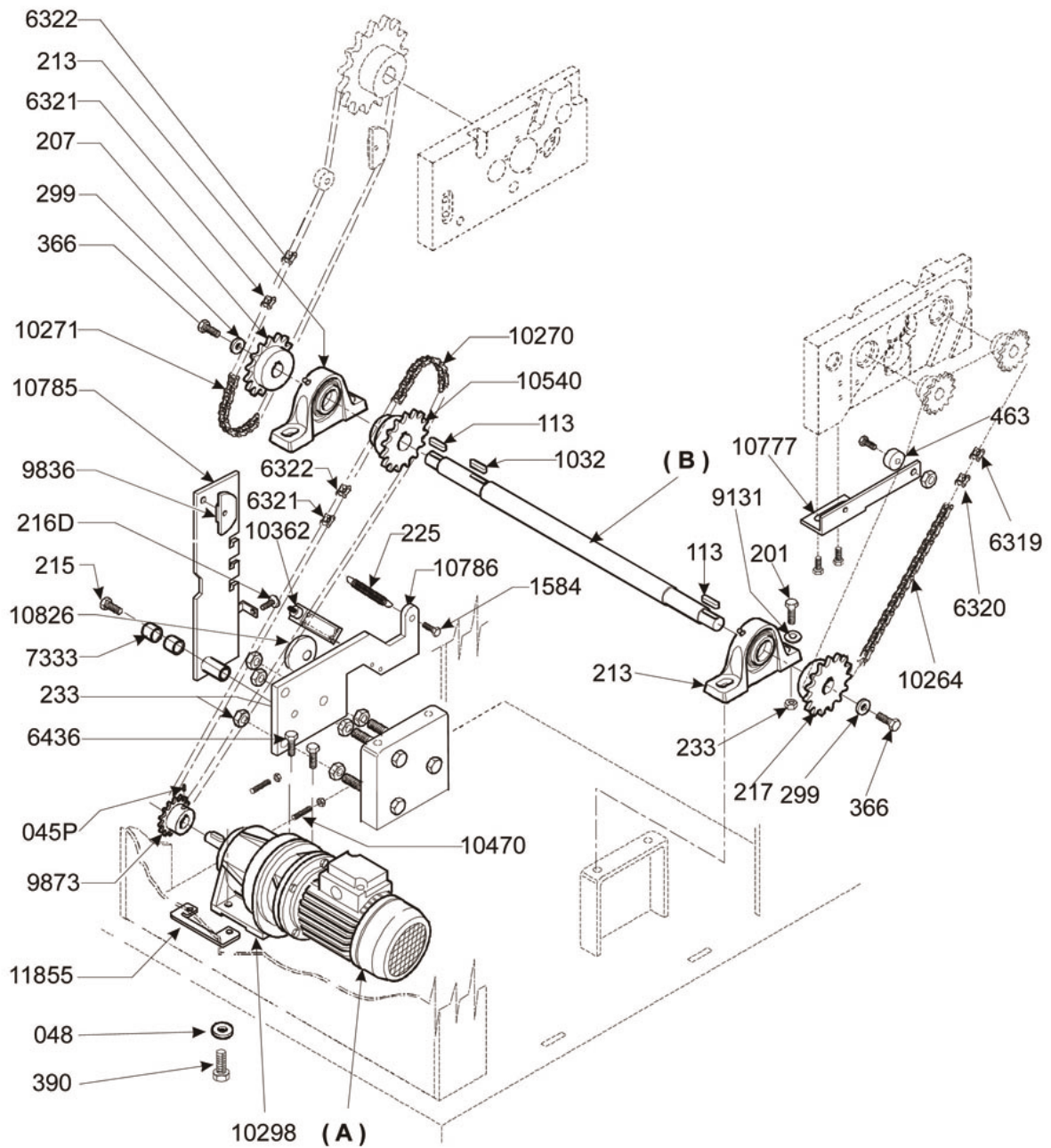


**Read carefully instructions and safety information (Sect.1) before using machine.**

**Disregards for instructions and safety information can cause injury**



## 11.1 MOTOR UNIT

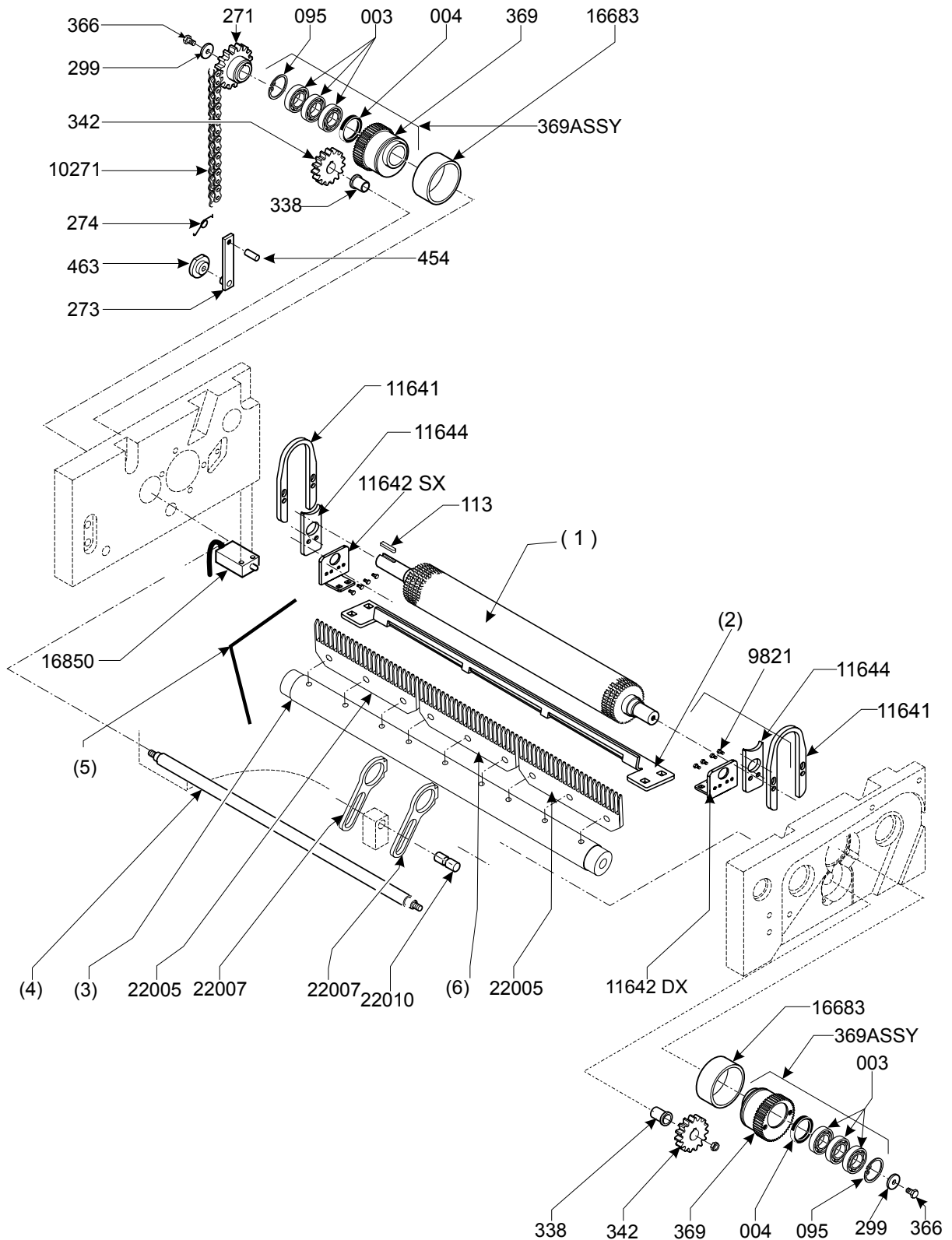






MOVIMENTAZIONE PRINCIPALE\ MOTOR UNIT\ MOTORISATION PRINCIPALE\ TRANSMISION PRINCIPAL		
CODE	DESCRIPTION	
045P	Vite\Screw\Vis\Tornillo STEI 08x10	
048	Rondella piana\Washer\Rondelle\Arandela	
201	Vite\Screw\Vis\Tornillo TE 12x40	
113	Linguetta\Key\Clavette\Lengüeta	
207	Pignone albero dentato\Toothroll pinion\Pignon\Piñón	
213	Supporto con cuscinetto\Support with bearing\Support\Soporte	
215	Vite\Screw\Vis\Tornillo TE 12x50	
216D	Vite schiaccia micro apertura\Screw\Vis de capteur\Tornillo	
217	Pignone motore nastri\Pinion\Pignon\Piñón	
225	Molla Tendicatena\Spring\Ressort tendeur de chaine\Muelle tensacadena	
233	Dado autobloccante\Nut\Ecrou\Tuerca	
299	Rondella piana\Washer\Rondelle\Arandela	
366	Vite\Screw\Vis\Tornillo 08x16	
390	Vite\Screw\Vis\Tornillo TE 10x40	
463	Rotella tendicatena\Nylon wheel\Roue tendeur de chaine\Ruedecilla tensacadena	
1032	Linguetta speciale\Special key\Clavette\Lengüeta	
1584	Vite\Screw\Vis\Tornillo 08x55	
6319	Falsa maglia\Dummy link\Faux maillon\Contra eslabón	
6320	Maglia di giunzione\Connector link\Maillon jonction\Unión 5/8"	
6321	Maglia di giunzione\ Connector link\ Maillon jonction\Unión 3/4"	
6322	Maglia di giunzione\ Connector link\ Maillon jonction\Unión 1/2"	
6436	Vite\Screw\Vis\Tornillo TE 10x30	
7333	Bronzina leva tendicinghia\Self lubricating bush\Douille\Casquillo	
9131	Rondella\Washer\Rondelle\Arandela	
9836	Tastatore tendicatena\Chain stretcher wheel\Roue tendeur de chaine\Ruedecilla tensacadena	
9873	Pignone motoriduttore\Gearbox pinion\Pignon\Piñón	
10264	Catena movimento nastri\Belt chain\Chain entr. tapis\Cadena mov. cintas	
10270	Catena riduttore\Gearbox chain\Chain motoreducteur\Cadena motorreductor	
10271	Catena albero dentato\Toothroller chain\Chaine entr. arbre a dentis\Cadena mov. ejedentado	
10298	Riduttore motovario\Gearbox\Reducteur\Reductor motovario	
10362	Fincorsa\Switch\Interrupteur\Tope de decorrido XCK-J167	
10470	Vite\Screw\Vis\Tornillo STEI 10x60	
10540	Pignone motore\Motor pinion\Pignon\Piñón	
10785	Tendicatena con albero dentato\Chain stretcher arm\Plat\ Tendeur de chaine\Tensacadena completo	
10786	Piastra per fulcro tendicatena\Fixing plate\Plat fixation soupape\Plato sujeción válvula	
10826	Rondella per fermo tendicatena\Washer\Butee pour tendeur de chaine\Retén para tensacadena	
11855	Protezione sul rullo gomma\Rubber roll protection\Plaque motor\Protection rodillo de goma	
10777	Squadretta fissaggio tenditore\Stretcher angle fixing plate\Plat\Plato tensacadena	
A	475	Motore\Motor\Moteur\Motor 3CV 220-460V 50-60Hz
	6323	Motore\Motor\Moteur\Motor 3CV 200V 50Hz
	6324	Motore\Motor\Moteur\Motor 3CV 200V 60Hz
	6325	Motore\Motor\Moteur\Motor 3CV 575 60Hz
B	9761	Albero intermedio\Jack shaft\Axe intermediaire\Árbol intermediario
	11842	Albero intermedio\Jack shaft\Axe intermediaire\Árbol intermediario
	19091	Albero intermedio\Jack shaft\Axe intermediaire\Árbol intermediario

## 11.2 TOOTHROLLER AND COMB





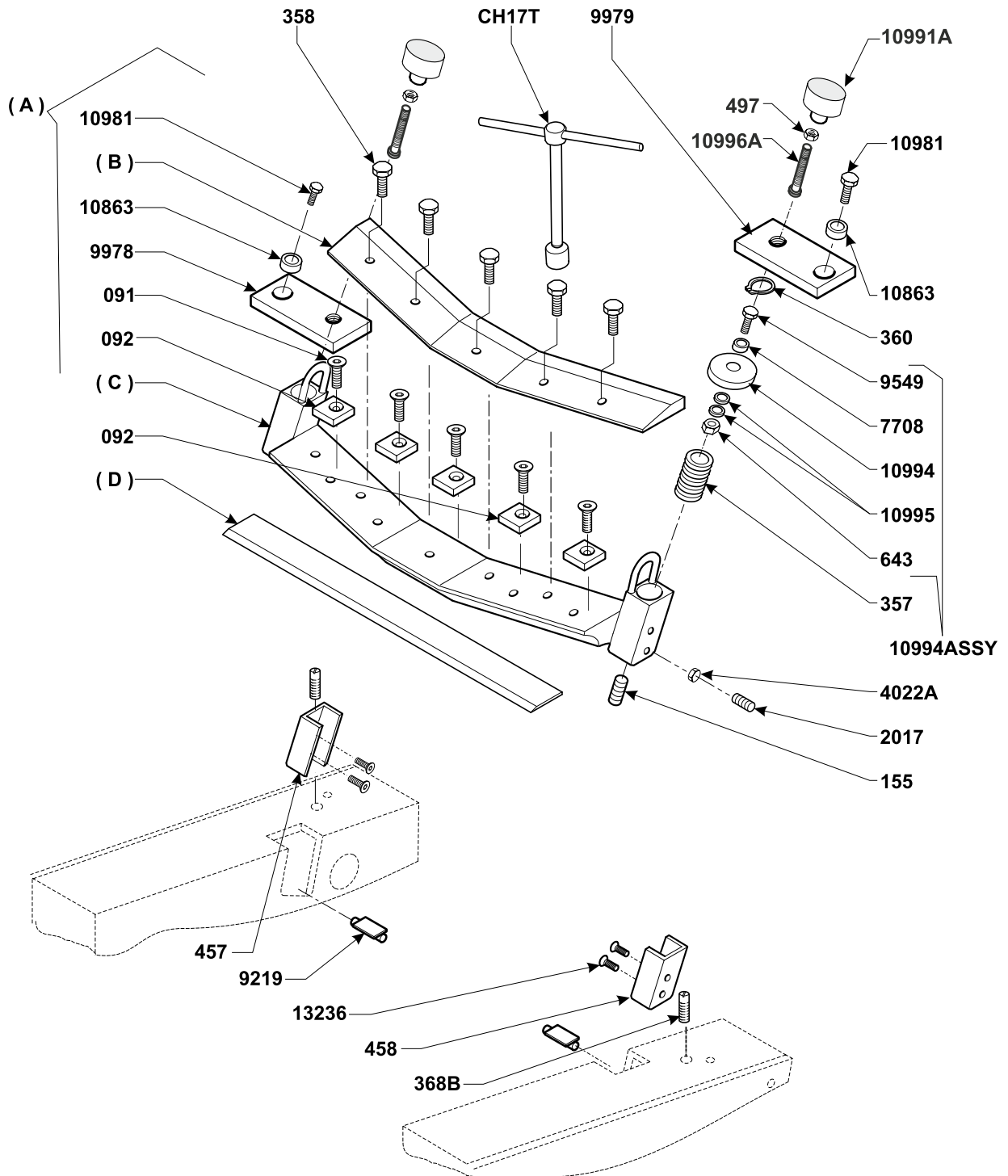
<b>ALBERO DENTATO - PETTINE\ TOOTHROLLER - COMBI ROULEAU DENTE - PEIGNE\ RODILLO DENTATDO - PEINE</b>	
<b>CODE</b>	<b>DESCRIPTION</b>
<b>003</b>	Cuscinetto\Bearing\Roulement\Cojinete
<b>004</b>	Paraolio\Oil seal\Para-huile\Sello de aceite
<b>095</b>	Seeger\Seeger\Circlip\Seeger
<b>113</b>	Linguetta\Key\Clavette\Lengüeta
<b>271</b>	Pignone mov. albero dentato\Toothroller driving pinion\Pignon arbre\Piñón
<b>273</b>	Tendicatena\Chain stretcher arm\Plat tendeur de chaine\Tensacadena
<b>274</b>	Molla tendicatena\Chain stretcher spring\Ressort tendeur de chaine\Muelle tensacadena
<b>299</b>	Rondella\Plane washer\Rondelle\Arandela 08x32x2,5
<b>338</b>	Bronzina collare sinterizzata\Self lub. bush\Coussinet\Chumacera
<b>342</b>	Ingranaggio movimento eccentrico\Cam driving gear\Engr. mouv. excentrique\Engr. mov. excéntrico
<b>366</b>	Vite\Screw\Vis\Tornillo 08x16
<b>454</b>	Distanziale\Spacer\Entretoise\Distanciador
<b>16683</b>	Bronzina eccentrico albero dentato\Self lub. bush\Coussinet\Chumacera
<b>369ASSY</b>	Eccentrico albero completo\Toothed arbor cam complete\Coussinet complet\Casquillo completo
<b>369</b>	Eccentrico per rullo dentato\Toothed arbor cam\Coussinet arbre\Casquillo eje
<b>463</b>	Rotella plastica tendicatena\Nylon wheel\Roue tendeur chaine\Ruedecilla tensacadena
<b>506</b>	Vite\Screw\Vis\Prisionero STEI 06x10
<b>9821</b>	Vite per supporto pettine\Screw\Vis\Tornillo TE 08x10
<b>10271</b>	Catena albero dentato\Toothroller chain\Chaine entr. arbre a dents\Cadena mov. eje dentado
<b>11641</b>	Lamiera sup. pettine\Comb plate\Tole interne sup. peigne\Chapa sop. peine
<b>11644</b>	Piatto inferiore pettine\Bottom plate\Plate ferm. peigne.\Chapa peine
<b>11642DX</b>	Lamiera interna dx\Right comb support plate\Plat ferm. peigne droite\Chapa drch. soporto peine
<b>11642SX</b>	Lamiera interna sx\Left comb support plate\Plat ferm. peigne gauche\Chapa izq. soporto peine
<b>11709ASSY</b>	Supporto pettine completo\Comb support assy\Support peigne complet\Soporte peine completo
<b>16850</b>	Fincorsa pizzato\Limit switch\Fin de course pizzato\Interruptor
<b>22005</b>	Lamiera laterale\Lateral plate\Peine lateral\Chapa lateral
<b>22007</b>	Lamiera centrale di guida\Central plate\Guide peine\Chapa central
<b>22009</b>	Lamiera centrale di guida\Central plate\Peine central\Chapa central
<b>22010</b>	Perno guida apertura a pettine\Comb opening pin\Axe point d'appui peigne\Perno fulcro peine



1 NAB520	346	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=44 AG.
	2099	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=32 AG. - pollo e tacchino
	2101	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=60 AG.
	2102	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=88 AG.
	2103	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=88 30°
1 NAB720	11857	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=44 AG.
	12277	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=32 AG. - pollo e tacchino
	12278	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=60 AG.
	14240	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=88 AG.
	14241	Albero dentato\Toothroller\Arbre a dents\Eje dentado Z=88 30°
2	11709	Piatto apertura pettine\Comb plate\Levrier ouverture peigne\Plato abertura peine NAB 520
	11861	Piatto apertura pettine\Comb plate\Levrier ouverture peigne\Plato abertura peine NAB 720
3	22008	Perno pettine completo\Comb pin\Arbre peine\Perno peine NAB 520
	22006	Perno pettine completo\Comb pin\Arbre peine\Perno peine NAB 720
4	341	Perno movimenti eccentrici\Cam drive pin\Pivot coussinet\Perno mov. excéntricos NAB 520
	11856	Perno movimenti eccentrici\Cam drive pin\Pivot coussinet\Perno mov. excéntricos NAB 720
5	22008ASSY	Pettine completo\Complet comb\Peine complet\Peine completo NAB 520
	22006ASSY	Pettine completo\Complet comb\Peine complet\Peine completo NAB 520



## 11.3 CURVE BLADE HOLDER





PORTA LAMA CURVO\ CURVE BLADE HOLDER\ PORTE-LAME COURBE\ PORTA CUCHILLA CURVE	
CODE	DESCRIPTION
091	Vite\Screw\Vis\Tornillo TSCE 06x10
092	Piastrina appoggio lama\Blade stop\Plaque\Plaqueta
155	Grano appoggio lama\Grub screw\Vis sans tete\Prisionero
357	Molla portalama\Blade holder spring\Ressort\Muelle
358	Vite serraggio coperchio\Blade tightening screw\Vis\Tornillo
360	Seeger\Seeger\Circlip\Seeger
368B	Vite piastrina\Screw\Axe\Tornillo
457	Blocco scorrimento sx\Left blade holder guide\Guide gauche\Guía izq.
458	Blocco scorrimento dx\Right blade holder guide\Guide droite\Guía drch.
497	Dado\Nut\Ecrou\Tuerca
643	Dado autoblock\Nut\Ecrou frein\Tuerca
2017	Grano\Screw\Vis sans tête\Tornillo
4022A	Tappo per esagono\Exagonal plastic plug\Entretoise\Tuerca plastica
7708	Distanziale\Spacer\Entretoise\Distanciadador
9219	Piastrina completa\Holder sheet\Plaque\Plaqueta appui\Plaqueta apoyo
9549	Vite portalama\Screw\Axe\Tornillo M8x30
9978	Piastrina sx\Left plate\Plaque\Plaqueta gauche\Plaqueta izquierda
9979	Piastrina dx\Right plate\Plaque\Plaqueta droite\Plaqueta derecha
10863	Distanziale\Spacer\Entretoise\Distanciadador
10981	Vite\Screw\Axe\Tornillo
10991A	Pomello\Knob\Manette\Pomo esférico
10994	Rondella premi molla\Washer\Rondelle\Arandela
10994ASSY	Rondella premi molla comp.\Assy washer\Rondelle complete\Arandela
10995	Rondella regolazione\Washer\Rondelle de reglage\Arandela
10996A	Barra filettata\Threaded pin\Vis speciale\Eje roscado
13236	Vite\Screw\Axe\Tornillo
CH17T	Chiave a T\Blade spanner\Clef pour lame\Llave tornillos porta cuchilla

<b>A</b>	<b>10966ASSY/C</b>	Portalama completo\Blade holder assy\Porte-lame complet\ Porta cuchilla completo
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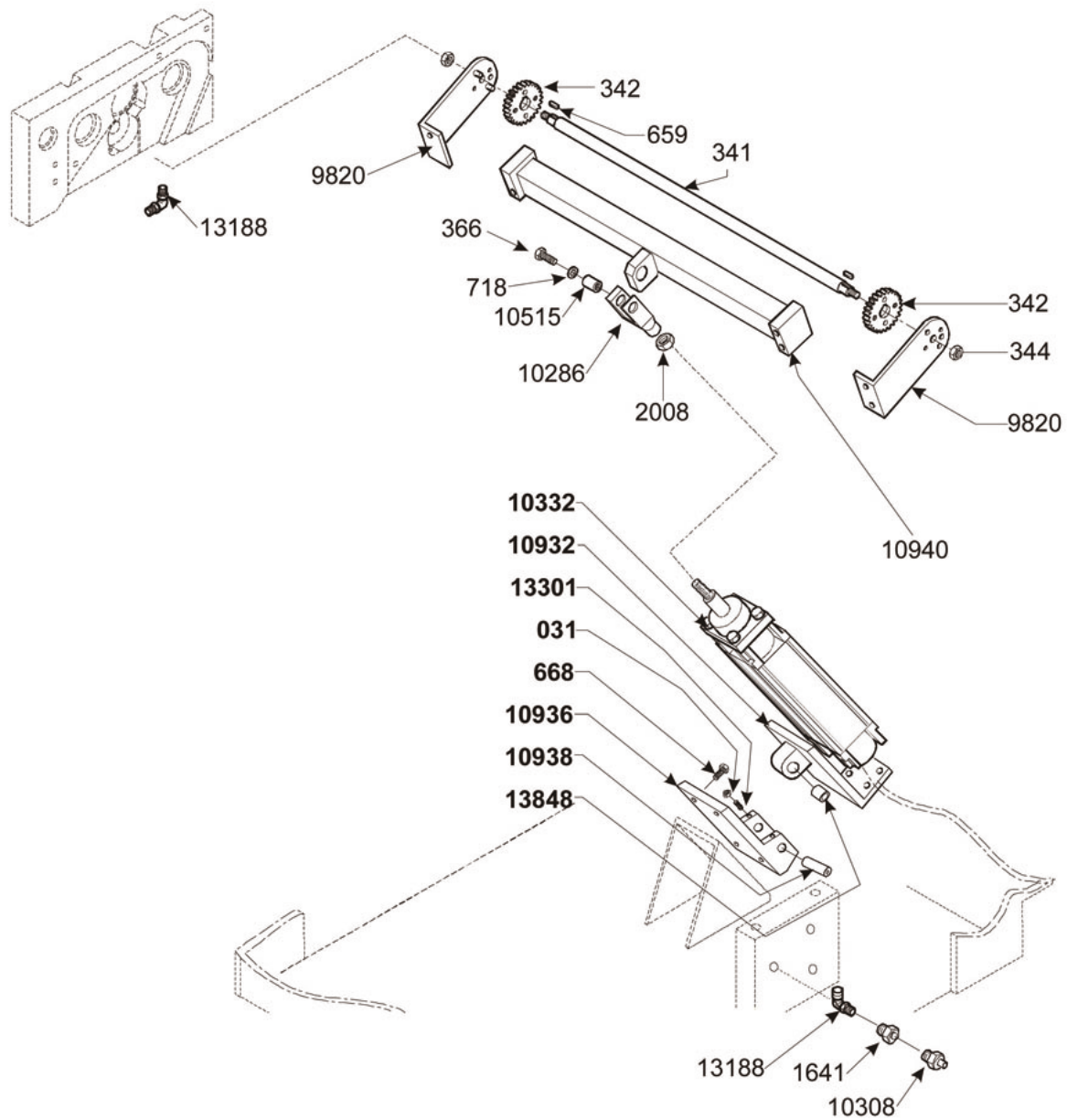
<b>B</b>	<b>19651</b>	Coperchio serralama\Cover Blade holder curve\Couvercle Porte-lame\Tapa porta cuchilla
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<b>C</b>	<b>19650</b>	Piatto portalama\Blade holder base\Plaque porte-lame\Tapa porta cuchilla
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<b>D</b>	<b>B356</b>	Lama\Blade\Lame\Cuchilla 520x22x0,7
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## 11.4. OPENING SYSTEM

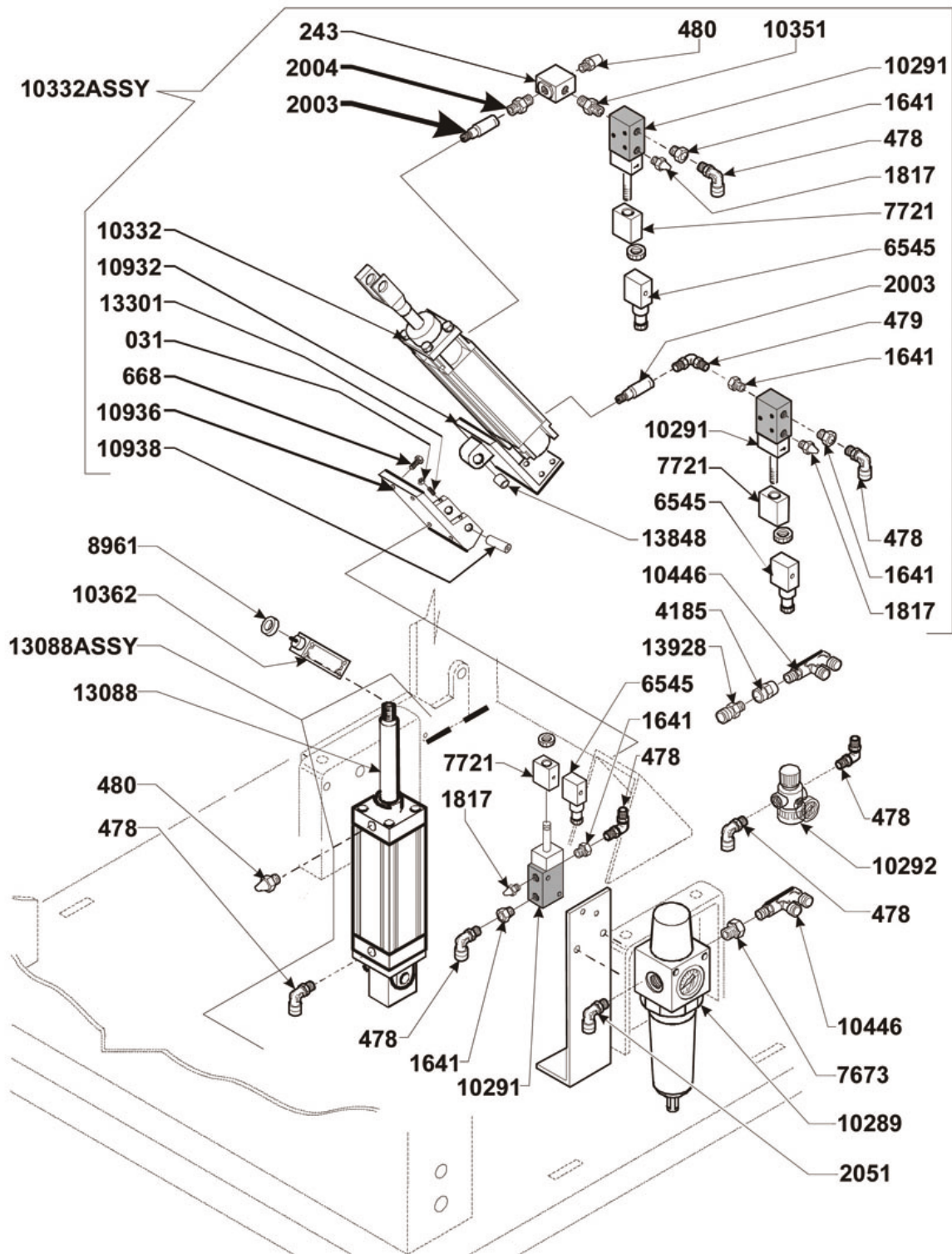




SISTEMA APERTURA\ OPENING SYSTEM\ SYSTÈME D'OUVERTURE\ SISTEMA DE ABERTURA	
CODE	DESCRIPTION
031	Dado\Nut\Ecrou\Tuerca M08
341	Perno movimenti eccentrici\Cam drive pin\Pivot coussinet\Perno mov. excéntricos
342	Ingranaggio mov. eccentrico\Cam driving gear\Engrenage\Engranaje Z=43
344	Dado autobloccante\Nut\Ecrou\Tuerca
366	Vite\Screw\Vis\Tornillo TE 08x16
659	Linguetta\Key\Clavette\Lengüeta UNI 6604
668	Vite\Screw\Vis\Tornillo TE 08x25 UNI 5739
718	Rondella\Washer\Rondelle\Arandela
1641	Riduzione\Reducer\Réduction\Reducción
2008	Dado basso\Nut\Ecrou\Tuerca
4811	Dado basso\Nut\Ecrou\Tuerca
9820	Leva mov. eccentrico\Cam motion arm\Levier deplacement exc.\Palanca para movimiento excéntricos
10286	Forcella cilindro\Fork\Fourchette\Horquilla
10308	Ingrassatore\Grease cap\Graisseur\Engrasador
10332	Cilindro oleopneumatico\Oleopneumatic unit\Cylindre\Cilindro TECNAIR
10515	Perno forcella cilindro\Pin\Axe\Perno de fulcro
10932	Supporto completo cilindro\Oleopneumatic unit support\Support de cylindre hydraulique\Soporte completo
10936	Supporto fulcro completo\Fulcrum support\Support de cylindre hydraulique\Soporte fulcro
10938	Perno di fulcro cilindro\Fulcrum pin\Axe\Perno de fulcro cilindro
10940	Tubolare completo apertura albero dentato\Opening toothroll arm\Jonction du mouvement\Tubo completo
13188	Raccordo doppio girevole tubo\Fastening\Raccord\Unión Ø6-1/8"
13301	Vite\Screw\Vis\Tornillo STEI 08x25
13848	Bronzina cilindrica sinterizzata\Bronze bush\Douille\Casquillo



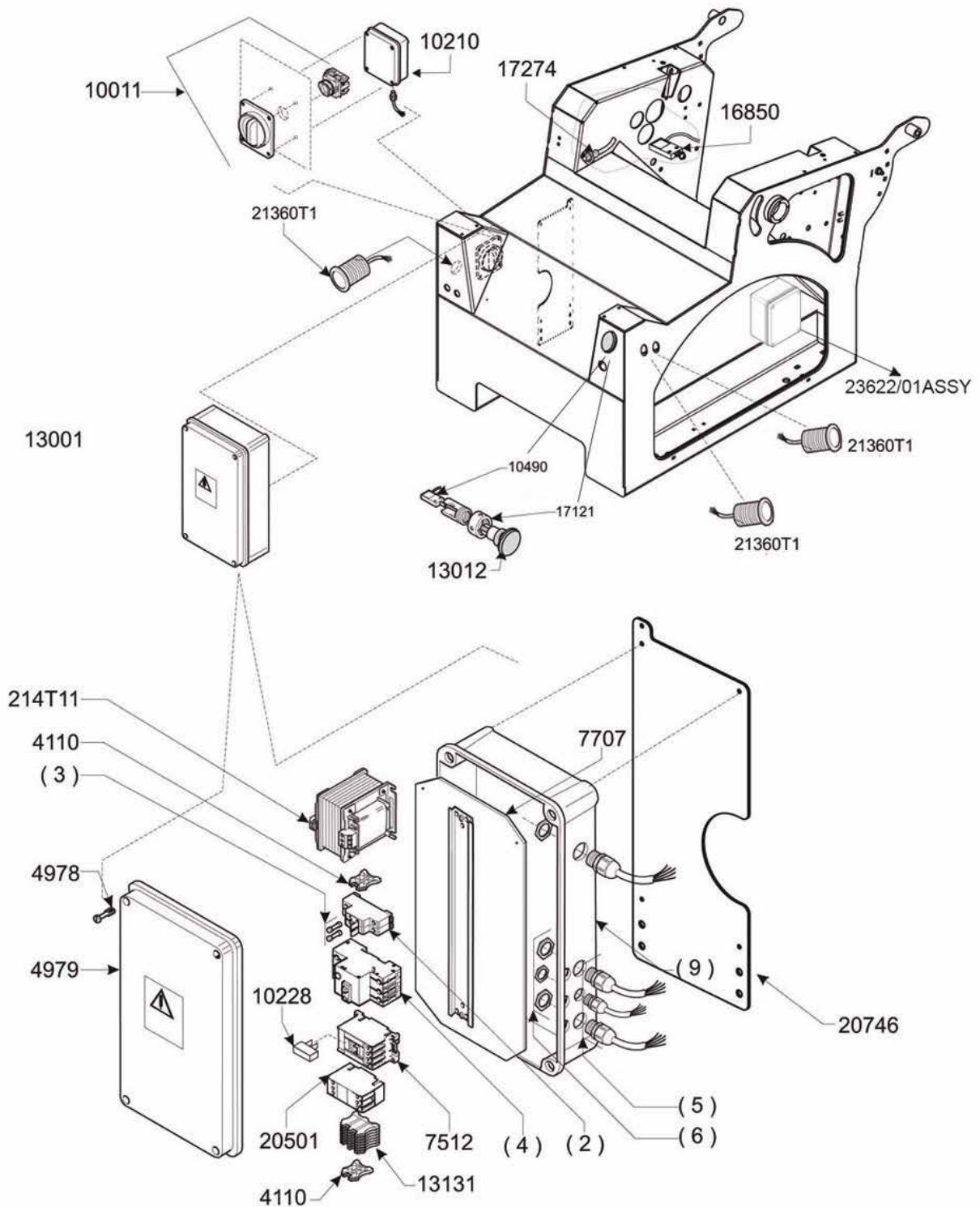
# 11.5. DD PNEUMATIC SYSTEM





IMPIANTO PNEUMATICO\ PNEUMATIC SYSTEM\ CIRCUIT PNEUMATIQUE\ INSTALACION NEUMATICA	
CODE	DESCRIPTION
031	Dado\Nut\Ecrou\Tuerca
243	Scarico rapido\Air distribution block\Decharge rapide\Vaciado rápido 1/4"
478	Raccordo a L girevole\Connector\Raccord\Empalme Ø 10 - 1/4"
479	Raccordo a L\Connector\Coude\Unión 1/4"
480	Silenziatore in bronzo\Bronze silencer\Silencieux de bronze\Silenciador 1/4"
668	Vite\Screw\Vis\Tornillo TE 08x25
1641	Riduzione\Reducer\Reducteur\Reducción 1/4"F - 1/8"M
1817	Silenziatore in bronzo\Bronze silencer\Silencieux de bronze\Silenciador 1/8"
2003	Prolunga 1/4 maschio-femmina\Extension\Rallonge\Unión
2004	Nipples\Nipples\Raccord filete\Unión 1/4" conico
2051	Raccordo a L girevole\Fastening\Raccord\Unión Ø 10 - 3/8"
4185	Manicotto da\Collar\Collier\Unión 1/4" a 1/4"
6545	Connettore luminoso elettrovalvola\Led connector\Connecteur de led\Conector luminoso
7673	Riduzione\Union\Reducteur\Reducción 3/8"M - 1/4"F
7721	Bobina festo\Coil\Bobin et connecteur\Bobinas MSFW-24AC-OD
8961	Tondo tendicatena\Limit switch pin\Entretuise\Tondo tendicatena
10289	Filtro regolatore\Filter regulator\Filter manomètre\Filtro-regulador FESTO
10291	Elettrovalvola\Solenoid valve\Bobine\Electrálvula FESTO
10292	Regolatore di pressione\Regulator\Regler\Regulador
10332	Cilindro oleopneumatico\Oleopneumatic unit\Verin\Cilindro TECNAIR
10332ASSY	Cilindro completo\Complet oleopneumatic unit\Cylindre complet\Cilindro completo
10351	Nipples ridotto\Nipples\Raccord\Reducción
10362	Fincorsa\Limit switch\Fin de course\Tope de decorrido
10446	Raccordo doppio girevole tubo\Fastening\Raccord\Unión Ø10-1/4"
10932	Supporto completo cilindro\Oleopneumatic unit support\Support de cylindre hydraulique\Soporto completo
10936	Supporto fulcro completo\Fulcrum support\Support de cylindre hydraulique\Soporto fulcro inferior
10938	Perno di fulcro cilindro\Fulcrum pin\Axe\Perno de fulcro cilindro
13088	Cilindro oleopneumatico\Oleopneumatic unit\Verin\Cilindro TECNAIR
13088ASSY	Gruppo cilindro completo\Complet oleopneumatic unit\Tete de cylindre complet\Grupo cilindro
13301	Vite\Screw\Vis\Tornillo STEI 08x25
13848	Bronzina cilindrica sinterizzata\Bronze bush\Douille en bronze\Casquillo
13928	Raccordo diritto tubo\Fastening\Raccord\Tubo 10 1/4F

## 11.6. ELECTRIC SYSTEM



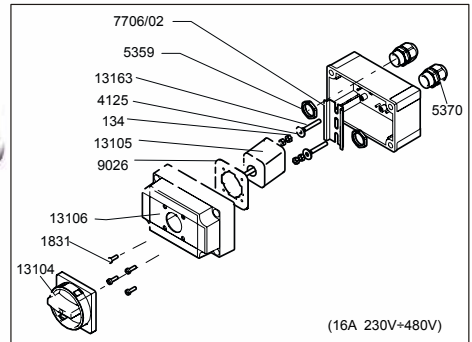
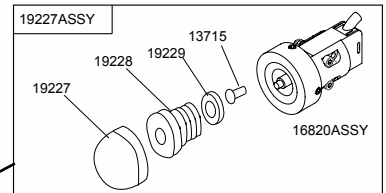
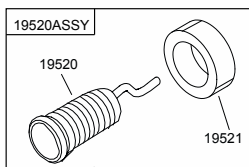
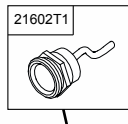
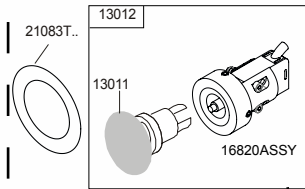
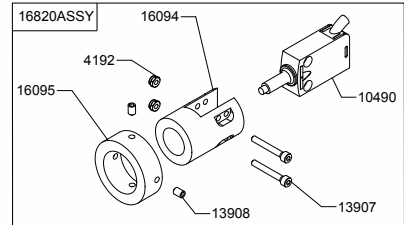
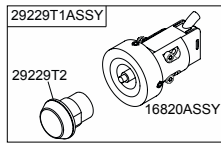
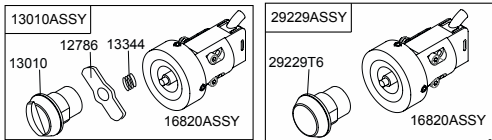
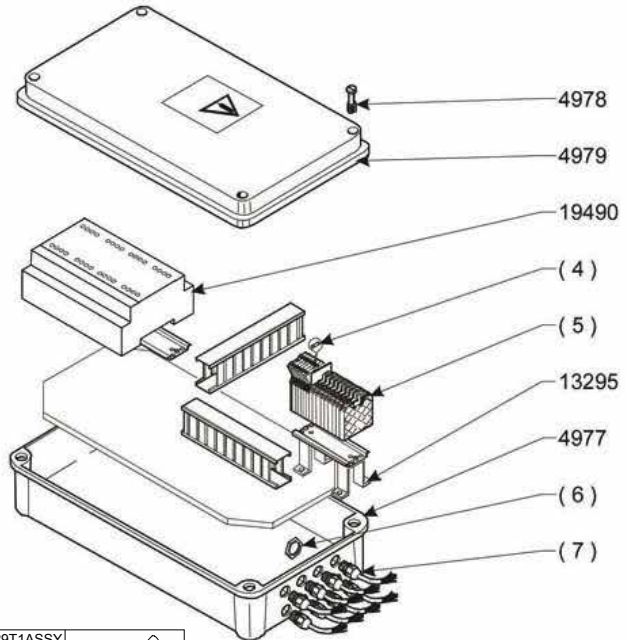
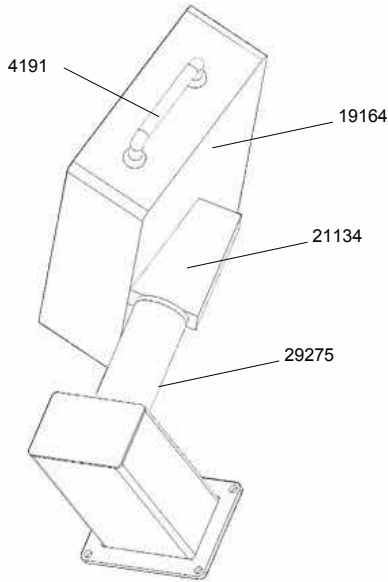


IMPIANTO ELETTRICO\ ELECTRIC SYSTEM\ CIRCUIT ELECTRIQUE\ INSTALACION ELECTRICA		
CODE	DESCRIPTION	
214T11	Trasformatore\Transformer\Transformateur\Trasformador OMT032040EE02	
4110	Morsetto\Terminal block\Bloc\Borne terminal WAGO 281-601	
4978	Vite cassetta elettrica\Screw\Vis de plastique\Tornillo tapa	
4979	Coperchio\Electrical box cover\Couvercle de boîte\Tapa Wimex	
7707	Piastra di fondo\Electrical box plate\ Plat\Plaqua	
7512	Teleruttore\Contactor\Telerupteur\Teleruptor Siemens 3RT1016-1AB01	
10011	Selettore Breter completo\Selector 0-1\Selecteur\Interruptor general	
10210	Scatola piccola\Selector box\Boitier pour selecteur\Caja para interruptor	
10228	Antidisturbo\Antijamming\Filter de telerupteur\Filtre lectrico 3ZT1916	
10490	Finecorsa pizzato completo\Limit switchassy\Fin de course complet\Tope de decorrido	
13001	Spia luminosa verde\Green signal lamp\Lampe verte\Portachivato verde	
13012	Pulsante emergenza\Emergency button\Bouton d'urgence assy\Pulsante de emergencia	
13131	Morsetto\Terminal block\Bloc\Borne terminal WDK 2.5	
16850	Finecorsa pizzato\Limit switch\Fin de course\Tope de decorrido	
17121	Ghiera\Limit switch ring nut\Commutateur ecrou\Tuerca	
17274	Sensore\Sensor\Sensour\Sensor SCHMERSAL	
20501	Centralina\Control unit\Centrale\Centralita\Steuerung SCHMERSAL	
20746	Lamiera sostegno scatola elettrica\Plate support electrical box\Plaque sur le chassis\Plaqua por caja	
21360T1	Pulsante luminoso\Lamp button\Buton lumineux\Pulsante luminoso Ø22	
23622ASSY	Impianto elettrico cilindro\ Electric system cylinder\Circuit electrique cylindre\Instalacion electrica cilindro TECNAIR	
2	6279	Portafusibile bipolare\Two-pole fuse-holder\Porte-fusibile\Porta fusibile bipolar 10x38
	6280	Portafusibile tripolare\Three-pole fuse-holder\ Porte-fusibile\Porta fusibile tripolar 10x38
3	6281	Fusibile\Fuse\Fusible\Fusible 10x38 2A 500V
	6282	Fusibile\Fuse\Fusible\Fusible 10x38 4A 500V
	6283	Fusibile\Fuse\Fusible\Fusible 10x38 10A 500V
4	5237	Salvamatore\Motor protector\Thermique\Salvamotor SIEMENS 3RV1011-1AA10 1-1.6A
	5238	Salvamatore\Motor protector\Thermique\Salvamotor SIEMENS 3RV1011-1CA10 1.8-2.5A
	5239	Salvamatore\Motor protector\Thermique\Salvamotor SIEMENS 3RV1011-1EA10 2.8-4A
	5240	Salvamatore\Motor protector\Thermique\Salvamotor SIEMENS 3RV1011-1GA10 4-6A
	13549	Salvamatore\Motor protector\Thermique\Salvamotor SIEMENS 3RV1011-0HA10 0.5-0.8A
	10492	Salvamatore\Motor protector\Thermique\Salvamotor SIEMENS 3RV1011-0JA10 0.7-1A
5	4116	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG9
	4117	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG11
	4188	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG7
	5130	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG16
	5370	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG13.5
6	4683	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG9
	4684	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG11
	5131	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG16
	5681	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG7
	5359	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG13.5
9	4977	Cassetta Impianto elettrico\Electric system box\Boitier\Caja de Instalacion electrica





# 11.7 PLC ELECTRIC SYSTEM





IMPIANTO ELETTRICO\ ELECTRIC SYSTEM\ CIRCUIT ELECTRIQUE\ INSTALACION ELECTRICA		
CODE	DESCRIPTION	
10011	SELETTORE BRETER COMPLETO\SELECTOR 0-1\SELECTEUR\INTERRUPTOR GENERAL	
10210	SCATOLA PICCOLA\SELECTOR BOX\BOITIER POUR SELECTEUR\CAJA PARA INTERRUPTOR	
10490	FINECORSA COMPLETO\LIMIT SWITCH ASSY\FIN DE COURSE PIZZATO\TAPA DE GOMA	
12786	LAMIERA PER UTILIZZO MICRO SU SELETTORE / SHEET	
13010	SELETTORE 0-1 ITW 76-9470 SENZA CONTATTI E GHIERA / 0-1 SWITCH WITHOUT CONTACT	
13010ASSY	SELETTORE 0-1 ITW COMPLETO DI SUPPORTO E MICRO / 0-1 MECHANICAL TURN SWITCH ASSY	
13011	FUNGO EMERGENZA ITW 76-9430 R SENZA CONTATTI E GHIERA / EMERGENCY BUTTON	
13012	PULSANTE EMERGENZA\EMERGENCY BUTTON\BOUTON ROUGE "ITW"\PULSANTE DE EMERGENCIA	
13104	MANOPOLA BRETER LFS2-N-6-175 / KNOB	
13105	INTERRUTTORE BRETER LA2-16-1753 / SWITCH	
13106	CASSETTA IMPIANTO ELETTRICO WIMEX 125X75X100 / ELECTRICAL BOX	
13163	VITE STEI 05X30 INOX A2 UNI 5923 PUNTA PIANA / DOWEL 5X30 PP	
13295	PORTAGUIDA / SUPPORT	
13344	MOLLA INTERRUTTORI / SPRING	
134	DADO M05 INOX A2 UNI 5588 / HEXAGON NUT M05 INOX A2 UNI 5588	
13715	VITE TSTC 04X08 INOX A2 UNI 6109 / SCREW	
13907	VITE TCCE 04X30 INOX A2 UNI 5931 / SOCKET HEAD SCREW	
13908	VITE STEI 05X08 INOX A2 UNI 5927 PUNTA CONICA / GRUB SCREW	
16094	SUPPORTO FISSAGGIO MICRO PULSANTE EMERGENZA SELETTORE / SUPPORT	
16095	GHIERA PER SUPPORTO MICRO / PLASTIC NUT	
16820ASSY	SUPPORTO COMPLETO DI MICRO PIZZATO PER PULSANTI / LIMIT SWITCH BUTTON SUPPORT ASSY	
17121	GHIERA PER PULSANTI\RING NUT\BAGUE BOUTONS\TUERCA	
17274T2	SENSORE\SENSOR\SENSOUR\SENSOR SCHMERSAL	
17275T2	MAGNETE\MAGNET\AIMANT\IMÁN\MANGET BPS 303 SS SCHMERSAL	
1831	VITE TCTC 04X16 INOX A2 UNI 6107 / SCREW WITH SLOT 04X16 INOX A2 UNI 6107	
19164	PULSANTIERA MOBILE COMPLETA / CONTROL BOX	
19227	PULSANTE DI COMANDO BOMBATO / DOMED PUSH BUTTON	
19227ASSY	PULSANTE BOMBATO INOX COMPLETO DI SUPPORTO E MICRO / STAINLESS STEEL DOMED BUTTON ASSY	
19228	SUPPORTO CORPO PULSANTE / PUSH BUTTON SUPPORT	
19229	RONDELLA DI BLOCCAGGIO PER PULSANTE / WASHER	
19490	PLC FX1N-60MR-DS (MITSUBISHI) / PLC FX1N-60MR-DS (MITSUBISHI)	
19520	SPIA PER PULSANTIERA / SIGNAL LAMP	
19520ASSY	SPIA COMPLETA PER PULSANTIERA / SIGNAL LAMP ASSY	
19521	GHIERA PER SERRAGGIO SPIA / RING NUT	
21083T	DISCO EMERGENZA FRANCESE-TEDESCO-SPAGNOLO / FRENCH-SPANISH-GERMAN DISC EMERGENCY STOP	
21134	SUPPORTO ORIENTABILE PULSANTIERA / PIVOT SUPPORT	
21602T1	SPIA ROSSA-VERDE COMPLETA INOX AC/DC / STAINLESS STEEL RED-GREEN PANEL INDICATOR AC/DC	
29229ASSY	PULSANTE INOX COMPLETO / STAINLESS STEEL PUSH BUTTON ASSY	
29229T1ASSY	PULSANTE DI STOP\STOPPING BUTTON	
29229T2	PULSANTE ROSSO SENZA FINECORSA / STAINLESS STEEL RED BUTTON WITHOUT LIMIT SWITCH	
29229T6	PULSANTE NEUTRO SENZA FINECORSA / STAINLESS STEEL PUSH BUTTON WITHOUT LIMIT SWITCH	
29275	SUPPORTO COMPLETO PER PULSANTIERA / SUPPORT ASSY	
4125	RONDELLA PIANA 05X15X1.5 UNI 6592 INOX A2 / WASHER	
4191	MANIGLIA IN ACCIAIO COMPLETA DI BUSSOLA / GUARD HANDLE ASSY	
4192	DADO AUTOBLOCCANTE M04 INOX A2 UNI 7474 / SELF-LOCKING NUT M04 INOX A2 UNI 7474	
4977	CASSETTA IMPIANTO ELETTRICO 380X190X130 TRASP. / ELECTRICAL BOX	
4978	VITE CASSETTA ELETTRICA / PLASTIC SCREW	
4978	VITE CASSETTA ELETTRICA\SCREW\VIS DE PLASTIQUE\TORNILLO TAPA	
4979	COPERCHIO TRASPARENTE / TRANSPARENT COVER	
4979	COPERCHIO\ELECTRICAL BOX COVER\COUVERCLE DE BOÎTE\TAPA WIMEX	
5359	GHIERA PG13.5 OTTONE / NUT PG 13.5	
5370	PRESSACAVO SKINTOP PG13.5 / CABLE GLAND PG13.5	
7706/02	BARRA OMEGA / BAR	
9026	LAMIERA PER FISSAGGIO SCATOLA INTERRUTTORE / PLATE	
4	13004	PORTASPIA VERDE CON GHIERA\GREEN PANEL INDICATOR\LAMPE VERT INDICATEUR\PORTALAMPARA VERDE CON TESTIGO
	13005	PORTASPIA ROSSA CON GHIERA\RED PANEL INDICATOR\LAMPE ROUGE INDICATEUR\PORTALAMPARA ROJO CON TESTIGO
	13006	PORTASPIA AMBRA CON GHIERA\YELLOW PANEL INDICATOR\LAMPE TORIQUE\ANGE INDICATEUR\PORTALAMPARA ÁMBAR CON TESTIGO
5	13001	SPIA LUMINOSA VERDE\GREEN SIGNAL LAMP\LAMPE VERT\PORTACHIVATO VERDE
	13002	SPIA LUMINOSA ROSSA\RED SIGNAL LAMP\LAMPE ROUGE\PORTACHIVATO ROJO
	13003	SPIA LUMINOSA AMBRA\YELLOW SIGNAL LAMP\LAMPE TORIQUE\ANGE\PORTACHIVATO ÁMBAR
6	13001ASSY	SPIA LUMINOSA VERDE\GREEN SIGNAL LAMP ASSY\PORTE-TÉMOIN LUMINEUX VERT\LUZ VERDE
	13002ASSY	SPIA LUMINOSA ROSSA\RED SIGNAL LAMP ASSY\PORTE-TÉMOIN LUMINEUX ROUGE\LUZ ROJO
	13003ASSY	SPIA LUMINOSA AMBRA\YELLOW SIGNAL LAMP ASSY\PORTE-TÉMOIN LUMINEUX TORIQUE\ANGE\LUZ ÁMBAR
7	6281	FUSIBILE\FUSE\FUSIBLE\FUSIBLE 10X38 2A 500V
	6282	FUSIBILE\FUSE\FUSIBLE\FUSIBLE 10X38 4A 500V



5	7244	Morsetto\Port\Bourne\Borne WDU2.5
	7243	Morsetto\Port\Bourne\Borne WPE2.5
	13146	Morsetto\Port\Bourne\Borne EAGO 249-116
	7245	Morsetto\Port\Fusible\Borne WSI 6
	13131	Morsetto\Port\Bourne\Borne WDK 2.5
	13961	Morsetto\Port\Bourne\Borne WDU4
	13962	Morsetto\Port\Bourne\Borne WPE4

6	4683	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG9
	4684	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG11
	5131	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG16
	5681	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG7
	5359	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG13.5
	2186	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG21
	13746	Ghiera ottone\Ring nut\Ecrou\Tuerca anular PG29

7	4116	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG9
	4117	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG11
	4188	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG7
	5130	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG16
	5370	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG13.5
	2186	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG21
	13746	Pressacavo\Cable gland\Passe-cable\Pressacavo Skintop PG29



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