(Original) Use and maintenance manual

Type: Ply separator
Model: PS-15

IMPORTANT
Read this user manual and follow the instructions and warnings before operating this device.

Any modification or transformation performed on this machine may cause loss of the manufacturer's guarantee and liability.

This manual must always remain near to the machine and visible to all the operating and maintenance staff, for any future consultation, forming part of the equipment.

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- CE Declaration of conformity:

WE DECLARE, under our responsibility, that the machine:
- Type: Ply separator
- Brand: ERM Engineering
- Model: PS-15
- Serial No.: 13939
- Manufacturer date: 2023

Inspired by the directives of the Official Journal of the European Communities:

2006/42/CE Machinery Directive
2014/35/UE Low Voltage Directive
2014/30/UE Electromagnetic Compatibility Directive

Complies with the design and construction specifications of the European Standards on General Machine Safety:

EN 349 – EN 614-1 – EN 614-2 – EN 12100 – EN 11161-1 - EN 1005-1 – EN 1005-2 – EN 1005-3 - EN 1005-4 – EN 13849-1 – EN 13849-2 – EN 894-3 – EN 13857 – EN 60204-1 – EN 14118 - EN 14120

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Date: 2023/04

- Description:

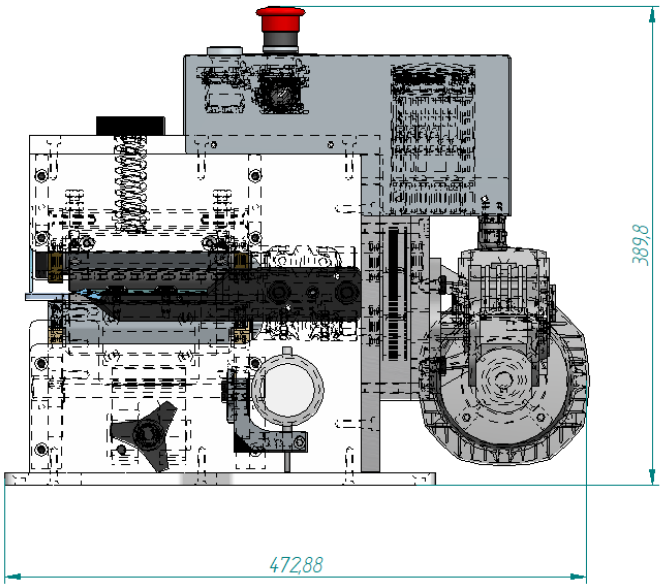
Ply separator activated by a reducer motor and drive shaft, with manually controlled height adjustment by way of eccentrics.

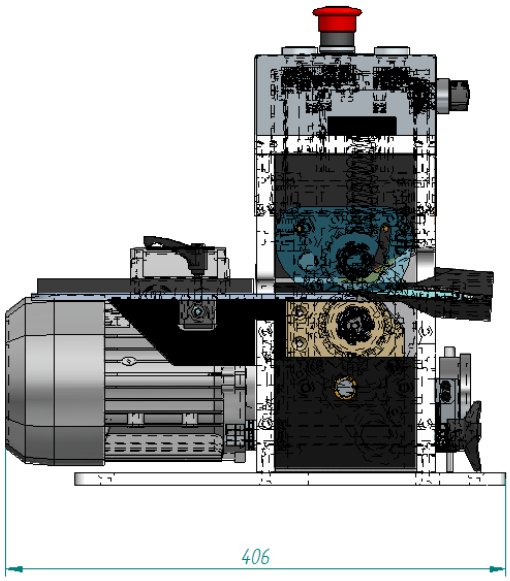
Support table with adjustable cutting width guide.

Pinch rollers closure activated by compression spring.

- Technical characteristics:

Dimensions	480x406x390mm (l × w × h)
Weight	39 Kg
Blade width	120 mm
Max. cutting width	160 mm
Max. thickness	20 mm
Voltage	1x230V
Power	0.37 Kw
Current	1.8 Amp.

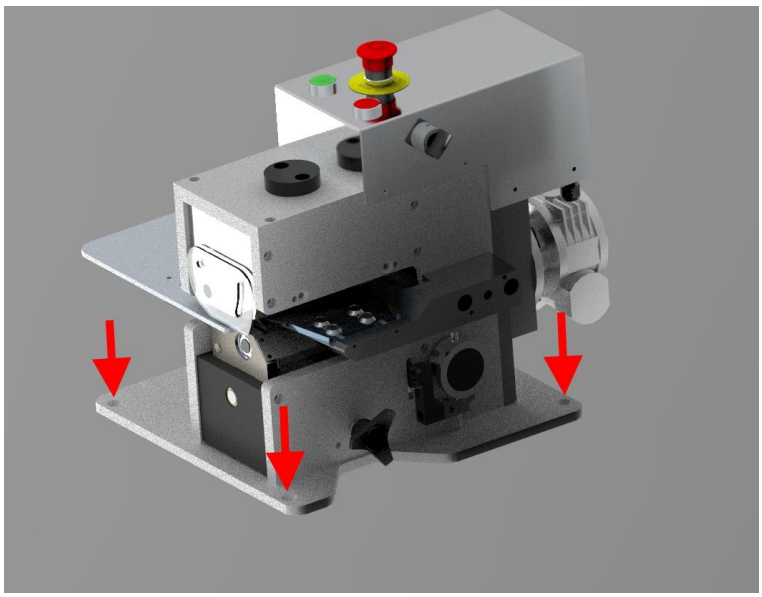




- Instalation:

CAUTION:
For safety, this machine must be fixed to a table or support through the four holes in its base, to avoid overturning or falling, which can sometimes occur with large or heavy belts.

Once the equipment is connected to the mains, it must be fixed to a table or support through the four holes in its base, so as to avoid overturning or falls.



- Electrical connection to the grid:

Connect the equipment to a 220/230v single phase grid, the voltage shown on the technical specifications plate, and its corresponding earth connection, without taking into consideration the direction of the motor rotation. This equipment has a rotation selector.

- Using instructions:

WARNING:
THIS DEVICE INVOLVES THE HAZARD OF HANDS BEING TRAPPED AND CUT BY THE PINCH ROLLERS. THE USER SHOULD EXERCISE GREAT CARE AND PRECAUTION IN THE BELT ENTRY ZONE, AVOIDING THE PLACEMENT OF HANDS IN THIS ZONE.

Always adjust the cutting guide to less than 120 mm, before introducing the material.

NOTE:
Although the initial cut is 120 mm, we must keep in mind that depending on the toughness of the material used, various passes must be done in order to obtain the desired final width.

Regardless of the total thickness of the band, the adjustment of the cutting height is given by the space or distance between the lower roller and the blade,

We will adjust this cutting distance by turning the height adjustment knob located under the blade, in such a way that, rotating clockwise, we will raise the lower roller, reducing the thickness of the lower layer to be separated.

In the same way, rotating in the opposite direction, we will increase the thickness of this lower layer.

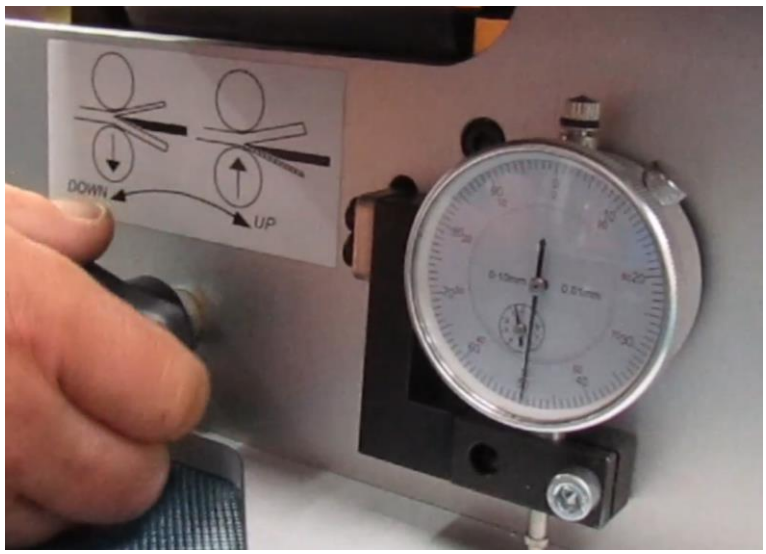
The upper roller will absorb rising and will adapt to the total thickness of the material
To facilitate this adjustment, the reading of the dial gauge located to the right of the height adjustment knob is taken as a reference.

We will adjust the cutting thickness by turning the height adjustment knob located under the blade, in such a way that, rotating clockwise, we will raise the lower roller to decrease the thickness of the lower layer to be separated.

We can do a test on a corner of the belt, or on a scrap piece of the same material, to see if the height adjustment and pressure is correct.

We start to ply the belt by applying one or more passes, depending on the hardness or substance of the material being worked on, and depending on the adjustment of the table's opening guide.

To facilitate adjustment, the reading of the dial gauge located to the right of the height adjustment knob is taken as a reference.



It is recommended to carry out a test on a piece of the same belt, to check if the height adjustment is correct.

Once the machine is connected to the network, we will press the green START button at the top to start the motor, to stop the motor we will press the red STOP button.

IF NECESSARY, WE CAN MAKE AN EMERGENCY STOP BY PUSHING ON THE RED EMERGENCY BUTTON.

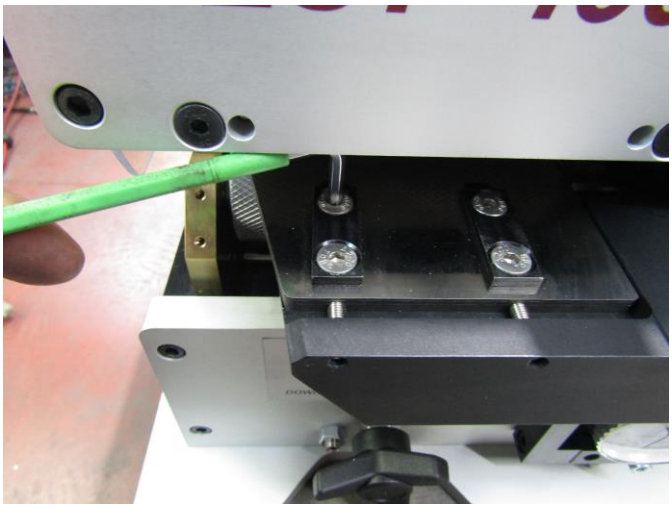
In the event of jamming or trapping of the belt, we will press the STOP button and reverse the rotation of the rollers with the REVERSE selector and press START to initiate material recoil.

NOTE:
Although the initial width of cut is 120mm. We must take into account that depending on the hardness of the material, more or fewer passes will have to be made until the final depth of cut is achieved.

Changing and adjusting the blade:

⚠WARNING:
When changing the blade, disconnect the power cord from the mains, to avoid accidents.

To replace the blade, we will use a 4mm Allen key to remove the 4 flat head screws that hold it.



Once extracted, we will remove the blade and place the new one in the same position, making sure that it is fully in contact with the two measurement adjustment bolts.

To modify this measurement, we will keep the 4 screws that hold the blade slightly loose to be able to move during the adjustment and once the measurement is adjusted, we will strongly tighten the 4 Allen screws.

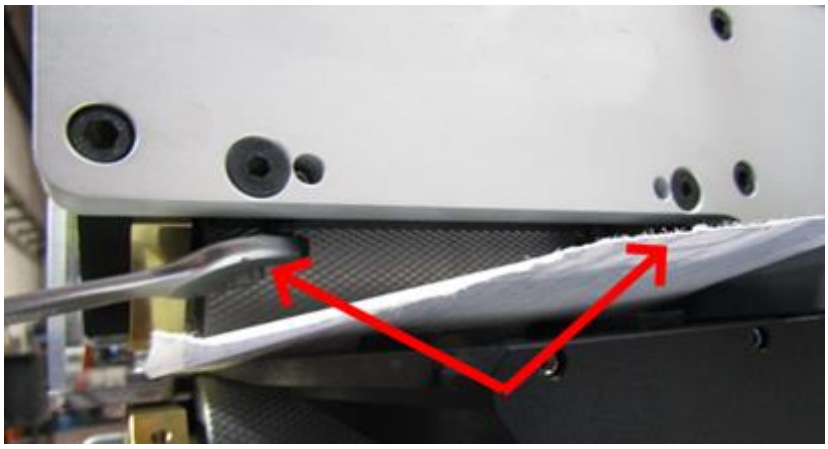
NOTE:
When advancing or retreating the cutting blade with respect to the rollers, the opening stroke limits of both rollers must be adjusted, otherwise, we will cause the edge of the same to break.

To adjust the limit of the upper roller, it is advisable to place a sheet of paper between the blade and the upper roller, it must be able to move once the height has been adjusted.

Otherwise, we could cause damage to the cutting edge.

First we will loosen the two M-5 studs on the top front of the machine one turn using a 2.5mm Allen key.

Next, we can raise or lower the upper pressure roller with a 13mm wrench. acting equally on the two stop screws to maintain parallelism between the rollers.



Once adjusted, we will fix the two screws M5 again to prevent the measurement from being misaligned.

To adjust the height of the lower roller, we also recommend the use of a sheet of paper to adjust the measurement, it will suffice to loosen the locknut located to the left of the height adjustment knob with a 13mm fixed wrench, and with an Allen key. 4mm We will regulate the stud that limits the lifting movement of this lower roller.

Once adjusted, we will tighten the locknut again.

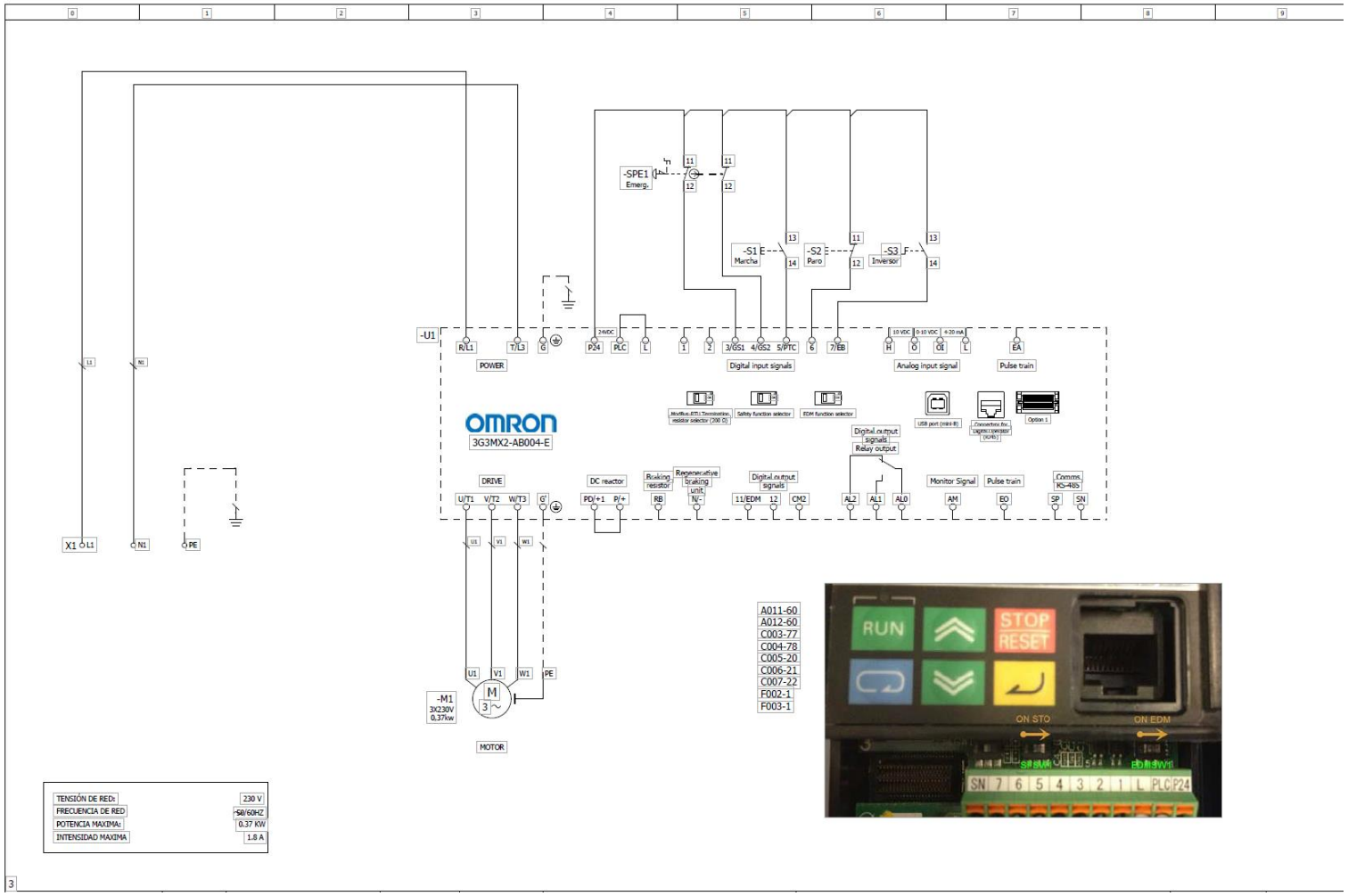
Warnings.

ATTENTION: Although safety systems are present, due to the nature of functioning of the equipment, there is a high risk of trapping and cutting in the open zone.

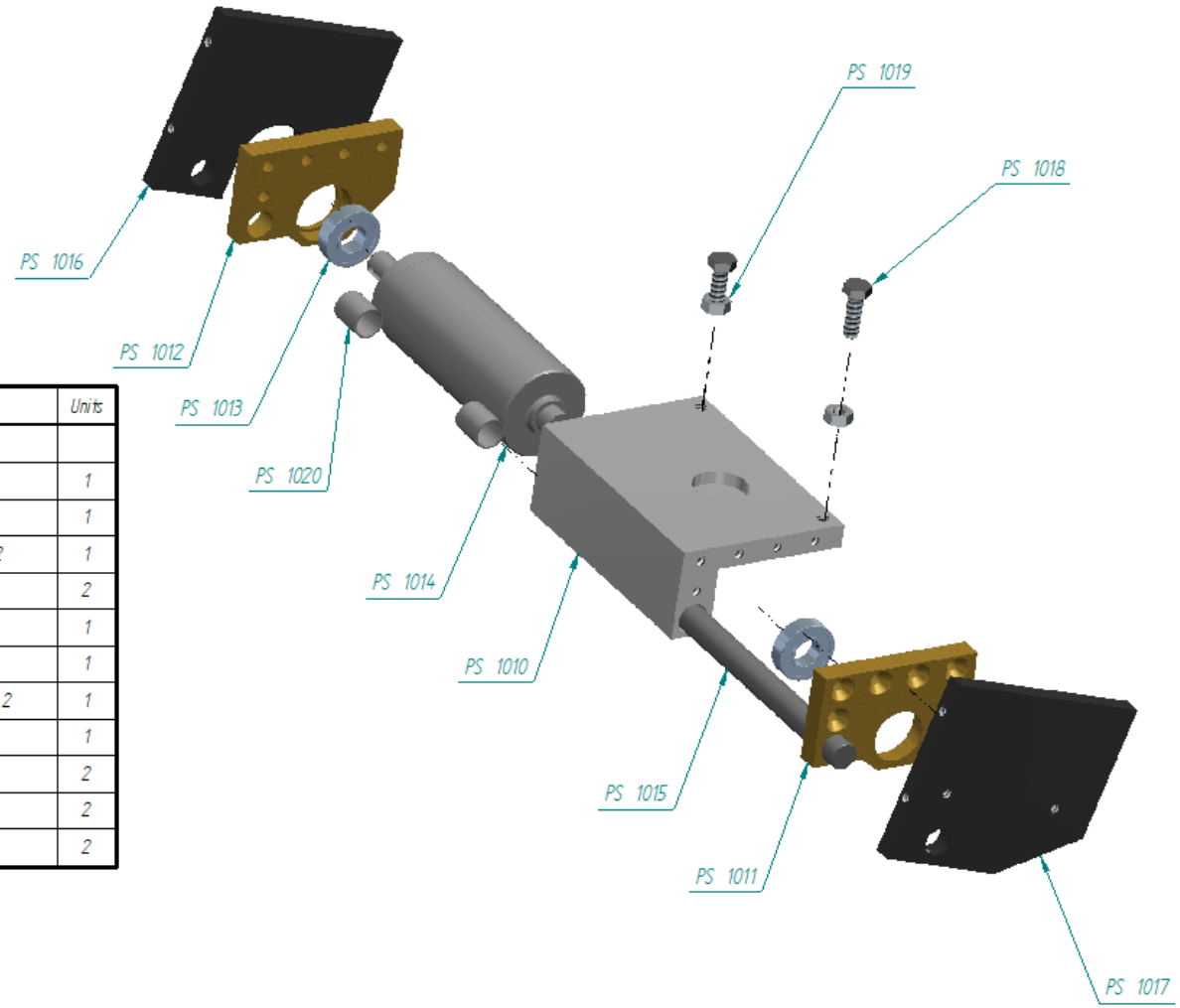
- Check the voltage of the equipment before connecting to the mains.

- Do not use the equipment in damp environments or with a wet floor.
- Always work with the equipment fastened to a stable and sturdy base.
- Avoid the use and operation of this equipment by inexperienced or unqualified staff.

- **Electric schemes:**

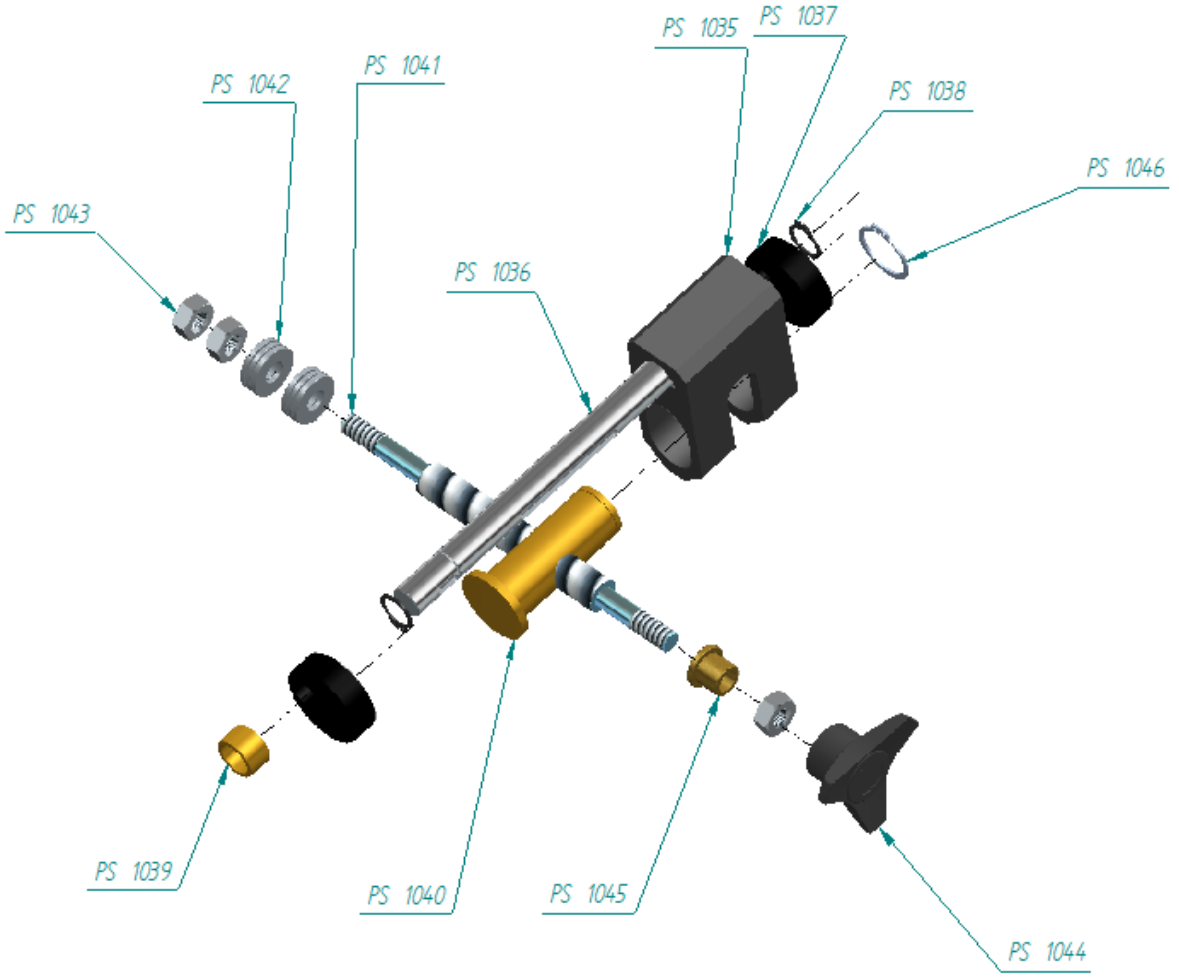


- **Spare parts:**

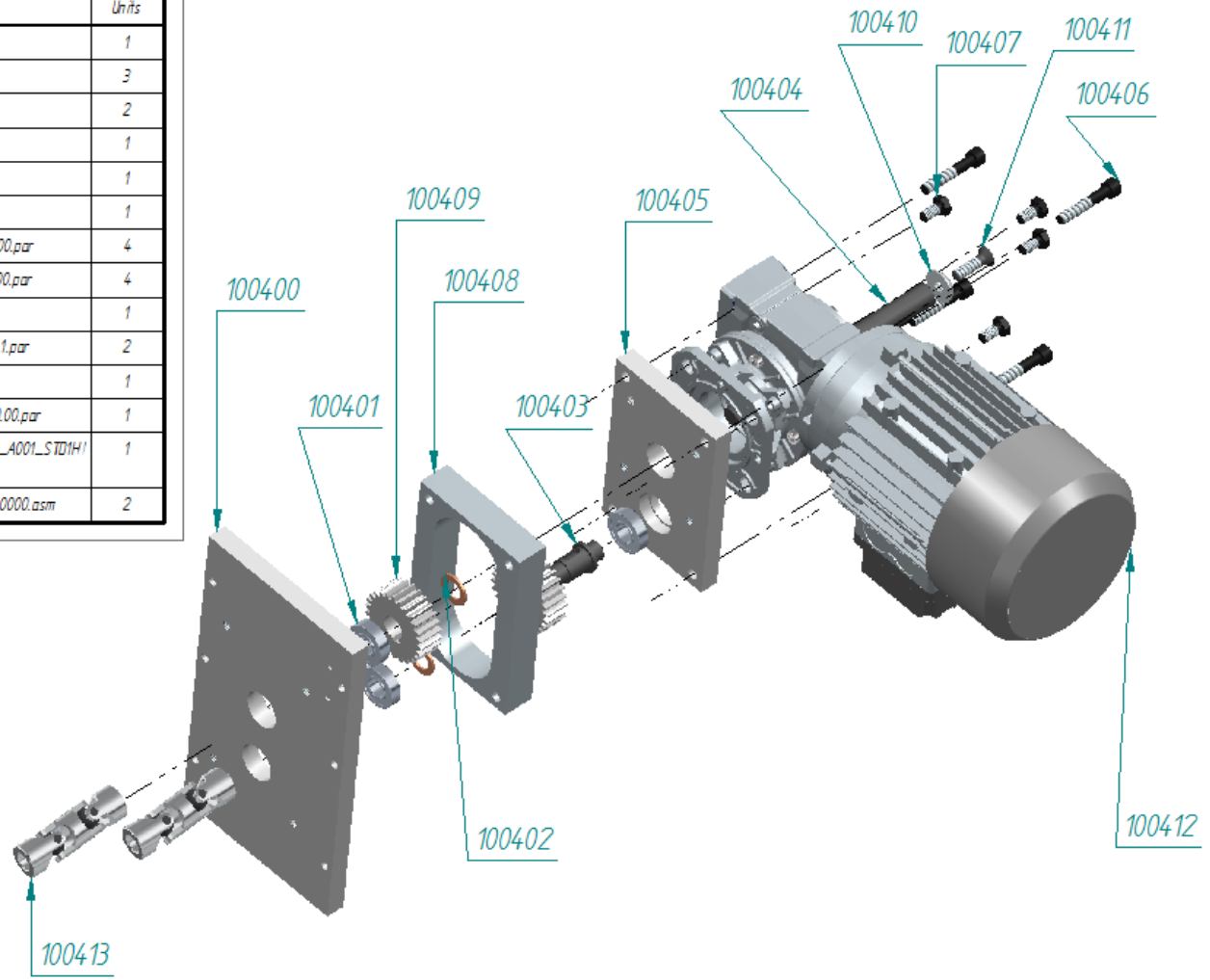


Part number	Description	Units
PS	Grupo superior	
PS1010	Distancial rodillo SUP	1
PS1011	Brazo rodillo presion	1
PS1012	Brazo rodillo presion 2	1
PS1013	cojinete	2
PS1014	Rodillo motriz PS	1
PS1015	Eje basculante	1
PS1016	Cierre cuerpo superior 2	1
PS1017	Cierre cuerpo superior	1
PS1018	933M8X25	2
PS1019	934-M8	2
PS1020	PAP 1520 P10	2

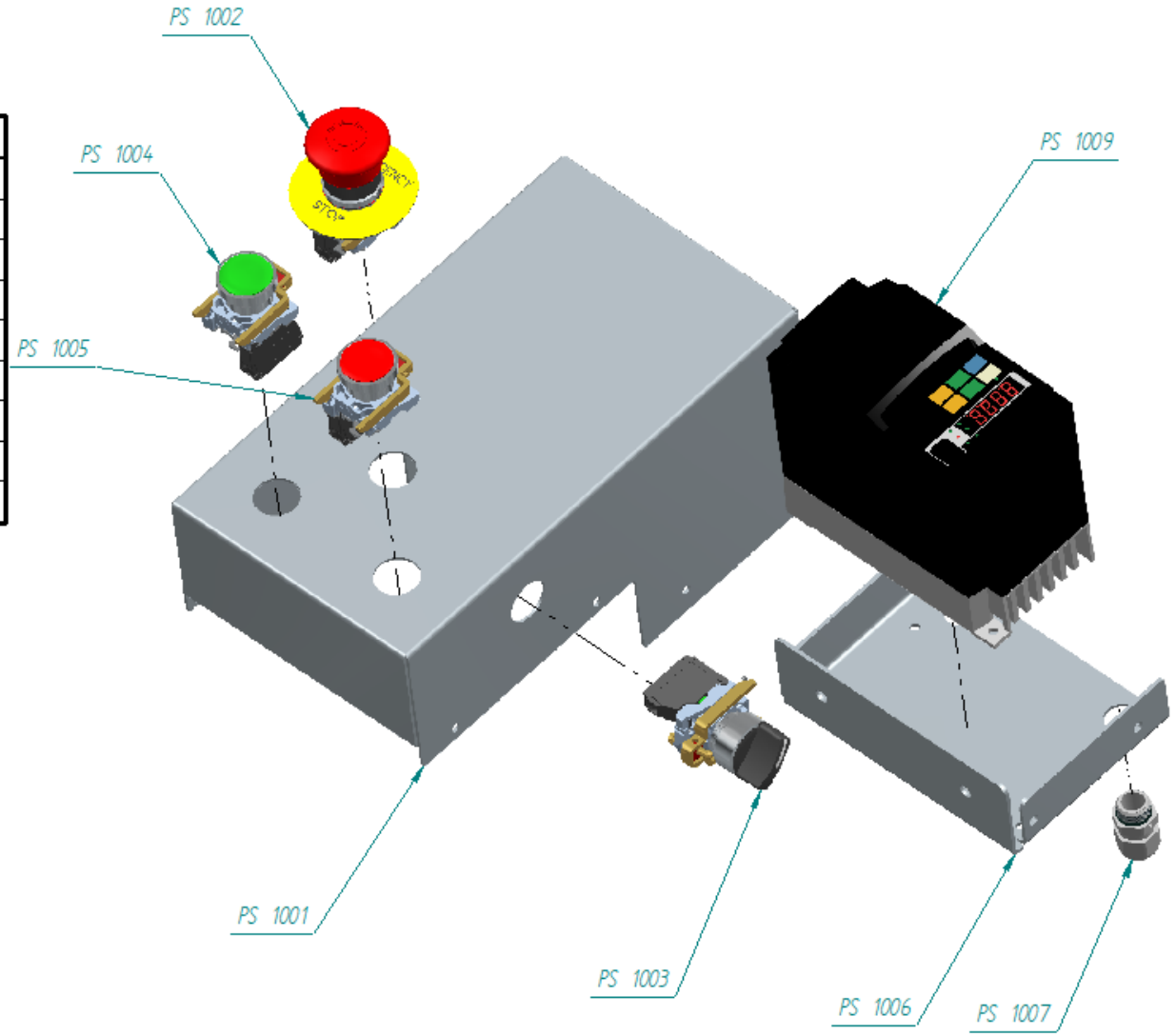
Part number	Description	Units
PS	Conjunto excentricas	
PS1035	Leva para alza	1
PS1036	Eje excentricas	1
PS1037	Excentrica alzado	2
PS1038	15x15	2
PS1039	SELFOIL 20X15X12	2
PS1040	Tuerca alzado nueva	1
PS1041	Eje roscado alza	1
PS1042	51100	2
PS1043	934-M10	3
PS1044	Three-arm knobs VB_639_63 B-M10	1
PS1045	Selfoil B 10-15-15	1
PS1046	25x12	1



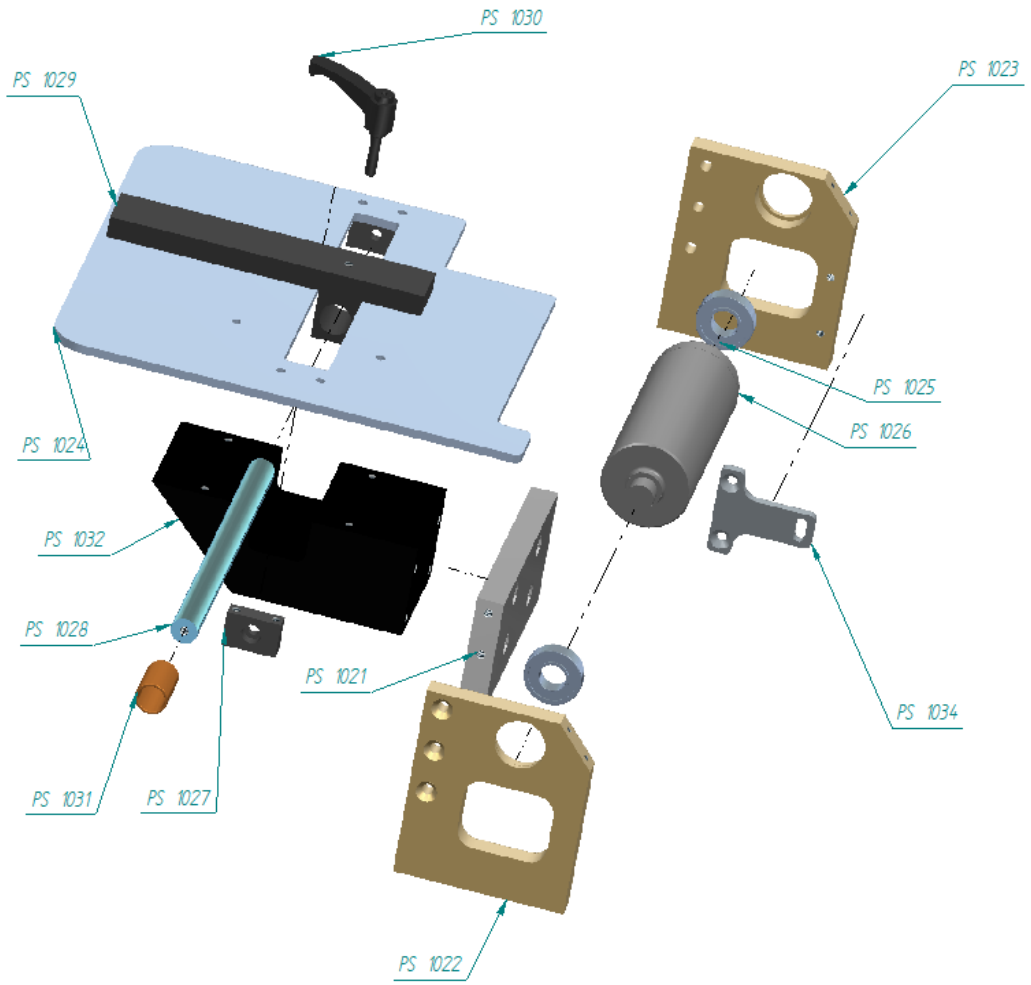
Number	Part name	Units
100400	Placa cierre trasero.par	1
100401	cojinete.PAR	3
100402	ARANDELA PIÑO.par	2
100403	Eje basculante SUP.par	1
100404	Ele basculante NF.par	1
100405	Placa trasera motor.par	1
100406	Screw_DIN_912_M6x45_v10.00.par	4
100407	Screw_DIN_933_M6x16_v10.00.par	4
100408	Placa sujecion motor.par	1
100409	michaud_chailly_A1_32_26_1.par	2
100410	ARANDELA CHAFLANADA.par	1
100411	Screw_DIN_7991_M6x30_v10.00.par	1
100412	T071IC411B1410514X30N0_____A001_ST01H1H1.asm	1
100413	michaud_chailly_A5_472_140000.asm	2

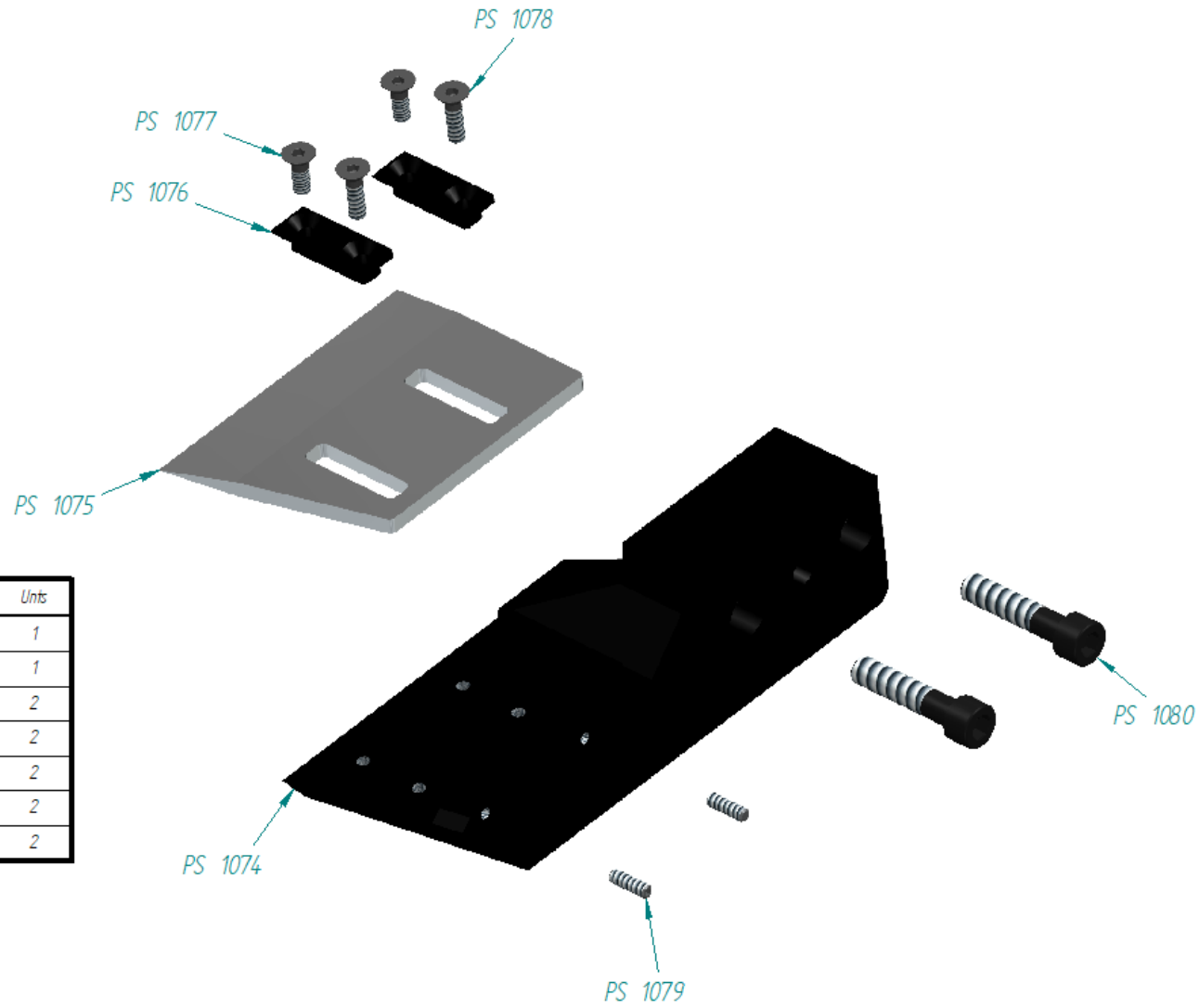


Part number	Description	Units
PS 1001	Tapa control PS-16	1
PS 1002	Paro completo	1
PS 1003	xb4_bd25	1
PS 1004	Pulsador Marcha	1
PS 1005	Pulsador Paro	1
PS 1006	Soporte Inverter Om	1
PS 1007	SKINTOP_ST_HF_M_16x1_5	1
PS 1008*	_VND_M162GT	1
PS 1009	OMRON-3G3MX2_AB004	1



Part number	Description	Units
PS	Mesa	
PS1021	Soporte mesa	1
PS1022	Alojamiento Excent-2	1
PS1023	Alojamiento Excent-1	1
PS1024	Mesa PS15 laser	1
PS1025	cojinete	2
PS1026	Rodillo motriz PS	1
PS1027	Pestaña barra guia	2
PS1028	Barra guia mesa	1
PS1029	Guia banda	1
PS1030	enz_44_p_m6x25	1
PS1031	SELFOIL 15-18-30	1
PS1032	Base mesa PS16	1
PS1034	Brazo comparador	1





Number	Name	Units
PS1074	Sparte cuchilla 17	1
PS1075	Kn-100507	1
PS1076	Tapa cuchilla	2
PS1077	7991M6X16	2
PS1078	7991M6X20	2
PS1079	M5x16	2
PS1080	912M10X45	2