SFERE • BM

L'expertise d'un fabricant en solutions d'emballage

SFERE emballage

BM emballage

BM6 Instruction manual

Mother vine pruning machine

Version: 11/2021

Original manual

TABLE OF CONTENTS

1 Introduction

1.1 Overview of the machine

The **BM6** machine - designed and manufactured by **SFERE BM** automatically prunes the stems of the mother vine.

The machine has been installed, connected and commissioned by **SFERE BM** personnel.

1.2 Purpose of this manual

This instruction manual is intended for production technicians, operators and maintenance technicians.

It has been compiled to provide you with important information on the safety, operation, servicing and first-level maintenance of the **BM6** machine.

Read this manual carefully before using the machine.
It has been prepared so that you can use the machine under the best possible conditions.
Keep it in a safe place close to the device, in a place accessible to servicing and maintenance personnel.

The illustrations in this manual are provided for ease of understanding. They are not contractual in nature.

The information contained in this manual was checked as of the date of issue. However, specifications are subject to change without notice.

1.3 Information and warning symbols

The following symbols are intended to draw your attention to information that clarifies a procedure or warns you of potential risks.

Indicates information relevant to the use of the machine or which will help optimise a procedure.

Indicates a hazard that could cause serious injury or death and serious property damage if the procedure is not followed.

1.4 Safety symbols

To inform technicians and operators of the dangers involved, you will find various safety symbols in this document.

The messages contained in these inserts inform you of the prohibitions to be observed, the potential risks involved and the steps to be taken to prevent these risks.

The definitions of the symbols are given below.

Electrical hazard.

Cut hazard.

Entanglement hazard.

1.5 Safety symbols on the device

Safety symbols and warnings affixed to the machine must never be removed or covered up. They must remain legible throughout the service life of the machine.

1.6 Warranty and liability

Warranty and liability are based on contractual provisions.

Spare parts and components

You should only use original **SFERE BM** spare parts or spare parts approved by **SFERE BM**. Only these parts guarantee complete occupational and functional safety. If you use non-approved parts, we accept no liability.

Components from other manufacturers

For all work performed on components from other manufacturers, you must follow the advice of individual instruction manuals.

Intellectual property rights

SFERE BM reserves all rights over plans and software, and any other document including the right to dispose thereof, such as the right to photocopy or reproduce them.

Storage

SFERE BM shall not be held liable for damage due to corrosion that may occur during improper storage of the equipment.

Transport and handling

Please note that improper transport and handling of the equipment does not entitle you to claims for compensation or warranty claims.
When in doubt about transport conditions, please contact **SFERE BM** before proceeding.
If a technician from **SFERE BM**'s technical department is present, he/she can be contacted for any question relating to transport. He/she shall under no circumstances be held liable for transport or any damage that may result therefrom.

1.7 Revision history

Revision	Date	Details
01	11/2021	Creation

2 Safety instructions

2.1 Intended use

The **BM6** machine is only intended for pruning vine rootstock, min. diameter 6mm - max. diameter 14mm.

Any other use is considered contrary to the intended use.
The warranty shall not cover any damage resulting therefrom, and the **SFERE BM** Company shall not be held liable in any way.

2.2 Important notes for the operator

The machine was manufactured in accordance with the regulations in force at the time of delivery, and corresponds with existing rules in terms of technical safety.

Any residual risks are specified in this manual. All safety instructions must be complied with.

Have protective devices, interlocks etc. inspected at least once a year by an expert to ensure proper operation.

The operator is required to carry out an inspection in accordance with the accident prevention and electrotechnical regulations prior to commissioning.

It is forbidden to make any changes, fit additional parts or make structural changes to the machine.
The machine is equipped with protective casings and safety features to ensure safe operation.
Any removal or inhibition of one of the protective features shall directly release **SFERE BM** from any liability in the event of an accident.

2.3 Personnel training

Before starting work, operating and qualified personnel must have read and understood the instruction manual, particularly the “Safety Instructions” section and the regulations in force.
Specific instructions applicable to certain operations are provided in the following sections.

Anyone required to operate the machine must be trained in its use.

Personnel working on the machine must be regularly informed of the dangers which may arise while operating the machine.

2.4 Personnel protection

The operator is required to take adequate preventive measures to protect their personnel against the risks that may result from the machine, particularly when working outside the normal course of operations (cleaning, waste disposal, maintenance, repairs).

The operator must make the following protective equipment available to the personnel.

Safety goggles	Safety footwear	Safety gloves	Noise protection
			

You should check on a regular basis that this equipment is complete and functional.

2.5 Safety in the working environment of the machine

- Before switching on the machine, make sure there are no obstructions in the working environment of the machine.
- Never reach inside the guards and casings when the machine is in operation.
- Wear tight fitting clothes, remove jewellery. Protect long hair, e.g. with a net.

2.6 Measures to be taken before carrying out work on the machine

- It is strictly forbidden to work on the machine when it is not at a standstill. Working on a machine in operation may cause serious personal injuries.
- Before carrying out any servicing/maintenance work on the machine, switch the machine off (see §).
- Secure the machine against unintentional start-up.
- Before restarting the machine, make sure the persons in the vicinity of the system are safe.

2.7 Electrical/electronic work safety

This symbol, which can be found at various points on the machine, indicates that there is a risk of electric shock. Serious personal injury or death may result.

Only qualified and trained electricians may carry out electrical/electronic work on the machine and work in the areas marked with this symbol.

Before working on electrical or electronic components, observe the following instructions:

- Do not connect or disconnect live parts.
- Set the machine’s button to OFF.
- Secure the machine against start-up.

2.8 Machine safety features

The machine is equipped with the safety features marked on Figure 1 on page 11, Figure 3 on page 15 and Figure 4 on page 15:

- Disconnect/Main switch
- EMERGENCY STOP button

- Voltage indicators
- Covers with security-protected opening

The EMERGENCY STOP should be used in case of serious risk to personnel or property.

3 Description

3.1 General overview

Left/Right convention

The visible side in the figure above is the left side, in relation to the direction of wood flow.

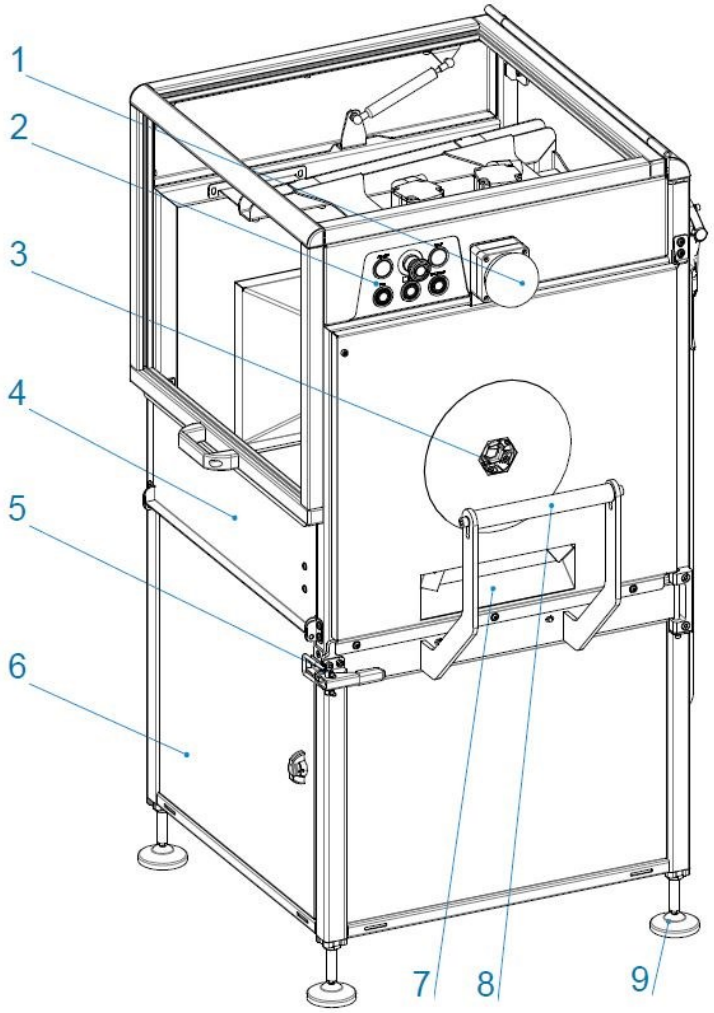


Figure 1 – General overview of the BM6 machine

1. Dome push button.
2. Control panel (see details in paragraph **§3.4**).
3. Cutting head
4. Waste chute hatch.
5. Open/close door latch for head maintenance.
6. Access to electrical panel
7. Waste outlet.
8. Wood support.
9. Adjustable feet (x4).

Left/Right convention

The visible side in the figure below is the right side, in relation to the direction of the wood movement.

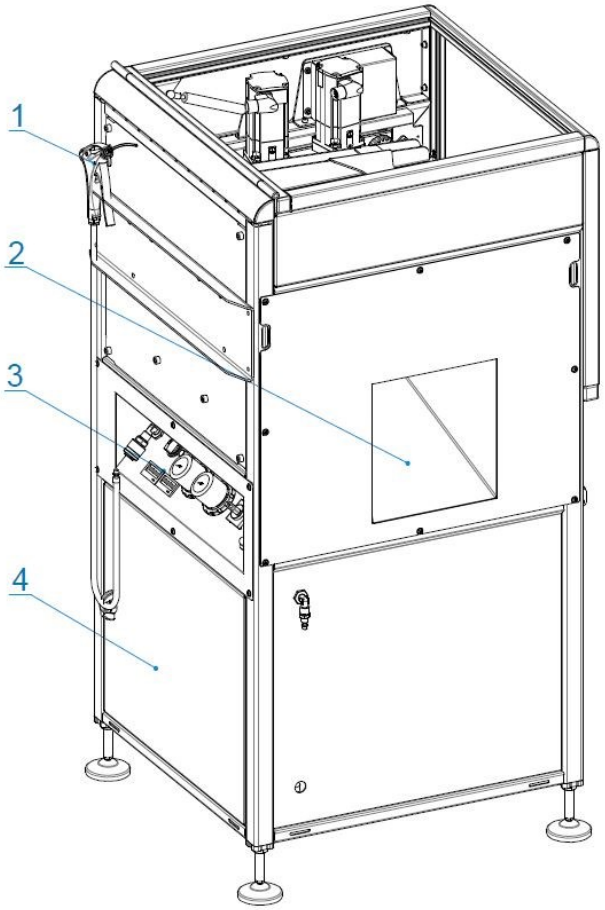


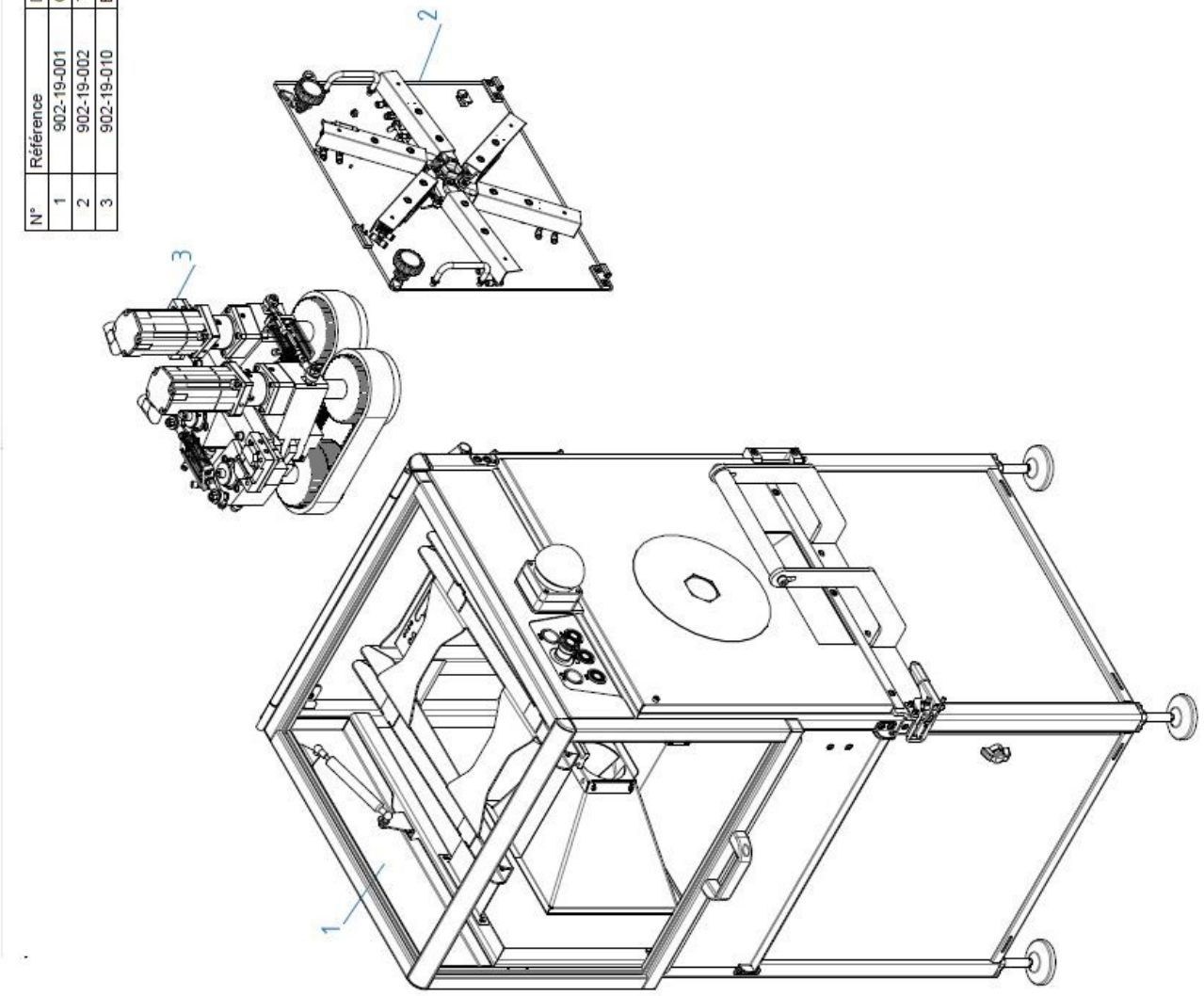
Figure 2 – Overview of the BM6 machine

1. Blowgun.
2. Trimmed vine outlet.
3. Side panel (see details in paragraph **§3.4**).
4. Access to pneumatic panel.

3.2 Functional units

N°	Référence	Désignation	Qté
1	902-19-001	GROUPE CHASSIS BM6	1
2	902-19-002	TETE DE COUPE BM6	1
3	902-19-010	ENTRAINEMENT OSCILLANT à BANDE	1

BM6 / 999-18-016 (Groupe)



3.3 Functional description

The **BM6** cleans up mother vines.

After configuring the settings as desired, the operator introduces the vine into the cutting head.

The vine is then fed into the machine.

The cutting head blades remove the branches as the vine moves through the machine.

The pruned mother vine is then ejected from the machine through the rear funnel.

3.4 Control buttons and indicators

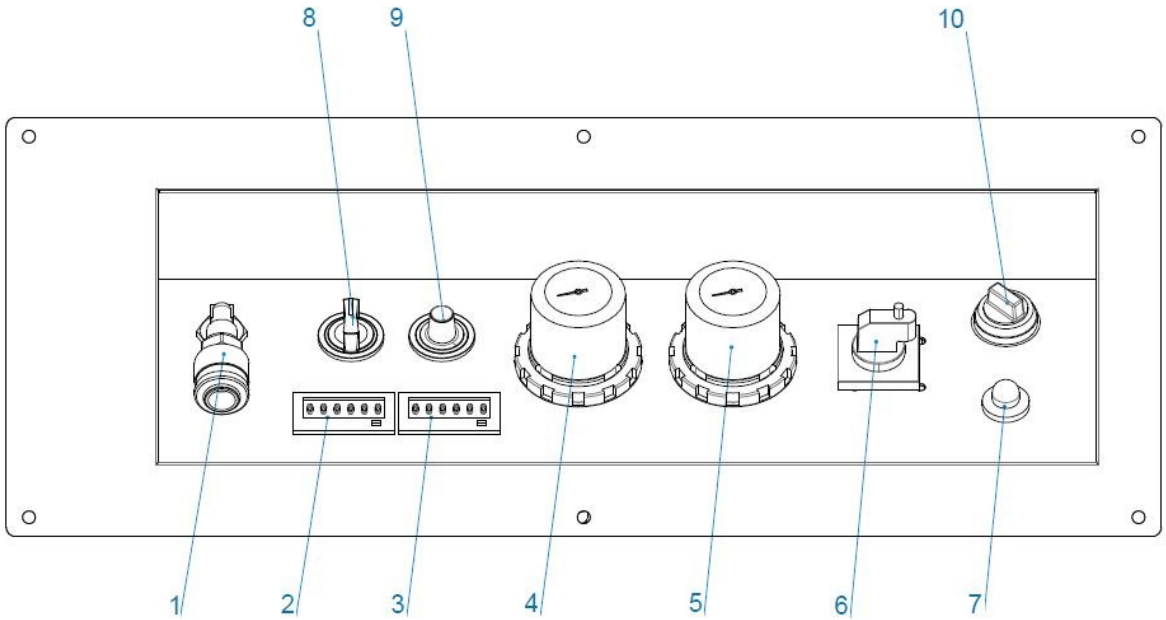


Figure 3 - Right side panel

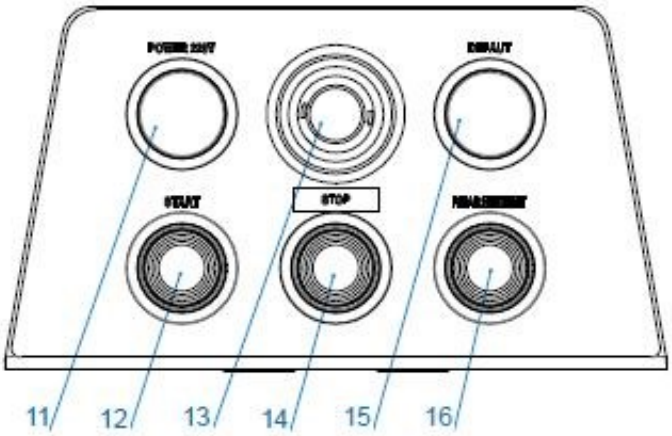


Figure 4 - Control panel

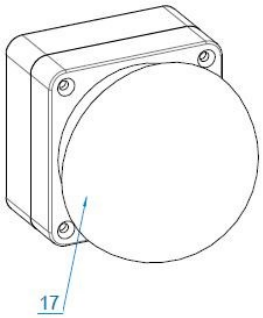
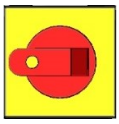
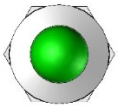
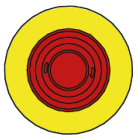
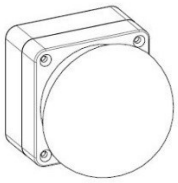


Figure 5 - Dome push button

Buttons and indicators		Functions
1. Blowgun connection		▪ Enables the blowgun to be connected.
2. Total counter		▪ Indicates the number of vines that have been pruned since set up. ▪ This cannot be reset.
3. Partial counter		▪ Indicates the number of vines that have been pruned over the period of time input. ▪ Able to be reset at any time, as the user wishes.
4. Head closure manometer		▪ Enables adjustment of the pneumatic pressure of the head closure. ▪ Turn clockwise to increase pressure. ▪ Turn anti-clockwise to decrease pressure.
5. Belt closure manometer		▪ Enables adjustment of the pneumatic pressure of the belt closure. ▪ Turn clockwise to increase pressure. ▪ Turn anti-clockwise to decrease pressure.
Adjustment of the belt reopening pressure is done through the solenoid valve on the pneumatic panel.		
6. Main switch		▪ On 1: 230V voltage arrives in the IT part. Temperature maintenance of the electrical part. ▪ On 0: switch off the machine during servicing and maintenance operations. Secures the machine against unintentional start-up.
7. Air-presence indicator		▪ Green: the pneumatic circuit is on. ▪ Grey: the machine is not hooked up to the compressed air.
8. I – 0 - II		The 3-position button enables you to choose the operating mode: ▪ I: standard mode for pruning vines. ▪ 0: maintenance mode - enables manual control of head and belt opening/closing. ▪ II: Unused.
9. Belt speed potentiometer		▪ Enables adjustment of the high speed rotation of the belts.
10. Pneumatic power supply		▪ Opening/closing of the pneumatic circuit.

Buttons and indicators		Functions
11. 230V voltage indicator		▪ On: machine powered on. ▪ Off: after turning the main switch to “0” position.
12. START		▪ Flashing: waiting for machine to start, according to the production programme selected. ▪ Press to start production. ▪ Lit: production in progress.
13. EMERGENCY STOP		Activation of an Emergency Stop will cause the machine to shut down. The “Fault” indicator will turn on and glow red. To get out of an ES: ▪ Resolve the fault. ▪ Turn the ES button to unlock it. ▪ Press the RESET button.
14. STOP		▪ Press to stop ongoing production.
15. Fault indicator		▪ A fault can cause the machine to stop. ▪ Refer to paragraph §6.3 on page 28 to resolve the corresponding fault.
16. RESET		▪ Lit: waiting reset. ▪ Off: reset.
17. Dome push button		▪ Different functions depending on the mode selected by the 3-position button. ▪ In mode I: ○ A short press enables opening and closing of the head to free a stuck vine. ○ A long press enables opening of the head and puts the belts into reverse to free up a heavy blockage. ▪ In mode 0: One press makes the head open and close 10 times in a row.

4 Production launch

4.1 Before you start

Tools: Clean microfibre cloth, air gun.

Before starting, check the following conditions:

- Open the cover and the door of the cutting head.
- Remove large debris/wood chips.
- Remove wood debris from belt assemblies.
- To dispose of debris, gently blow using the blowgun
- Blow harder using the blowgun remove the last bits of debris.
- Visually check the condition of the belts and pulleys.
- Check the condition of the blades.
- Close back up the cover and the door.

4.2 Starting production

- Turn the main switch to “On”. The white power indicator will light up.
- Open the pneumatic valve. The air-presence indicator will light up.
- Turn the 3-position button to operating mode I.
- The “Fault” indicator will flash.
- Press the blue “Reset” button.
- The “Fault” indicator will turn off.
- The green “Start” light will flash.
- Click on the green “Start”.
- The drive belts will start up slowly.
- The machine is ready to prune vines.

When there is a vine blockage, press the dome push button to open and close the head.
When there is a heavy blockage, keep the dome push button held down to open the head and reverse the vine out.

After 60 seconds of inactivity, the machine will go to sleep: the belts will stop, the START indicator will flash. To restart, press the START button.

4.3 Stoppage during production

- To stop production voluntarily, press the “STOP” button on the machine.
- To restart, press the “START” button.

4.4 Emergency stop

- If there is a risk to the machine or the user, press the “EMERGENCY STOP” button.

- The red “Fault” indicator will light up and the machine will stop immediately.

4.5 Restart after an emergency stop

To restart the machine after an emergency stop:

- Solve the problem.
- Check that the machine is ready to restart (no tools, etc.).
- Turn the emergency stop button to unlock it.
- Press the “RESET” button.
- Press “START”.

4.6 Stoppage at the end of production

To stop the machine at the end of production:

- Press the “STOP” button.
- Close the pneumatic valve.
- The air-presence indicator will disappear.
- Turn the main switch to 0.

Switch off the machine before any work or maintenance operation.

5 Servicing - Maintenance

5.1 Safety of maintenance operations

Prior to any maintenance and/or servicing operation, please read and observe all the safety instructions set out in **§ 2**.

The machine must be off, please refer to **§ 4.6**.

Before carrying out maintenance work:

- Stop the machine
- Remove the mains plug.

If the machine is not unplugged, electric shock or injuries may occur.

Knife blade removal and adjustment can cause cuts.
This must be carried out with care.
Gloves must be worn during these operations

5.2 Cleaning and maintenance.

5.2.1. Cleaning the machine

Before starting production, the machine must be cleaned so it can be used under the best possible conditions.

Daily maintenance:

- General blowing of the equipment.
- Removal of wood debris under the drive train group.

Weekly maintenance:

- Verification of belt condition.
- Verification of the cutting edge on each blade.
- Refilling of oil on the head runners.

5.2.2. Sharpening the blades.

To sharpen the blades, they must be removed from the mounts so they can be put onto the specially-designed sharpening tool.

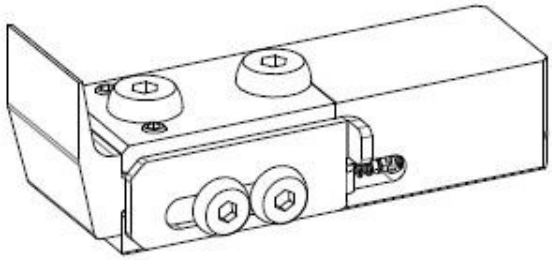


Figure 6 - Blade sharpening tool

- Position the tool on the worktop at 90° to the sliding tool rest.

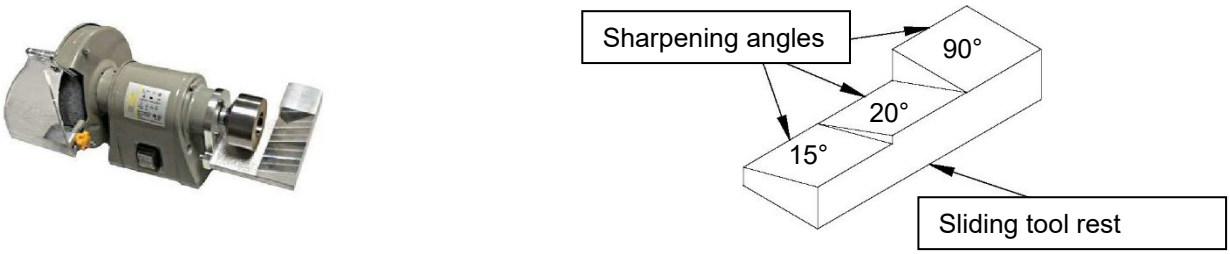


Figure 7 - Grinder and sliding tool rest

- Refine the flat side of the blade by passing it against the grinder.

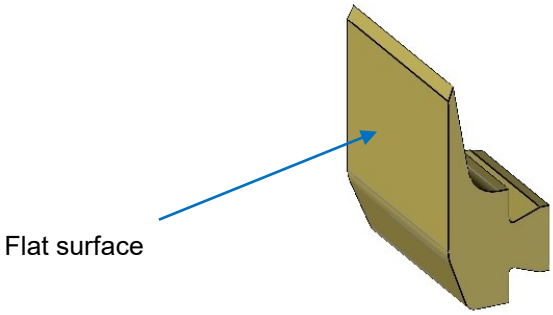


Figure 8 - How to do the flat surface on the blade

- Position the tool on the worktop at 15° to the sliding tool rest.
- Refine the cutting edge of the blade by passing it against the grinder.

5.2.3. Remounting the blades

The blade (1) must be positioned on the mount (2) using the dovetail. It is then held in position by tightening the backplate (3) against the assembly with the very low M5x10 socket head cap screws (10.9) (4).

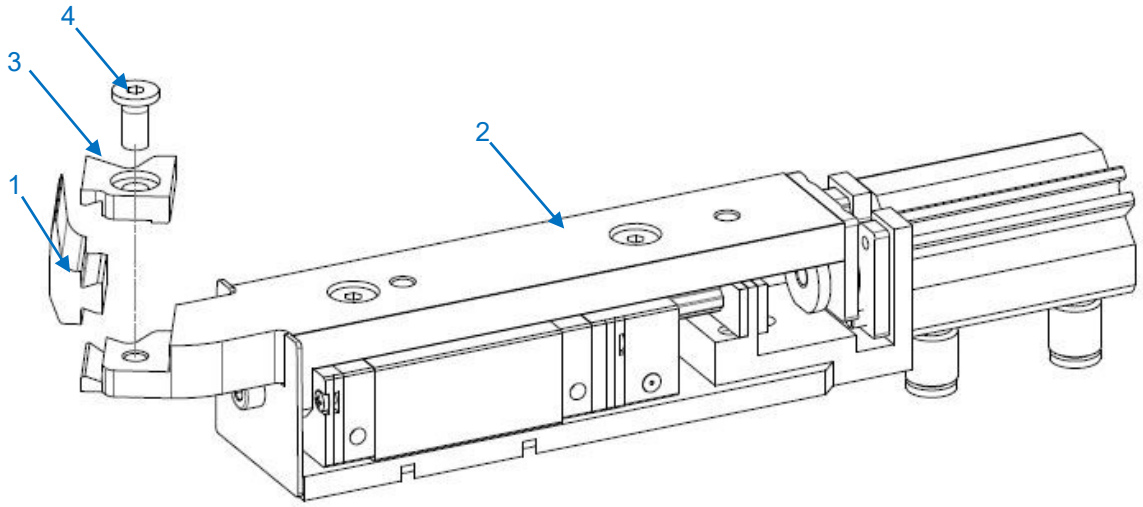


Figure 9 - Blade rest

The re installation order is important. Position the lower blade (1) first, then install the blades that follow clockwise.

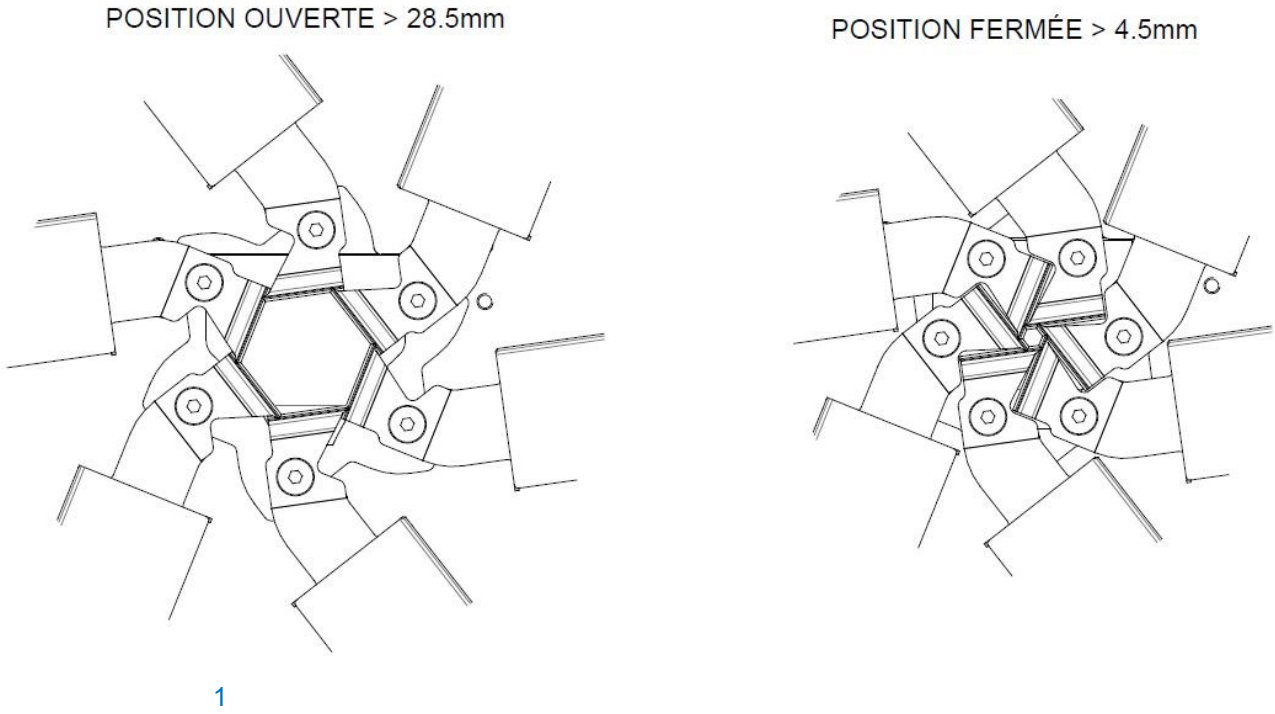


Figure 10 - blade installation

5.2.4. Refilling oil on the head runners

- Prepare an oilcan (or a syringe) by filling it up with Total Carter SH1000 or SHC636 oil.
- Remove the red cap at the back of the runner (1) using a screwdriver.
- Inject the oil through the orifice until the container is full.

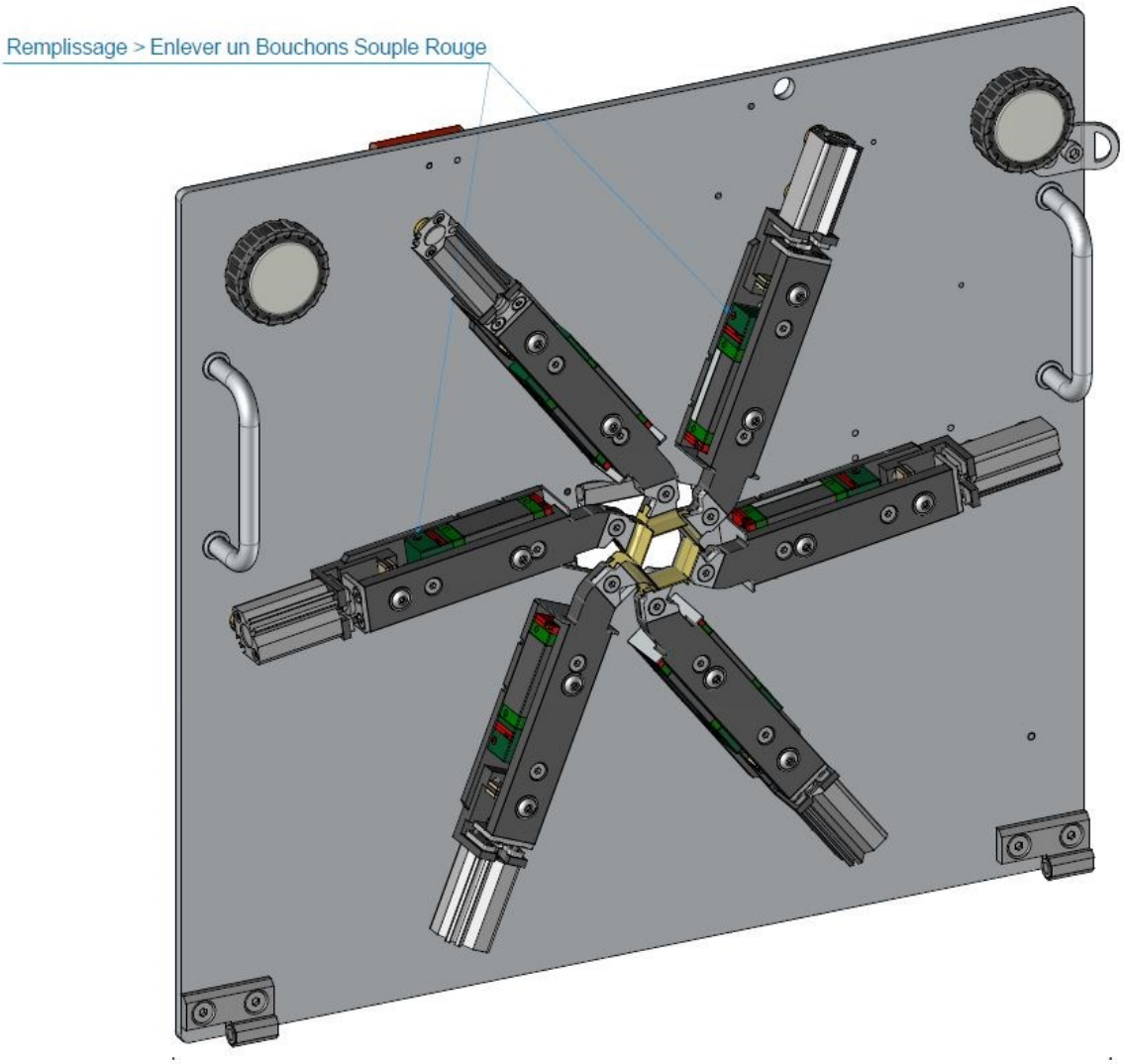


Figure 11 - Accessing the runner lubrification cartridges

- Place the cap back on.
- Repeat the operation on each runner.

5.2.1. Changing belts on the drive train unit

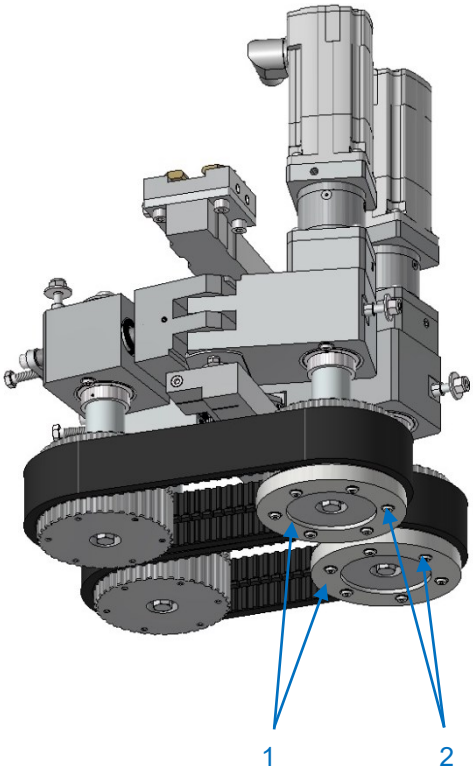


Figure 12 - Removing the plates

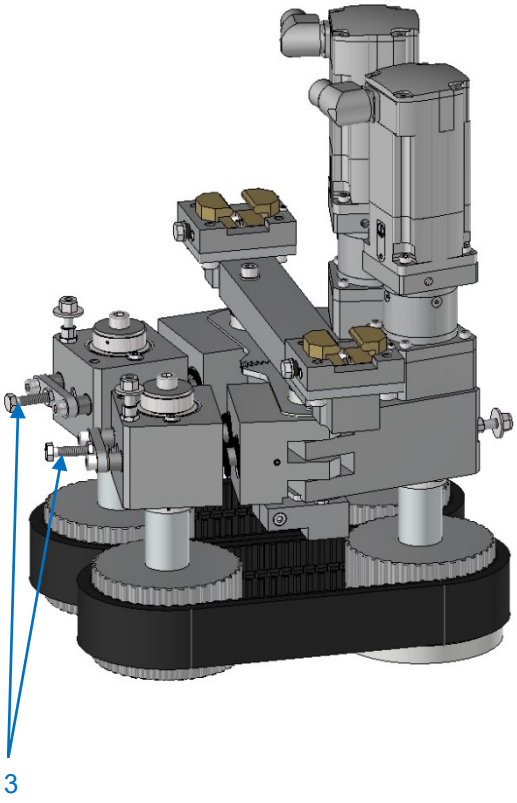


Figure 13 - Compressing the springs

- Remove the plates (1) by taking out the screws (2).
- Tighten the screws (2) so as to compress the spring and release the belt.
- Manually spread the two belts and insert a wedge where the pulley shafts (4) are in order to create space between the two belts.

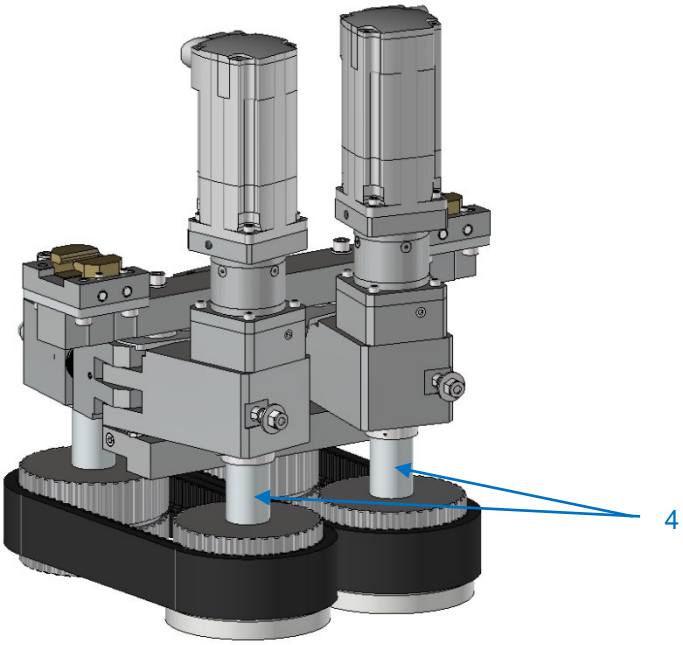


Figure 14 - Pulley shafts

- Manually wind the pulley while pressing on the belt to remove it from the system.
- Repeat the operation for the second belt.

- Install the new belt by manually winding the pulley and ensuring that the central guide is correctly positioned in the specially-designed groove.
- Repeat the operation for the second belt.
- Remove the wedge in order to put the belts back in their operating position.
- Undo the screw to release the spring and put the belt under tension.
- Remount the plates using the screws.

5.2.2. Maintenance Mode - Function test for the units

To be able to use this programme, the machine must be switched on, and the cover and waste hatch closed.

The maintenance mode is designed to manually test the function of each unit.
It can only operate with the cover closed.

- Turn the 3-position button to operating mode “0”.
- Press START to close the belts.
- Press STOP to open the belts.
- Press the dome push button to open and close the head 10 times in succession.

6 Appendices

6.1 Technical features

6.1.1. Machine dimensions

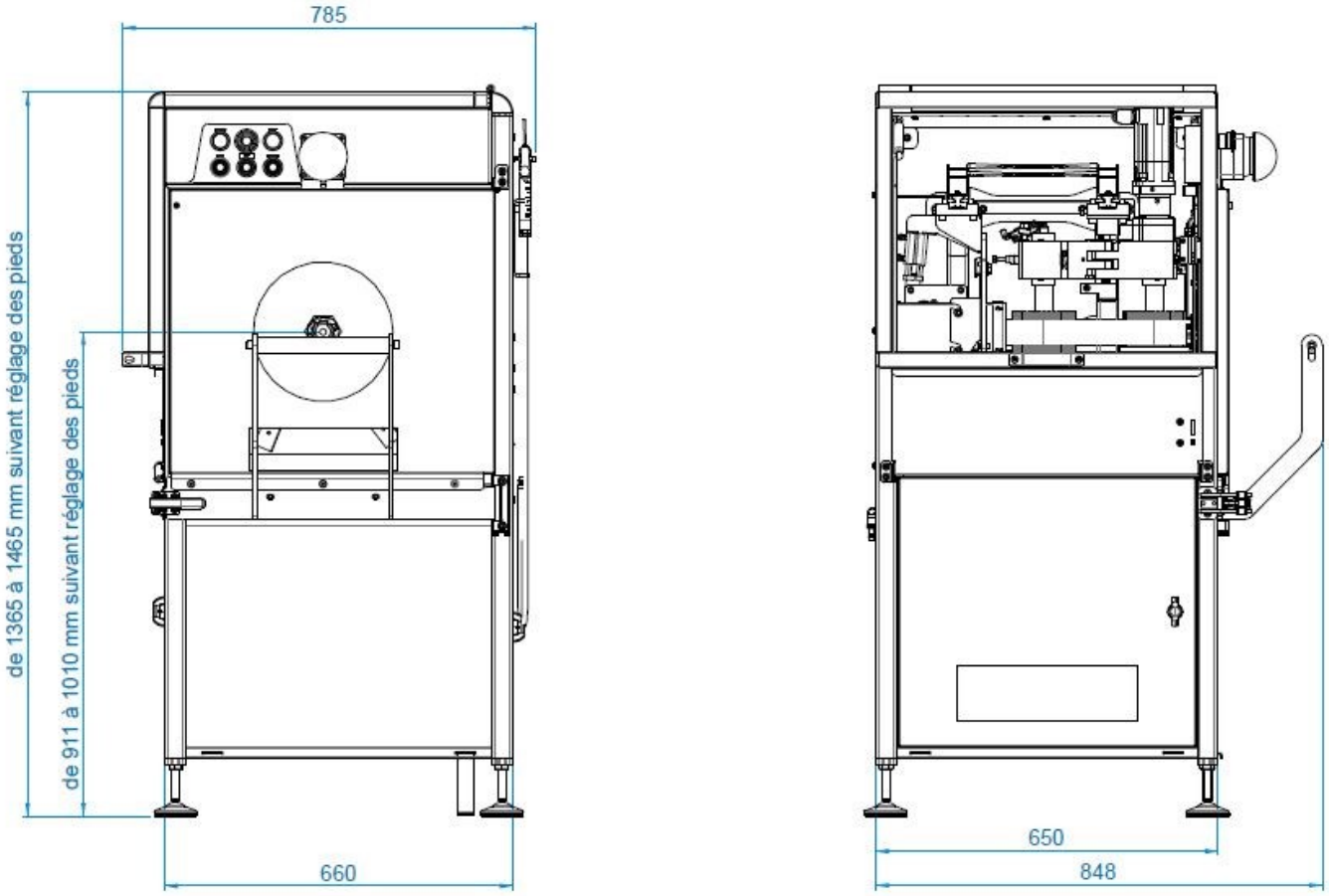


Figure 15 - Machine dimensions

- Weight ⇒ 200kg

6.1.2. Machine features

- Machine for pruning mother vines.
- Improved efficiency and reliability compared to manual processing
- Integrated protective housing for safe, clean and quite operation.
- Cutting head for cleaning vines, featuring 6 blades mounted on runners and pneumatic cylinders.
- Removable front head for easy maintenance.
- Fast installation and removal of blades, moving parts and belts.
- Automatic mechanical blade cleaning.
- Rubber belt suspended drive train with variable speed.
- Management of all operations through a programmable controller.
- Independent modular design for fast maintenance.
- User friendly and easy cleaning.
- CE standard compliant equipment.

6.1.3. Pneumatic power supply

- Supply 6 bars minimum
- Pipe connection Ø9 interior
- Consumption 6 m³/h

6.1.4. Electrical supply

- Plug type Type E
- Voltage 230 VAC 1 Phase + E + N.
- Current 6.5A
- Power 0.4kW
- Supply frequency 50Hz

6.1.5. Operating conditions

- Ventilated to remove heat and odours from the machine
- Area temperature ..... 0°C ≤ T° < 40°C
- Relative humidity..... 30 % < µ < 90%
- Acoustic power ≤ 78 dB (A).

6.1.6. Storage conditions

Storage prior to commissioning

The machine, still in its crate, must be placed in a room where the temperature is between 0°C and 40°C with humidity level below 90%.

Long-term storage

Once unpacked, the machine must be put back into its crate if possible, or at least covered with cardboard packaging and stored in a room away from a corrosive atmosphere and where the temperature is between 0°C and 40°C and humidity level below 90%.

The machine must be cleaned before storage.

6.2 Registration plate

The machine's nameplate is located on the back of the machine.

The following information is provided:

- Type of machine.
- Serial number.
- Electrical voltage of the machine.
- Year of manufacture of the machine.
- "CE" mark.
- Telephone number of **SFERE BM**.

6.3 List of Faults

Fault	Description	Solution
Red flashing indicator.	▶ Cover safety fault.	▶ Check that the cover and waste hatch are closed.
	▶ Emergency Stop is activated.	▶ Turn the ES button to unlock it. ▶ Press the RESET button.
Red solid indicator.	▶ Speed variator fault.	▶ Stop the machine by turning the main switch to 0. ▶ Wait 30 seconds. ▶ Restart the machine by turning the main switch to 1.

6.4 EC Declaration of Conformity

EC DECLARATION OF CONFORMITY

Machinery Directive Annex II. A

The manufacturer, importer or person responsible for placing on the market:

Company: **SFERE BM** SAS
Address: Zone Industrielle de la Pomme - 31250 REVEL

Hereby declares that the new (or considered new) work equipment or protective means described hereafter:

Brand: **BM packaging**

Type: **999-18-016 ; BM6 MOTHER VINE PRUNING MACHINE.**

Series N°: serial from N° 91816001 to N°91816040

Year: 2021

1- Complies with:

❒ Machinery Directive 2006/42/EC
❒ EMC Directive 2014/30/EU
❒ low voltage directive 2014/35/EU

2- Has been built in accordance with harmonised standards:

❒ EN ISO 12100: 2010
❒ EN60204-1: 2006/A1: 2009
❒ EN61000-6-1:2007
❒ EN61000-6-3:2007
❒ EN62233: 2008

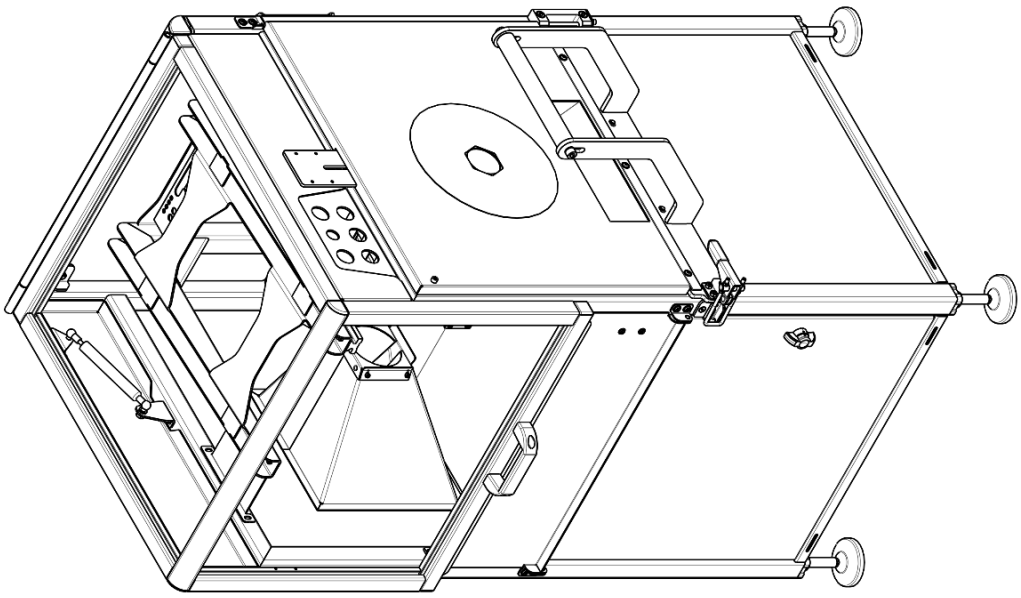
Signed in Revel on

In a generic form.
The signed declaration is delivered with the machine.

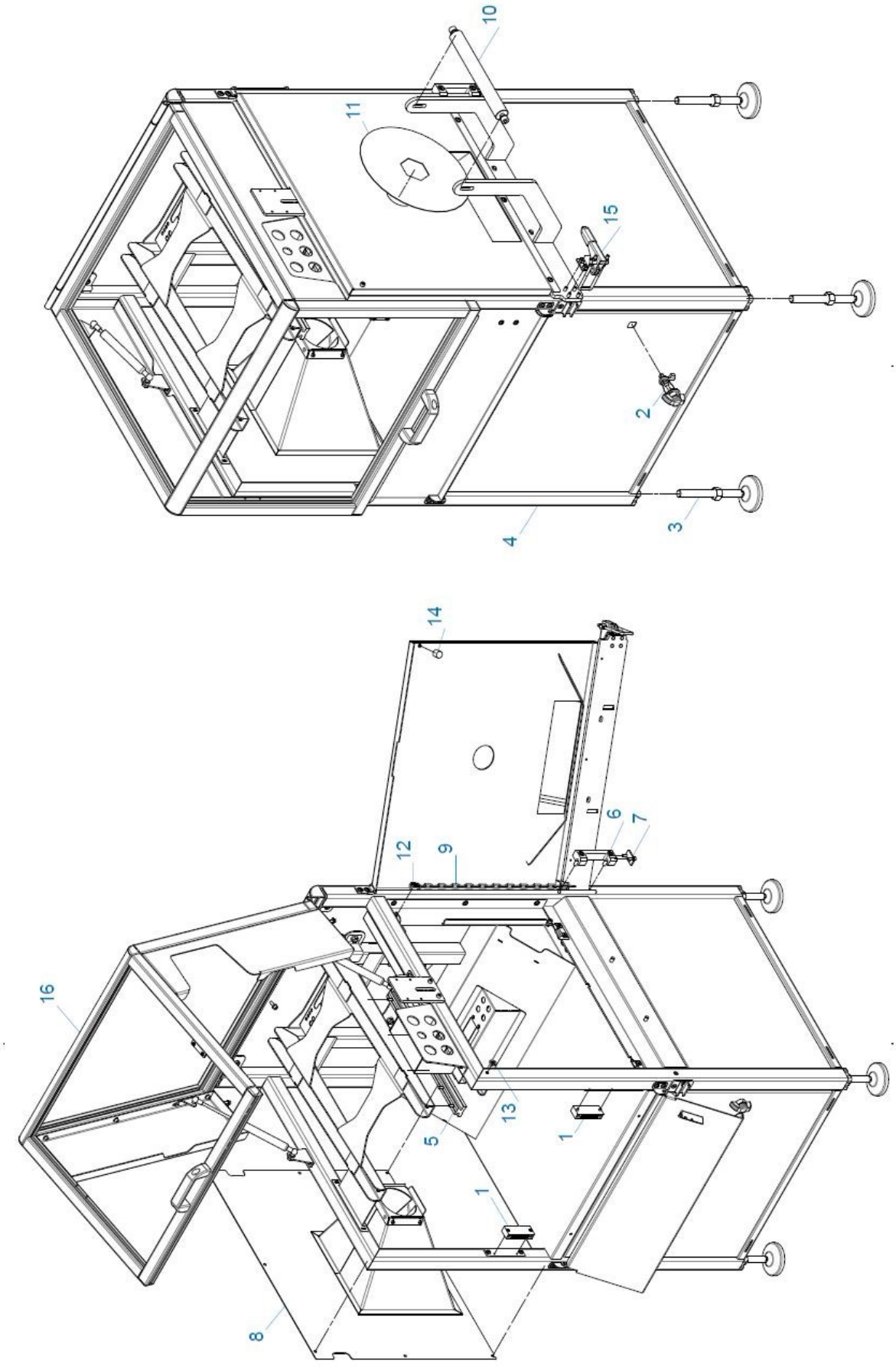
6.5 Exploded views

6.5.1. Chassis unit

902-19-001 / GROUPE CHASSIS BM6

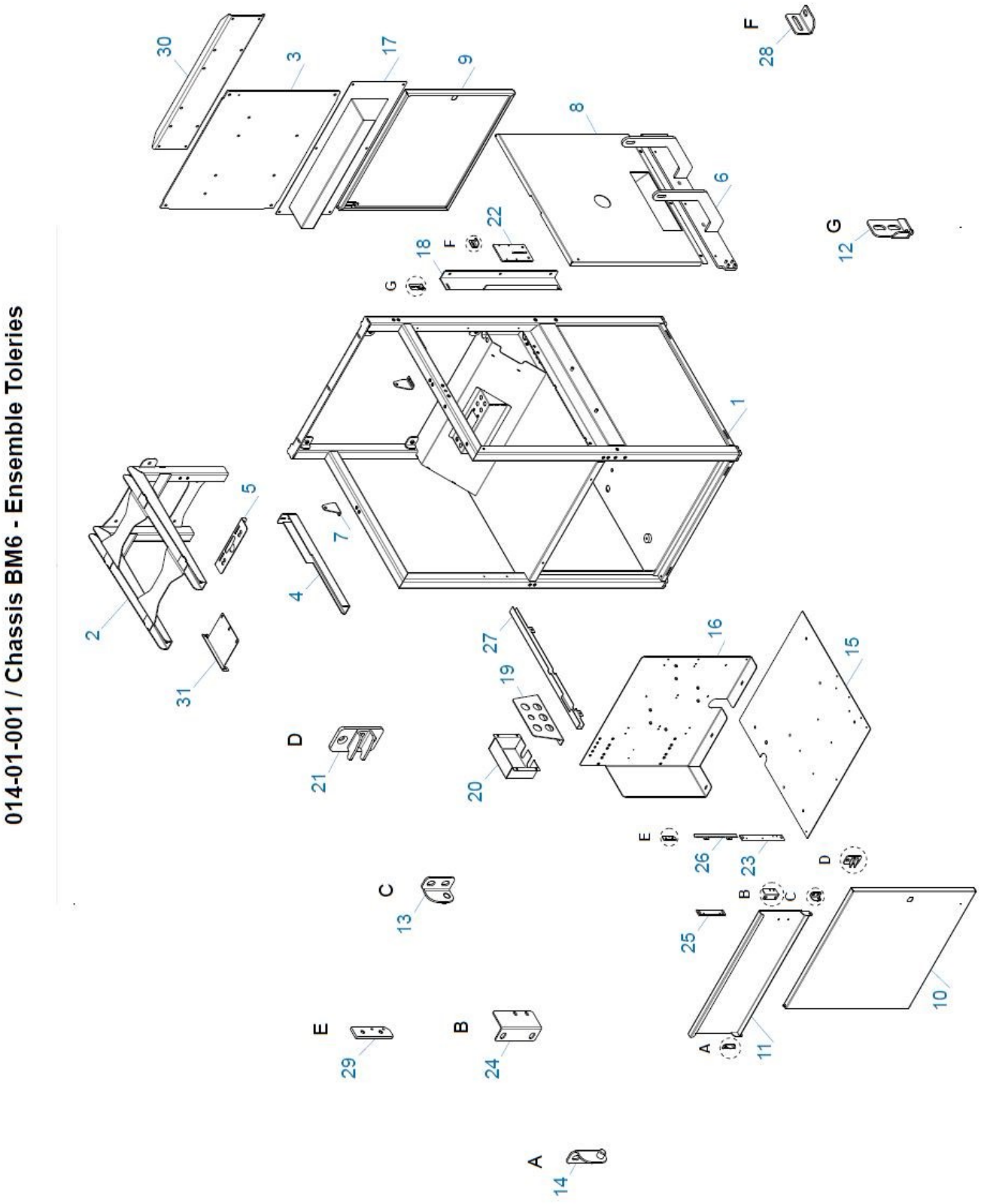


902-19-001 / GROUPE CHASSIS BM6



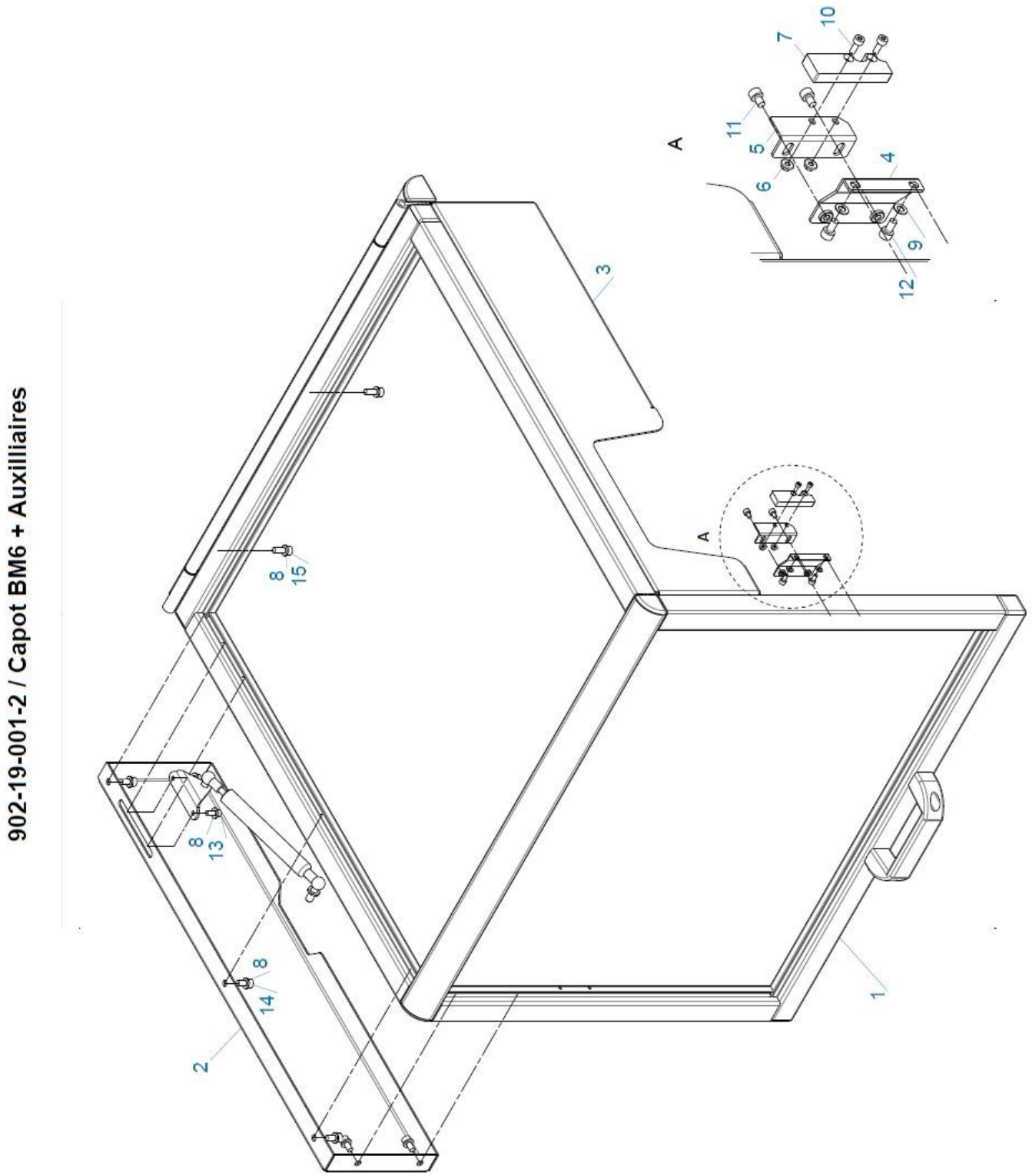
902-19-001 / GROUPE CHASSIS BM6

N°	Référence	Désignation	Qté
1	002-07-036-31	Loqueteau Magnétique Rectangulaire 76x26x16 (EA.66, 200N)	2
2	012-04-005	Loquet à Compression à Serrage Réglable - avec Serrure	2
3	012-04-017	Pied Antivibratoire Réglable Ø80 - M16 (L.180 avec AntiGliss)	4
4	014-01-001	Chassis BM6 - Ensemble Toleries	1
5	014-01-006	Rail de Guidage Igus TS-01-25 L400	1
6	014-01-007	Charnière Guide Bois & Porte Avant	1
7	014-01-008	Plaquette Charnière Guidage Bois	1
8	014-01-009	Carter de Sortie BM6 Sans Option	1
9	014-01-011	Chainette de Liaison Ø3-45Kg - L=470	1
10	014-01-012	Guide Bois Brut (Rond Ø30)	1
11	014-01-019	Autocollant Entrée Bois	1
12	100-01-001	Maillon Rapide Ø3	2
13	100-02-001	Contre Plaque Métallique Ronde pr Aimant (Galva, Ep.2mm)	1
14	100-02-002	Ventouse Magnétique Taraudée M6 - Ø17x16 - 27N	1
15	100-13-001	Sauterelle à Crochet Verticale MTD.320-T3 (075)	1
16	902-19-001-2	Capot BM6 (+ Auxilliaires)	1


014-01-001 / Chassis BM6 - Ensemble Toleries
30
3
17
9
8
F
28
6
22
18
F
G
12
G
1
5
7
4
2
31
27
19
16
15
D
21
20
E
26
23
D
B
C
C
13
25
10
E
29
B
24
A
11
A
14

014-01-001 / Chassis BM6 - Ensemble Toleries

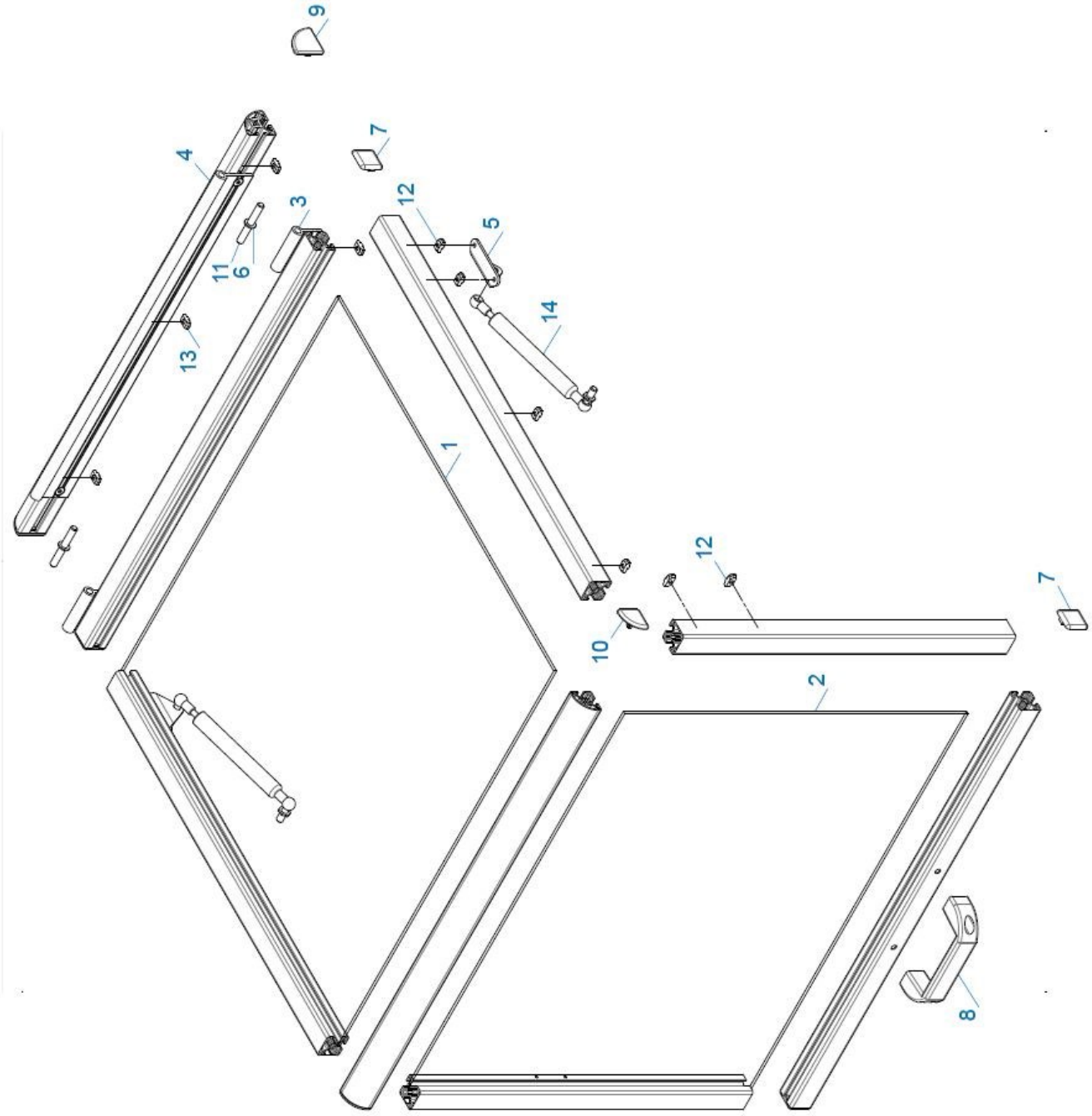
N°	Référence	Désignation	Qté
1	014-01-001-1	Chassis de Base BM6 (Mécano-Soudé)	1
2	014-01-001-2	Support Entrainement	1
3	014-01-001-3	Tôle Support Potence	1
4	014-01-001-4	Rail Inférieur (Antirotation Entrainement)	1
5	014-01-001-5	Equerre Passe Cables	1
6	014-01-001-6	Guidage Entrée Bois - Support	1
7	014-01-001-8	Patte de Fixation Vérins à Gaz	2
8	014-01-001-9	Porte Maintenance Tête	1
9	014-01-001-10	Porte Droite Coffret Automatisme	1
10	014-01-001-11	Porte Gauche Coffret Automatisme	1
11	014-01-001-12	Trappe à Déchet	1
12	014-01-001-13	Charnière Supérieur Porte Avant	1
13	014-01-001-14	Charnière Droite Trappe Déchet	1
14	014-01-001-15	Charnière Gauche Trappe Déchet	1
15	014-01-001-16	Platine Automatisme Horizontale	1
16	014-01-001-17	Platine Automatisme Verticale	1
17	014-01-001-18	Pupitre Latéral de Réglage (BM6)	1
18	014-01-001-19	Tôle Fermeture Coté Droit Tête	1
19	014-01-001-20	Platine Pupitre Avant (6 Trous)	1
20	014-01-001-21	Boite Pupitre Avant (6 Boutons)	1
21	014-01-001-22	Crochet Porte Maintenance Tête	1
22	014-01-001-23	Support Champignon	1
23	014-01-001-24	Support (Amagnétique), Aimant et Inter Sécurité	1
24	014-01-001-25	Support Aimant Sécurité de Trappe	1
25	014-01-001-26	Support Aimant Fermeture Trappe (Réglable)	1
26	014-01-001-27	Passage Câble Sécurité Trappe	1
27	014-01-001-28	Passage de Câbles Haut	1
28	014-01-001-29	Rabateur Tête de Coupe	1
29	014-01-001-30	Support Amagnétique pr Sécurité Capot	1
30	014-01-001-31	Raidisseur Tôle Support Potence	1
31	014-01-001-32	Renfort Latéral Potence	1


902-19-001-2 / Capot BM6 + Auxilliaires
A
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

902-19-001-2 / Capot BM6 + Auxilliaires

N°	Référence	Désignation	Qté
1	014-01-002	Capot Profilé Aluminium	1
2	014-01-003	Face Gauche Capot	1
3	014-01-004	Face Droite Capot	1
4	014-01-005	Patte Support Sécurité Capot	1
5	014-01-013	Support Aimant Sécurité Capot	1
6	6923-AZ-M3	Ecrou hexagonal à embase cylindro-tronconique DIN 6923/ISO 4161 - M3	2
7	XCS-ZC1 /XCS-DMC-5902&05	Préventa XCS - Aimant ZC1 pour Inter DMC-5902/05	1
8		Rondelle plate ISO 7089 - 6	17
9		Rondelle plate ISO 7092 - 4	2
10		Vis à tête cylindrique à six pans creux ISO 4762 - M3 × 8	2
11		Vis à tête cylindrique à six pans creux ISO 4762 - M4 × 6	2
12		Vis à tête cylindrique à six pans creux ISO 4762 - M4 × 8	2
13		Vis à tête cylindrique à six pans creux ISO 4762 - M5 × 12	4
14		Vis à tête cylindrique à six pans creux ISO 4762 - M6 × 12	10
15		Vis à tête cylindrique à six pans creux ISO 4762 - M6 × 16	3

014-01-002 / Capot BM6 (FM System)

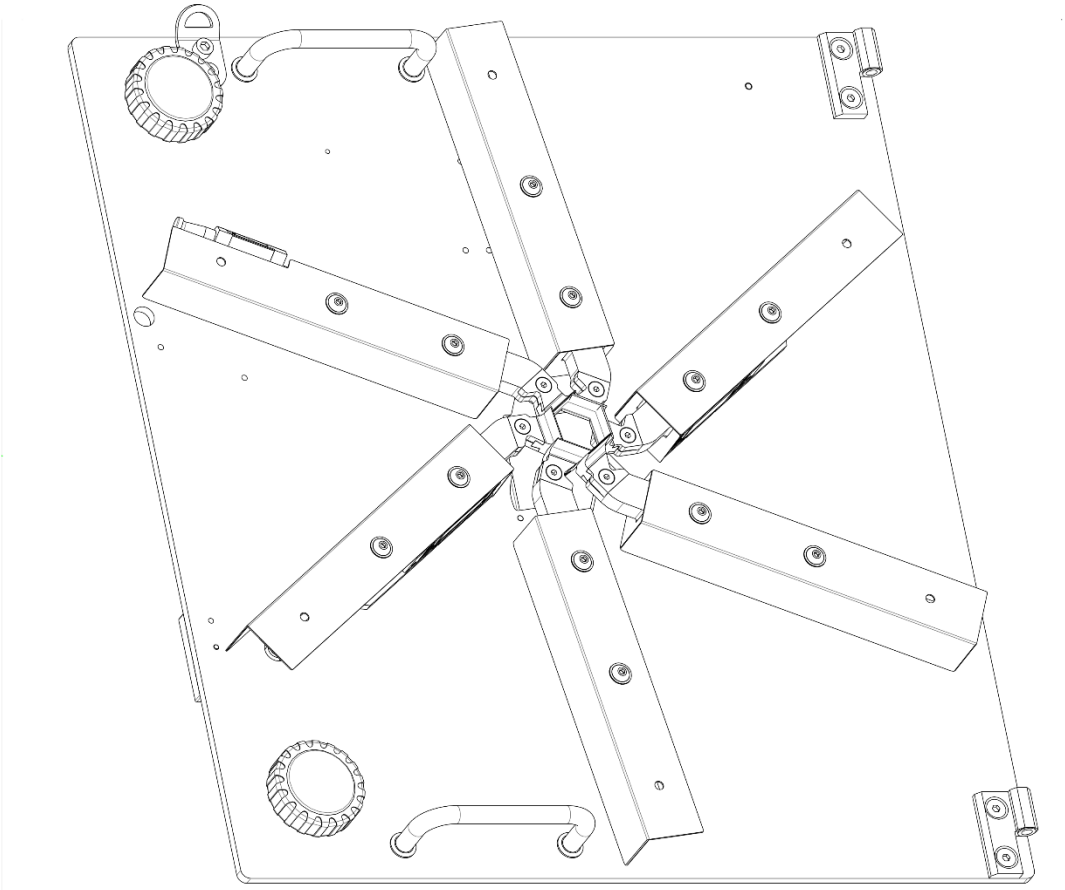


014-01-002 / Capot BM6 (FM System)

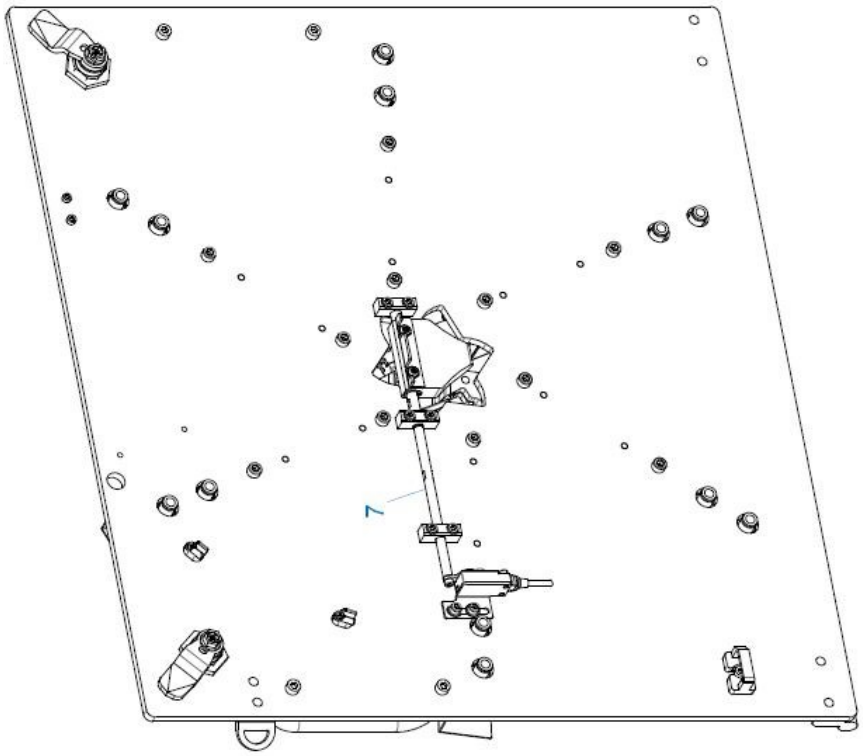
N°	Référence	Désignation	Qté
1	014-01-002-1	Panneau Supérieur (Plexi)	1
2	014-01-002-2	Panneau Avant (Plexi)	1
3	014-01-002-8	Charnière 30 - L60	2
4	014-01-002-9	Charnière 40 - L525	1
5	014-01-002-11	Equerre Vérin Gaz - Rotule Extérieure	2
6	125-NY-8-14-2	Rondelle Nylon DIN 125 - Ø8x14x2	2
7	1183	Embout de Profilé Carré 30×30	4
8	1223	Poignée Plastique 1223 - E=122	1
9	1728	Embout pour 40×40N-R 1943	2
10	1773	Embout de Profilé 30×30-R 1925	2
11	AC-8x60	Axe Charnière Ø8 x 60	1
12	GN505-8-M5	Ecrou/Tasseau Pivotant - Profilé 30, Rainure 8 - M5	14
13	GN505-8-M6	Ecrou/Tasseau Pivotant - Profilé 30, Rainure 8 - M6	3
14	VG-100-150N	Vérin à Gaz 150N Course 100 + Rotules	2

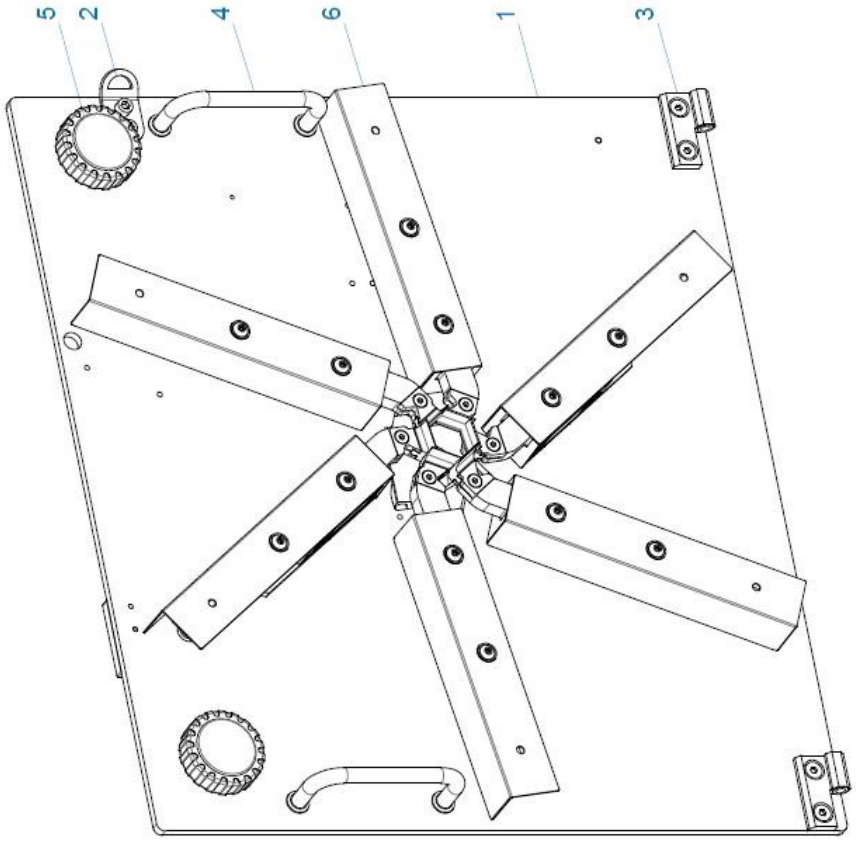
6.5.2. New cutting unit

902-19-002 / GROUPE TETE DE COUPE BM6



902-19-002 / GROUPE TETE DE COUPE BM6



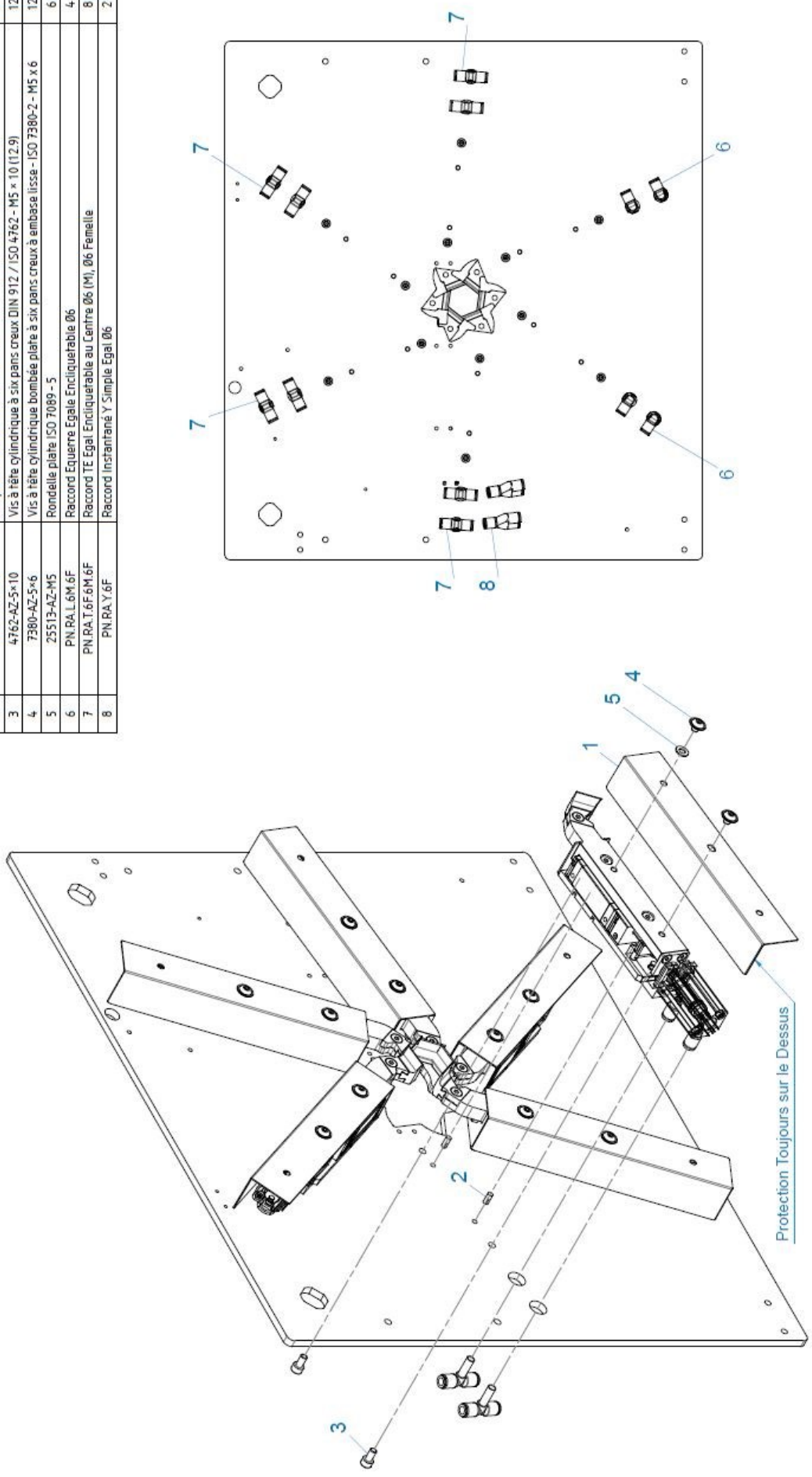


902-19-002 / GROUPE TETE DE COUPE BM6

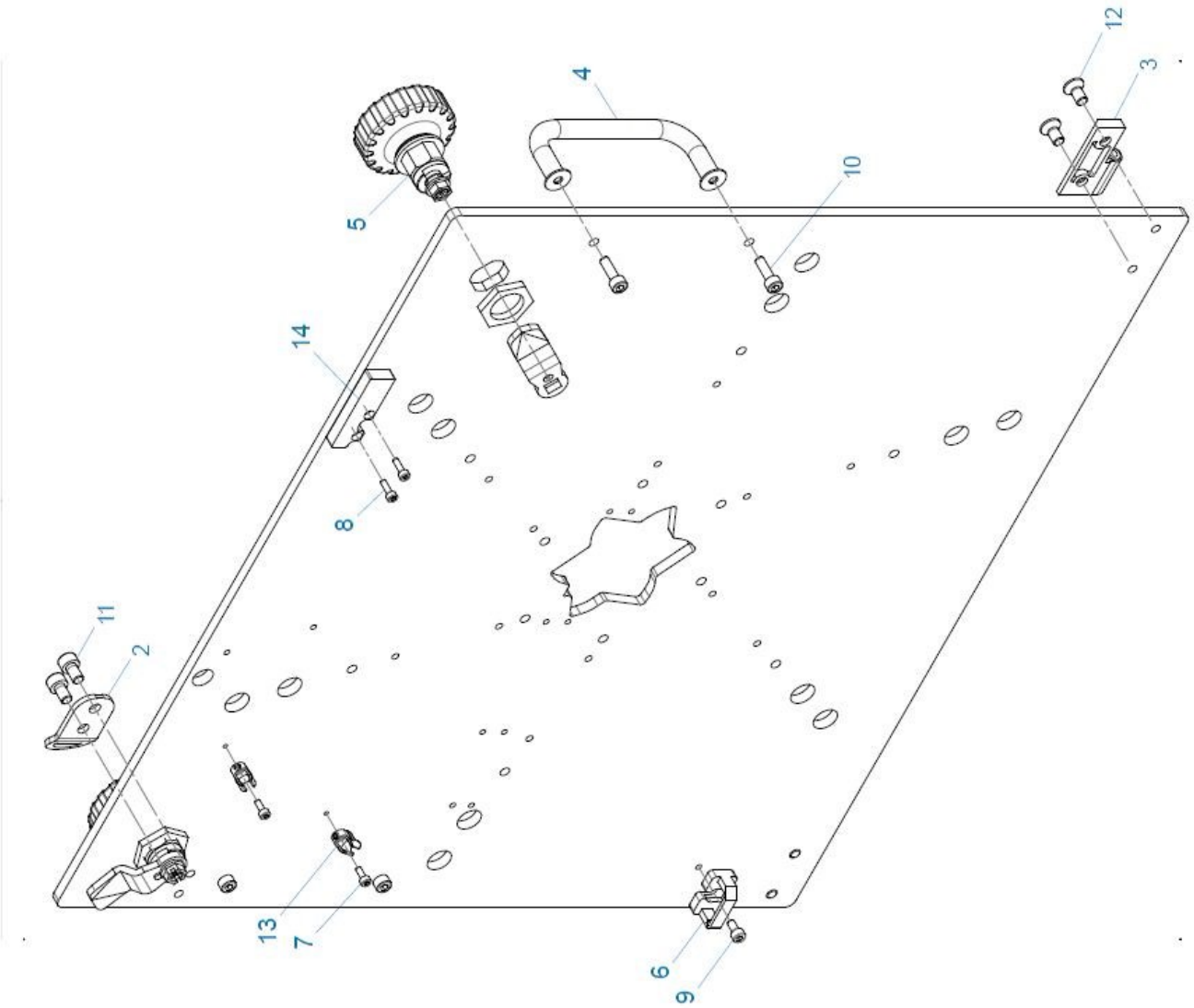
N°	Référence	Désignation	Qté
1	014-02-001	Plaque Tête de Coupe	1
2	014-02-015	Accroche Chainette Tête de Coupe	1
3	100-04-001	Charnière Déboitable Plate Inox 50	2
4	100-11-001	Poignée Etrier Mince Ø10 - EA100	2
5	100-14-001	Loquet à Came - Bouton Molleté Technopolymère Série 19-132	2
6	902-17-002-1	Bloc pour Couteau Mobile BM6 avec glissière Hiwin	6
7	902-19-002-2	Volet de Détection Bois Complet	1

902-19-002 / GROUPE TETE DE COUPE BM6

N°	Référence	Désignation	Qté
1	014-02-012-B	Demi Capot Supérieur V2 (BM6)	4
2	1474-2-4x10	Goupille cannelée ISO 8741 - 4 x 10	12
3	4762-AZ-5x10	Vis à tête cylindrique à six pans creux DIN 912 / ISO 4762 - M5 x 10 (12.9)	12
4	7380-AZ-5x6	Vis à tête cylindrique bombée plate à six pans creux à embase lisse - ISO 7380-2 - M5 x 6	12
5	25513-AZ-M5	Rondelle plate ISO 7089 - 5	6
6	PN.RA.L.6M.6F	Raccord Equerre Egale Encliquetable Ø6	4
7	PN.RA.T.6F.6M.6F	Raccord TE Egal Encliquetable au Centre Ø6 (M), Ø6 Femelle	8
8	PN.RA.Y.6F	Raccord Instantané Y Simple Egal Ø6	2



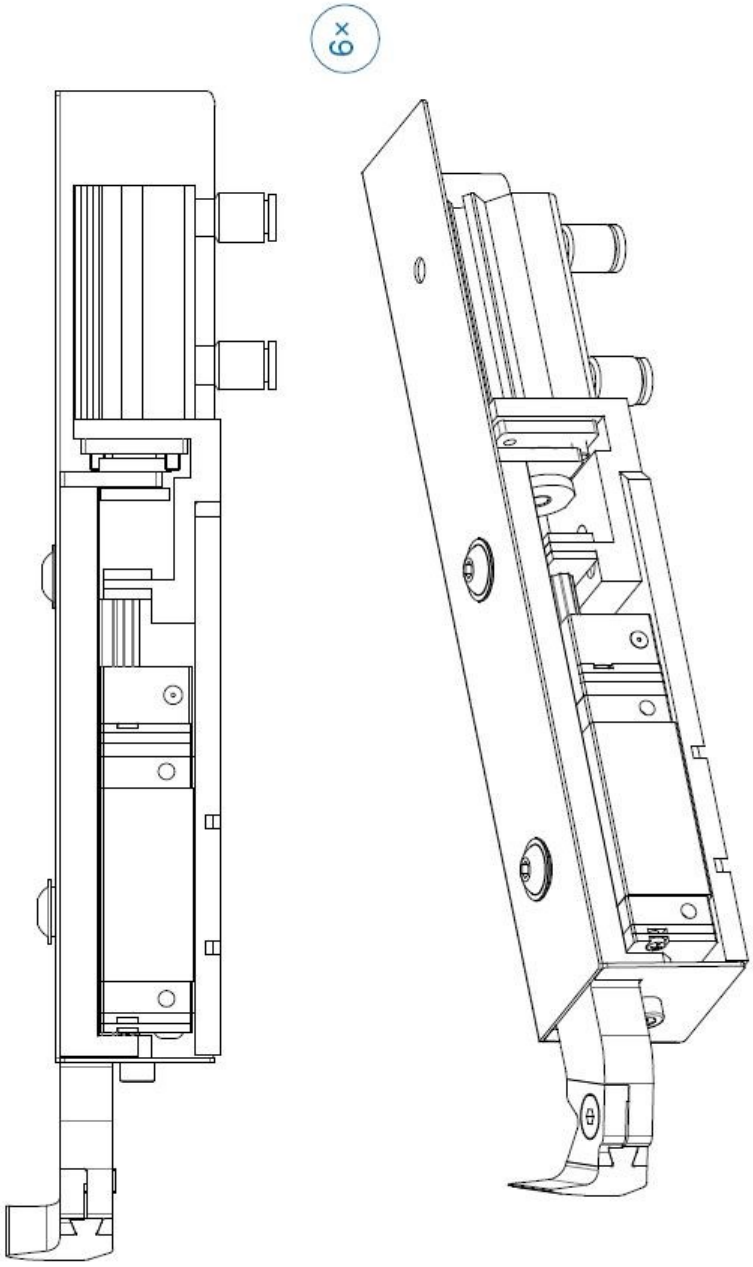
902-19-002 / GROUPE TETE DE COUPE BM6

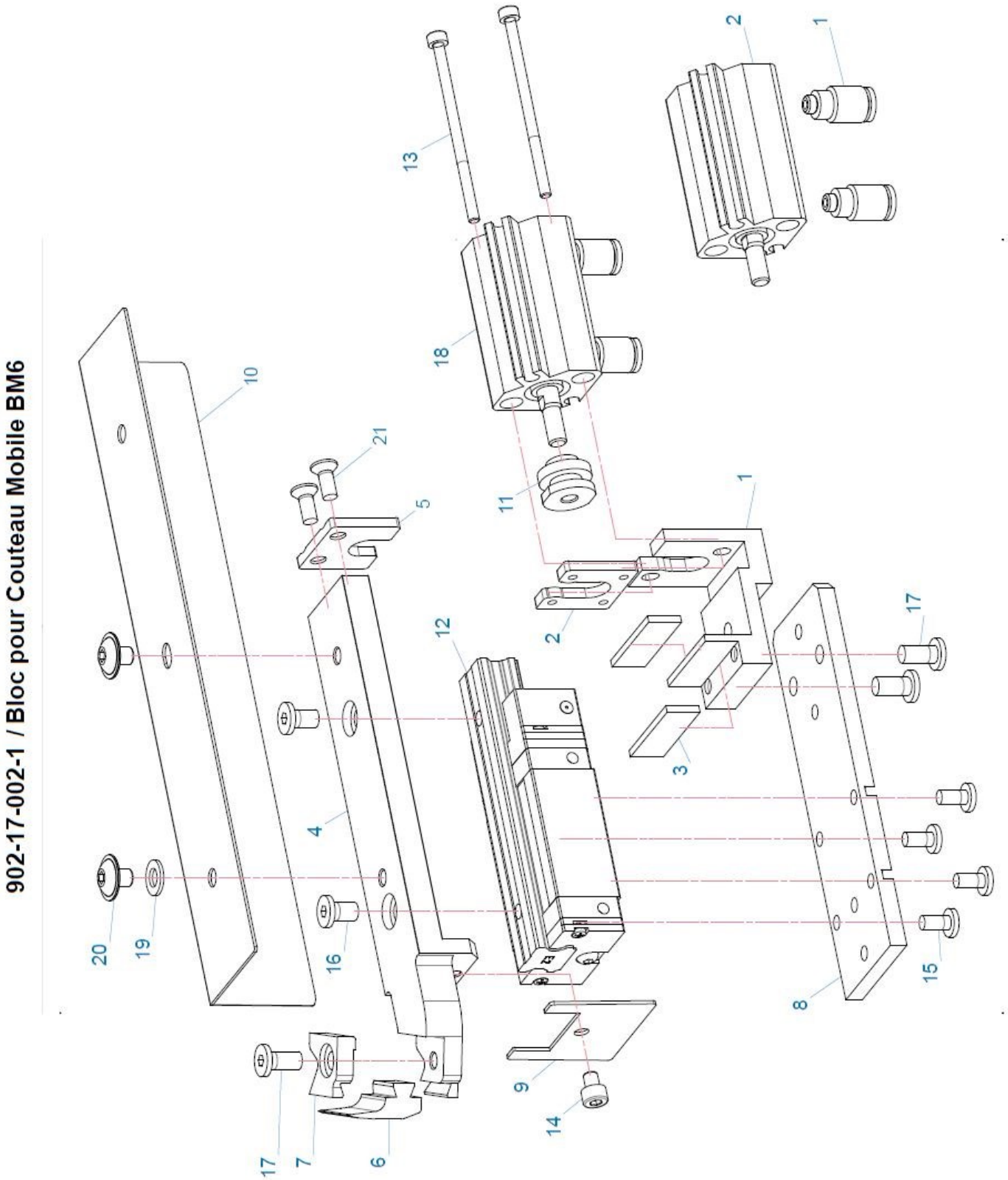


902-19-002 / GROUPE TETE DE COUPE BM6

N°	Référence	Désignation	Qté
1	014-02-001	Plaque Tête de Coupe	1
2	014-02-015	Accroche Chainette Tête de Coupe	1
3	100-04-001	Charnière Déboitable Plate Inox 50	2
4	100-11-001	Poignée Etrier Mince Ø10 - EA100	2
5	100-14-001	Loquet à Came - Bouton Moleté Technopolymère Série 19-132	2
6	190-411	Attache Cable Type Pliocatch à Visser GA-V200 (27x16 - M4)	1
7	912-AZ-3×8	Vis à tête cylindrique à six pans creux ISO 4762 - M3 × 8	2
8	912-AZ-3×10	Vis à tête cylindrique à six pans creux ISO 4762 - M3 × 10	2
9	912-AZ-4×8	Vis à tête cylindrique à six pans creux ISO 4762 - M4 × 8	1
10	912-AZ-5×16	Vis à tête cylindrique à six pans creux ISO 4762 - M5 × 16	4
11	912-AZ-6×10	Vis à tête cylindrique à six pans creux ISO 4762 - M6 × 10	2
12	7991-AZ-6×12	Vis à tête fraisée à six pans creux ISO 10642 - M6 × 12	4
13	PN.RA.I.6.CL	Clip pour Tube Pneumatique Ø6	2
14	XCS-ZC1 /XCS-DMC-5902&05	Préventa XCS - Aimant ZC1 pour Inter DMC-5902/05	1

902-17-002-1 / Bloc pour Couteau Mobile BM6




902-17-002-1 / Bloc pour Couteau Mobile BM6
1
2
13
18
10
21
5
11
12
4
20
19
16
17
7
6
9
14
3
17
15
8

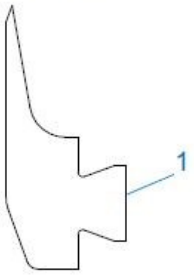
902-17-002-1 / Bloc pour Couteau Mobile BM6

N°	Référence	Désignation	Qté
1	014-02-002-B	Embase Support Vérin V2	1
2	014-02-003	Plaque Fixation Vérin	1
3	014-02-004	Butée Amortissante 28x10	2
4	014-02-006-B	Chariot Simple Couteau V2	1
5	014-02-007-B	Accroche Vérin pour Chariot V2	1
6	014-02-008-AVR	Couteau Réglable Avant V2 (Entrée Arrondie)	1
7	014-02-009	Plaquette Blocage Couteau	1
8	014-02-010	Embase Glissière	1
9	014-02-011-B	Capot Avant V2 (BM6)	1
10	014-02-012-B	Demi Capot Supérieur V2 (BM6)	1
11	014-02-016	Liaison Vérin - Chariot	1
12	100-16-006	Guidage à Billes sur Rail Modèle EGH15CA1TZ0H +DD+E2 (Cartouche + Joint + Dégraissage)	1
13	4762-AZ-3×55	Vis à tête cylindrique à six pans creux DIN 912 / ISO 4762 - M3 × 55 (12.9)	2
14	4762-AZ-4×5	Vis à tête cylindrique à six pans creux DIN 912 / ISO 4762 - M4 × 5	1
20	7380-AZ-5×6	Vis à tête cylindrique bombée plate à six pans creux à embase lisse - ISO 7380-2 - M5 x 6	2
21	7991-AZ-4×10	Vis à tête fraisée à six pans creux ISO 10642 - M4 × 10	2
19	25513-AZ-M5	Rondelle plate ISO 7089 - 5	1
15	CHCEB-AZ-4×8	Vis à tête cylindrique à six pans creux Extremement Basse (10.9) - M4 × 8	4
16	CHCEB-AZ-5×8	Vis à tête cylindrique à six pans creux Extremement Basse (10.9) - M5 × 8	2
17	CHCEB-AZ-5×10	Vis à tête cylindrique à six pans creux Extremement Basse (10.9) - M5 × 10	3
18	PN.VER.12.20.C.DE.ST+R	Vérin Compact Double Effect, Simple Tige, Ø12-C20 + Raccord Droit M5-Ø6	1

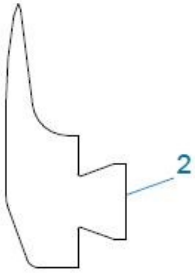
N°	Référence	Désignation	Qté
	PN.VER.12.20.C.DE.ST+R	Vérin Compact Double Effect, Simple Tige, Ø12-C20 + Raccord Droit M5-Ø6	1
1	PN.RA.I.CHC.M5M.6F	Raccord Droit CHC M5 Male , Tube Ø6	2
2	PN.VER.12.20.C.DE	Vérin Compact Double Effect, Simple Tige Fileté CQ2, Ø12-C20	1

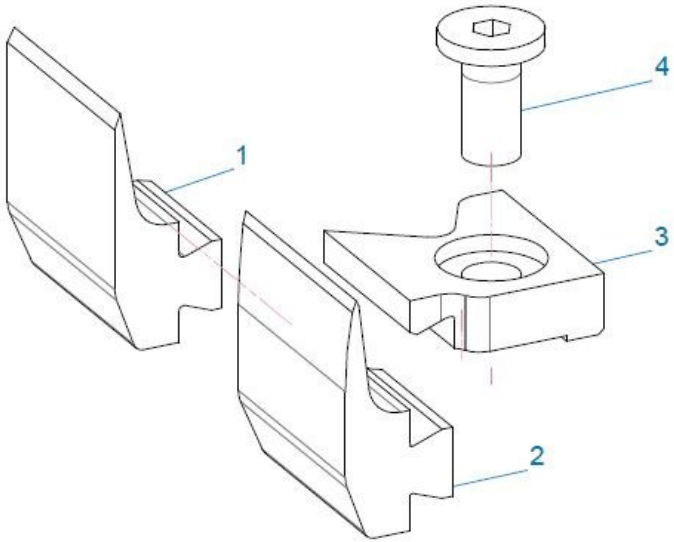
014-02-008-AV&AVR / Kit pour Couteau Réglable - SAV

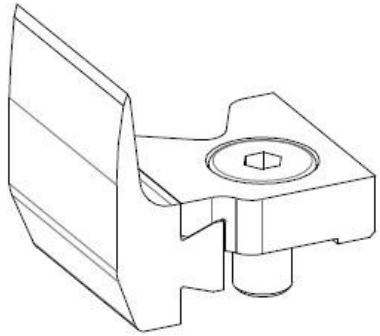
Bois Régulier



Bois Tortueux



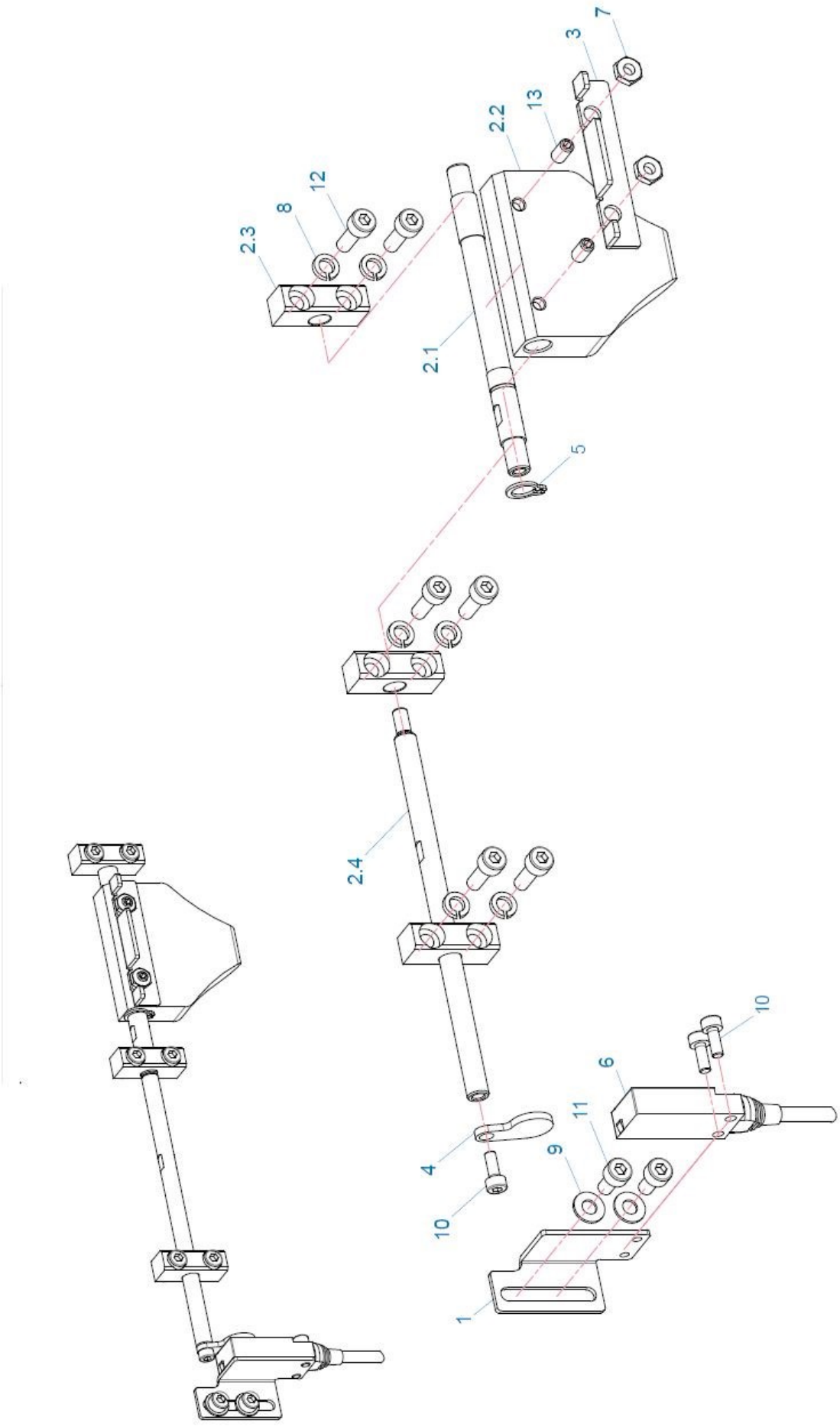




N°	Référence	Désignation	Qté
1	014-02-008-AV	Couteau Réglable Avant	1
2	014-02-008-AVR	Couteau Réglable Avant V2 (Entrée Arrondie)	1
3	014-02-009	Plaquette Blocage Couteau	1
4	CHCEB-AB-5×10	Vis à tête cylindrique à six pans creux Extremement Basse (10.9) - M5 × 10	1

Référence	Désignation	Qté
902-19-002	TETE DE COUPE BM6	1
014-02-008-AV	Couteau Réglable Avant	6
014-02-009	Plaquette Blocage Couteau	6
CHCEB-AB-5×10	Vis à tête cylindrique à six pans creux Extremement Basse (10.9) - M5 × 10	6

902-19-002-2 / Volet de Détection Bois + Auxiliaires

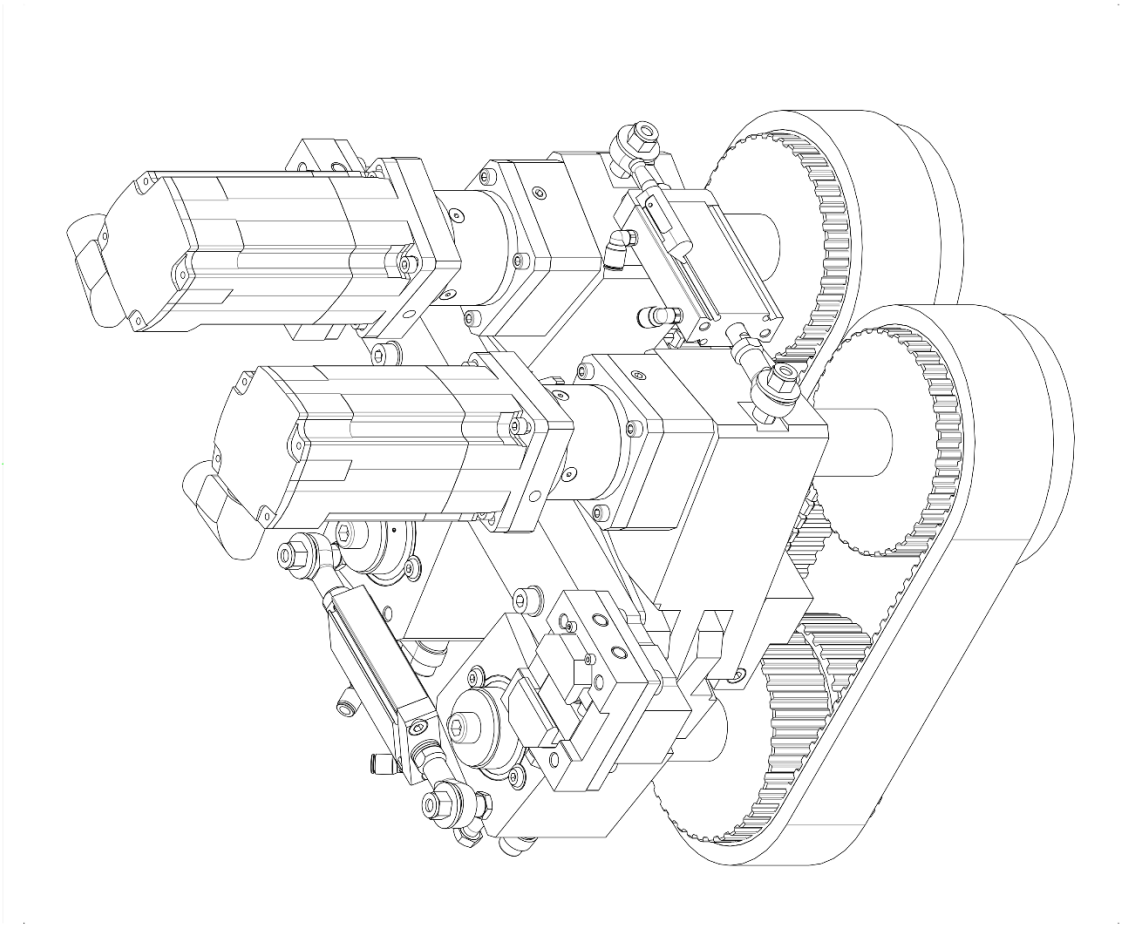


902-19-002-2 / Volet de Détection Bois + Auxiliaires

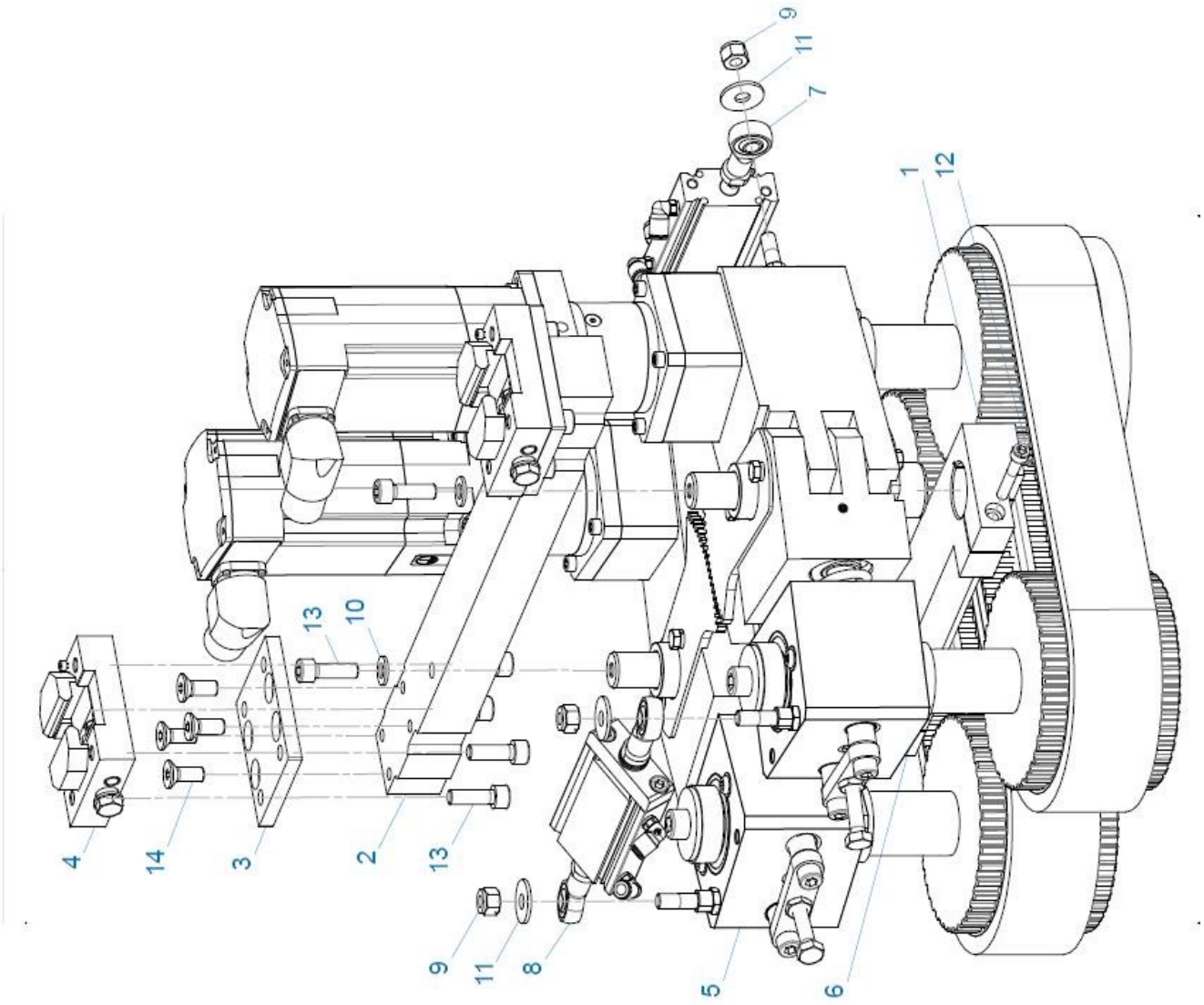
N°	Référence	Désignation	Qté
1	012-01-057	Support Détecteurs Inductifs, Plat 15x22x8	1
2	014-02-030	Volet de Détection (Usinage)	1
2.1	014-02-030-1	Axe Pivot du Volet Détection Bois	1
2.2	014-02-030-2	Volet Détection Bois	1
2.3	014-02-030-3	Pontet Axe Pivot	3
2.4	014-02-030-5	Prolongateur Axe pour Détecteur	1
3	014-02-031	Butée Volet pour Guidage Bois	1
4	014-02-032	Levier de Détection	1
8	127-AZ-4	Rondelle élastique - W, NF E 25-515 / DIN 127B - 4	6
5	471-Brut-7	Anneaux élastique pour arbre NF E 22-165/DIN 471 - Acier Brut - Ø7	1
10	912-AZ-3×8	Vis à tête cylindrique à six pans creux ISO 4762 - M3 × 8	3
11	912-AZ-4×8	Vis à tête cylindrique à six pans creux ISO 4762 - M4 × 8	2
12	912-AZ-4×12	Vis à tête cylindrique à six pans creux ISO 4762 - M4 × 12	6
13	916-AZ-4×8	Vis sans tête à six pans creux DIN 916 / ISO 4029 - M4 × 8	2
7	4035-AZ-4	Ecrou bas hexagonal ISO 4035 - M4	2
9	25513-AZ-4	Rondelle plate ISO 7089 / NFE 25 513 - 4	2
6	XS7F1A1NAL01M8	OsiSense XS - Détecteurs de Proximité Inductifs, Plat 15x22x8, Porté 4mm	1

6.5.3. Drive train unit

902-19-010 / GROUPE ENTRAINEMENT

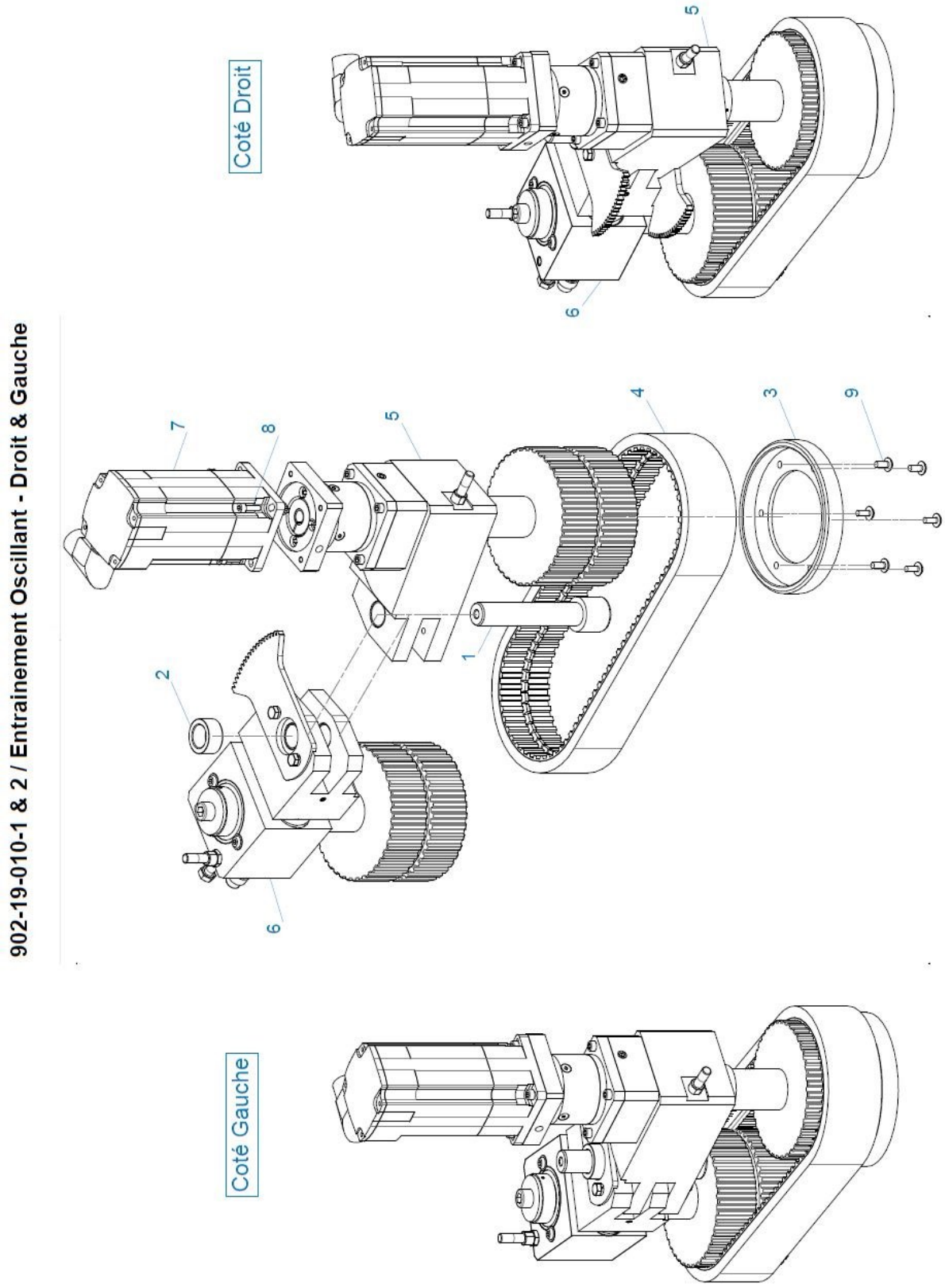


902-19-010 / GROUPE ENTRAINEMENT



902-19-010 / GROUPE ENTRAINEMENT

N°	Référence	Désignation	Qté
1	014-10-015	Traverse Inférieure	1
2	014-10-016	Traverse Supérieure	1
3	014-10-020	Platine Fixation Blocage Manuel	2
4	902-00-001-3	Blocage Manuel pour Rail Igus T25 (à Vis)	2
5	902-19-010-1	Entrainement Oscillant Coté Droit	1
6	902-19-010-2	Entrainement Oscillant Coté Gauche	1
7	902-19-010-3	Vérin Presseur Entrée Entrainement	1
8	902-19-010-4	Vérin Presseur Sortie Entrainement	1
9		Ecrou hexagonal à freinage interne ISO 7040 - M8	4
10		Rondelle plate ISO 7089 - 8	2
11		Rondelle plate ISO 7093 - 8	4
12		Vis à tête cylindrique à six pans creux ISO 4762 - M6 × 40	2
13		Vis à tête cylindrique à six pans creux ISO 4762 - M8 × 25	10
14		Vis à tête fraisée à six pans creux ISO 10642 - M8 × 20	8

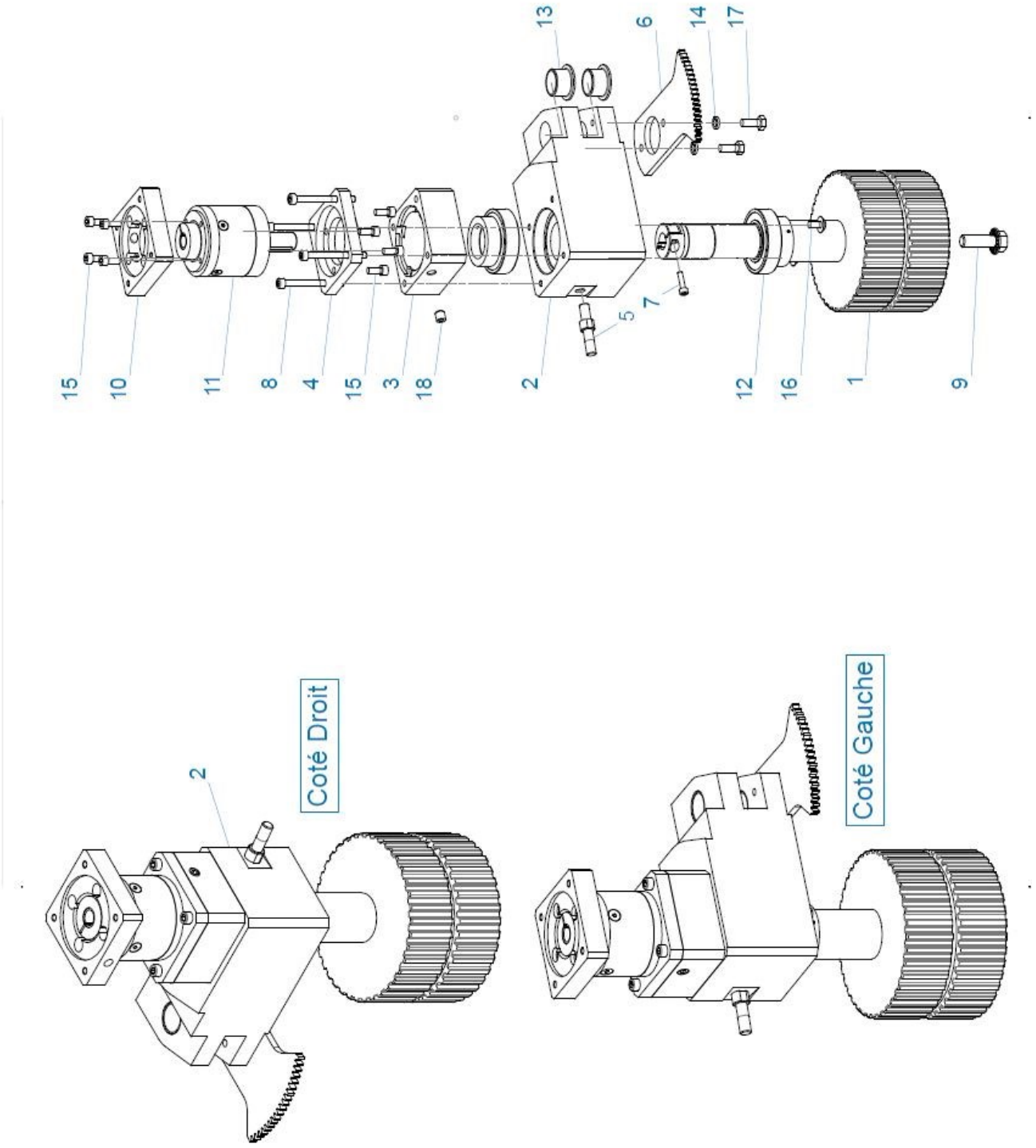

902-19-010-1 & 2 / Entrainement Oscillant - Droit & Gauche
Coté Droit
Coté Gauche
1
2
3
4
5
6
7
8
9

902-19-010-1 & 2 / Entrainement Oscillant - Droit & Gauche

N°	Référence	Désignation	Qté
	902-19-010-2	Entrainement Oscillant Coté Gauche	1
1	014-10-012	Axe Pivot Entrainement	1
2	014-10-013	Entretoise Haute Pivot	1
3	014-10-023	Flasque Courroie 50mm	1
4	014-10-024	Courroie Autoguidée T10K6, 80dts, Lp 800, Larg. 50	1
5	902-19-010-2.1	Bras Motorisé Gauche	1
6	902-19-010-2.2	Bras Tendeur Gauche	1
7	BMP0702R3NA2A	Moteur Brushless Synchrone 70mm 230VAC 550W	1
8		Vis à tête cylindrique à six pans creux ISO 4762 - M5 × 16	4
9		Vis à tête cylindrique bombée plate à six pans creux à embase lisse ISO 7380-2 - M5 × 12	6

N°	Référence	Désignation	Qté
	902-19-010-1	Entrainement Oscillant Coté Droit	1
1	014-10-012	Axe Pivot Entrainement	1
2	014-10-013	Entretoise Haute Pivot	1
3	014-10-023	Flasque Courroie 50mm	1
4	014-10-024	Courroie Autoguidée T10K6, 80dts, Lp 800, Larg. 50	1
5	902-19-010-1.1	Bras Motorisé Droit	1
6	902-19-010-1.2	Bras Tendeur Droit	1
7	BMP0702R3NA2A	Moteur Brushless Synchrone 70mm 230VAC 550W	1
8		Vis à tête cylindrique à six pans creux ISO 4762 - M5 × 16	4
9		Vis à tête cylindrique bombée plate à six pans creux à embase lisse ISO 7380-2 - M5 × 12	6

902-19-010-1.1 & 2.1 / Bras Motorisés

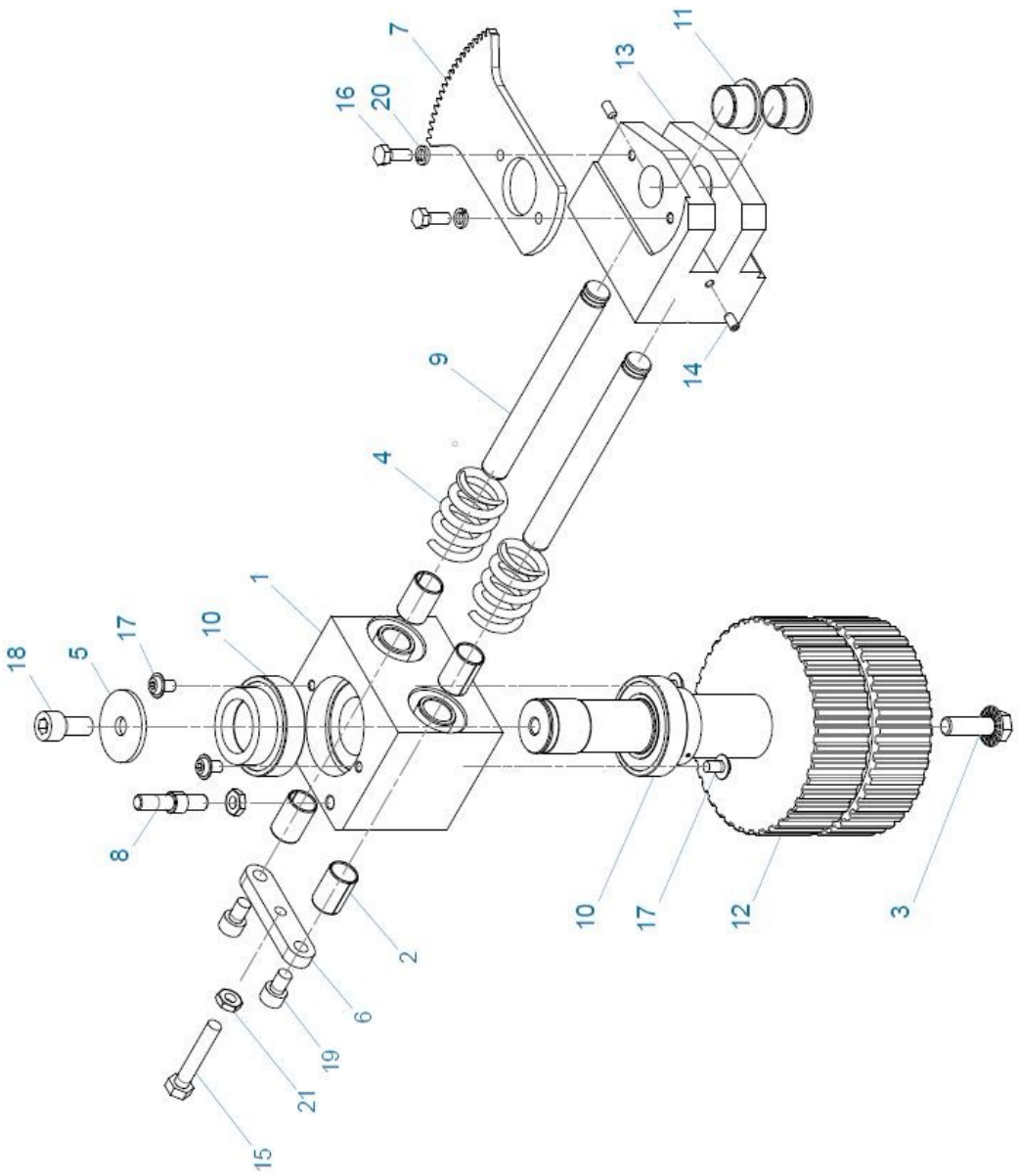


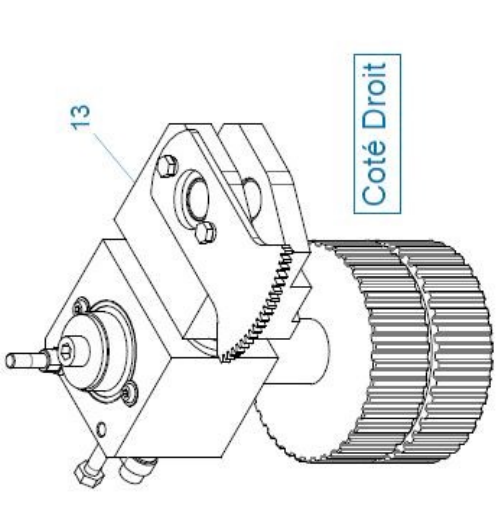
902-19-010-1.1 & 2.1 / Bras Motorisés

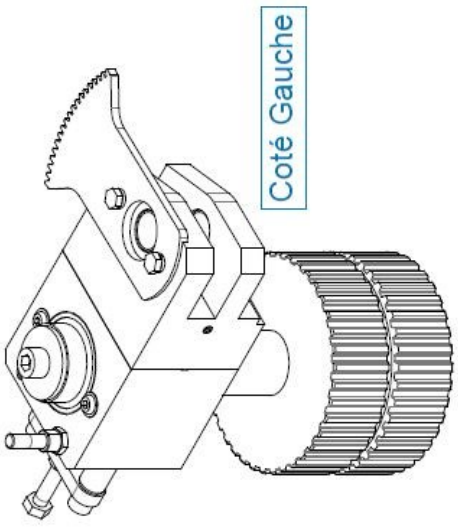
N°	Référence	Désignation	Qté
	902-19-010-1.1	Bras Motorisé Droit	1
1	014-10-001	Poulie Entrée Entrainement (Motrice)	1
2	014-10-003	Bras Moteur Droit	1
3	014-10-009	Bride Fixation Réducteur sur Bras	1
4	014-10-010	Bride Adaptation Réduct GBX 060	1
5	014-10-011	Goujon pour Fixation Vérin	1
6	014-10-017	Crémaillere De Symétrisation Entrainement	1
7	4762-AZ-4x16	Vis à tête cylindrique à six pans creux DIN 912 / ISO 4762 - M4 × 16 (12.9)	1
8	4762-AZ-5x55	Vis à tête cylindrique à six pans creux DIN 912 / ISO 4762 - M5 × 55 (12.9)	5
9	6921-AZ-10×30	Vis à tête Hexagonale à Embase Crantée - Zn - DIN 6921 - M10 × 30 - classe 8.8	1
10	GBK0600702F	Bride Réducteur Planetaire pour Moteur BMH/BMP Serie 701/702	1
11	GBX060008K	Réducteur Planétaire 60mm - 8:1	1
12	RAAC-305513-B	Roul. Auto-Aligneur Cyl. avec Blocage - 30x55x13	2
13	ZFM-2023-155	Palier Lisse à Collerette (F), Iglidur Z, Ø20-23-L15.5	2
14		Rondelle élastique - W, NF E 25-515 - 6	2
15		Vis à tête cylindrique à six pans creux ISO 4762 - M5 × 12	4
16		Vis à tête cylindrique bombée plate à six pans creux à embase lisse ISO 7380-2 - M6 × 10	2
17		Vis à tête hexagonale ISO 4017 - M6 × 16	2
18		Vis sans tête à six pans creux ISO 4026 - M8 × 8	1

N°	Référence	Désignation	Qté
	902-19-010-2.1	Bras Motorisé Gauche	1
1	014-10-001	Poulie Entrée Entrainement (Motrice)	1
2	014-10-004	Bras Moteur Gauche	1
3	014-10-009	Bride Fixation Réducteur sur Bras	1
4	014-10-010	Bride Adaptation Réduct GBX 060	1
5	014-10-011	Goujon pour Fixation Vérin	1
6	014-10-017	Crémaillere De Symétrisation Entrainement	1
7	4762-AZ-4x16	Vis à tête cylindrique à six pans creux DIN 912 / ISO 4762 - M4 × 16 (12.9)	1
8	4762-AZ-5x55	Vis à tête cylindrique à six pans creux DIN 912 / ISO 4762 - M5 × 55 (12.9)	4
9	6921-AZ-10×30	Vis à tête Hexagonale à Embase Crantée - Zn - DIN 6921 - M10 × 30 - classe 8.8	1
10	GBK0600702F	Bride Réducteur Planetaire pour Moteur BMH/BMP Serie 701/702	1
11	GBX060008K	Réducteur Planétaire 60mm - 8:1	1
12	RAAC-305513-B	Roul. Auto-Aligneur Cyl. avec Blocage - 30x55x13	2
13	ZFM-2023-155	Palier Lisse à Collerette (F), Iglidur Z, Ø20-23-L15.5	2
14		Rondelle élastique - W, NF E 25-515 - 6	2
15		Vis à tête cylindrique à six pans creux ISO 4762 - M5 × 12	8
16		Vis à tête cylindrique bombée plate à six pans creux à embase lisse ISO 7380-2 - M6 × 10	2
17		Vis à tête hexagonale ISO 4017 - M6 × 16	2
18		Vis sans tête à six pans creux ISO 4026 - M8 × 8	1

902-19-010-1.2 & 2.2 / Bras Tendeurs







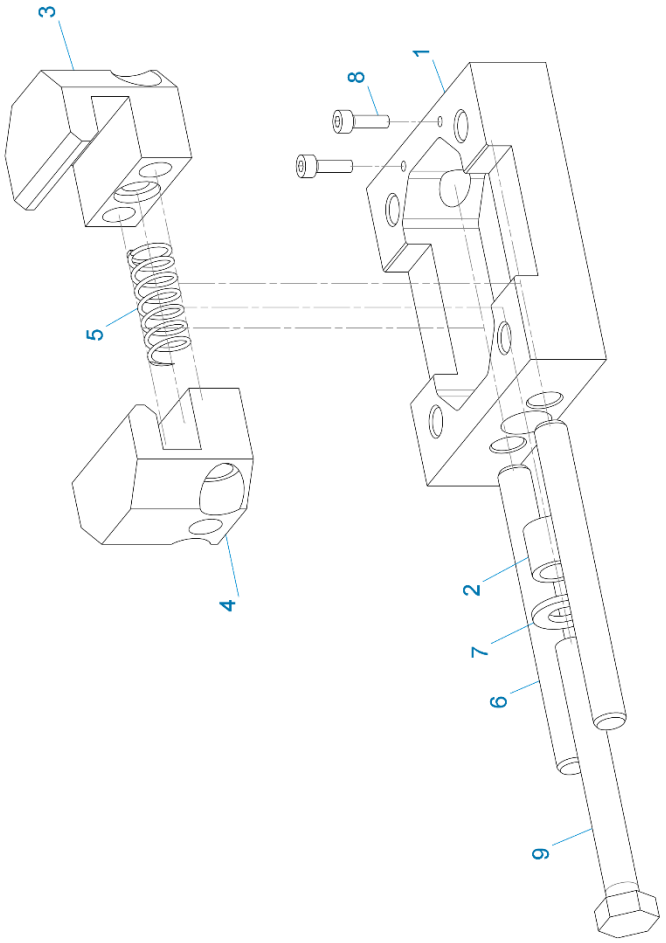
902-19-010-1.2 & 2.2 / Bras Tendeurs

N°	Référence	Désignation	Qté
	902-19-010-1.2	Bras Tendeur Droit	1
1	014-10-007	Bras Tendeur Mobile	1
2	CS-PTFE-1517-25	Coussinet Cyl. (S) Composite PTFE ISO 3547 - Ø15-17,L25	4
3	6921-AZ-10×30	Vis à tête Hexagonale à Embase Crantée - Zn - DIN 6921 - M10 × 30 - classe 8.8	1
4	014-10-022	Ressort Tension Bande	2
5	014-10-019	Rondelle Arbre Poulie Sortie	1
6	014-10-018	Platine Tendeur Bande	1
7	014-10-017	Crémaillère De Symétrisation Entrainement	1
8	014-10-011	Goujon pour Fixation Vérin	1
9	014-10-008	Arbre de Guidage Bras Tendeur	2
10	RAAC-305513-B	Roul. Auto-Aligneur Cyl. avec Blocage - 30x55x13	2
11	ZFM-2023-155	Palier Lisse à Collerette (F), Iglidur Z, Ø20-23-L15.5	2
12	014-10-002	Poulie Sortie Entrainement	1
13	014-10-005	Base Bras Tendeur Droit	1
14		Vis sans tête à six pans creux ISO 4029 - M5 × 10	2
15		Vis à tête hexagonale ISO 4017 - M8 × 45	1
16		Vis à tête hexagonale ISO 4017 - M6 × 16	2
17		Vis à tête cylindrique bombée plate à six pans creux à embase lisse ISO 7380-2 - M6 × 10	4
18		Vis à tête cylindrique à six pans creux ISO 4762 - M10 × 20	1
19		Vis à tête cylindrique à six pans creux ISO 4762 - M8 × 12	2
20		Rondelle élastique - W, NF E 25-515 - 6	2
21		Ecrou bas hexagonal ISO 4035 - M8	2

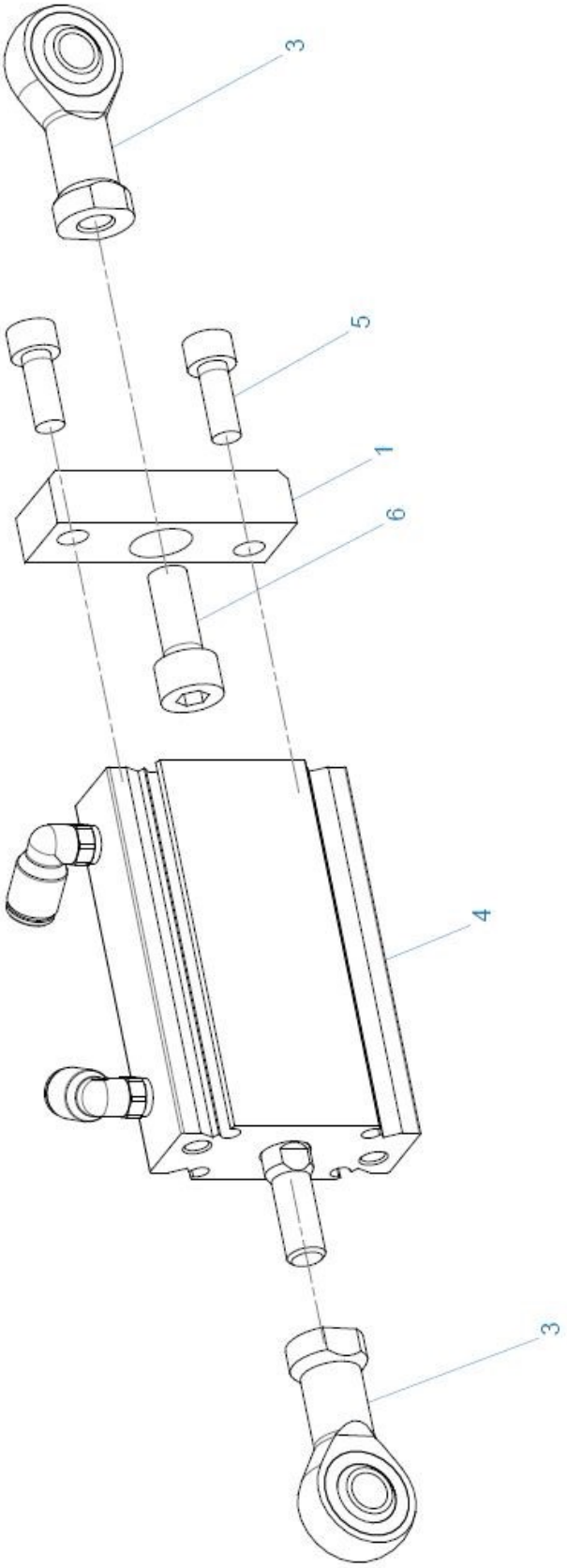
N°	Référence	Désignation	Qté
	902-19-010-2.2	Bras Tendeur Gauche	1
1	014-10-007	Bras Tendeur Mobile	1
2	CS-PTFE-1517-25	Coussinet Cyl. (S) Composite PTFE ISO 3547 - Ø15-17,L25	4
3	6921-AZ-10×30	Vis à tête Hexagonale à Embase Crantée - Zn - DIN 6921 - M10 × 30 - classe 8.8	1
4	014-10-022	Ressort Tension Bande	2
5	014-10-019	Rondelle Arbre Poulie Sortie	1
6	014-10-018	Platine Tendeur Bande	1
7	014-10-017	Crémaillère De Symétrisation Entrainement	1
8	014-10-011	Goujon pour Fixation Vérin	1
9	014-10-008	Arbre de Guidage Bras Tendeur	2
10	RAAC-305513-B	Roul. Auto-Aligneur Cyl. avec Blocage - 30x55x13	2
11	ZFM-2023-155	Palier Lisse à Collerette (F), Iglidur Z, Ø20-23-L15.5	2
12	014-10-002	Poulie Sortie Entrainement	1
13	014-10-006	Base Bras Tendeur Gauche	1
14		Vis sans tête à six pans creux ISO 4029 - M5 × 10	2
15		Vis à tête hexagonale ISO 4017 - M8 × 45	1
16		Vis à tête hexagonale ISO 4017 - M6 × 16	2
17		Vis à tête cylindrique bombée plate à six pans creux à embase lisse ISO 7380-2 - M6 × 10	4
18		Vis à tête cylindrique à six pans creux ISO 4762 - M10 × 20	1
19		Vis à tête cylindrique à six pans creux ISO 4762 - M8 × 12	2
20		Rondelle élastique - W, NF E 25-515 - 6	2
21		Ecrou bas hexagonal ISO 4035 - M8	2

902-00-001-3 / Blocage Manuel pour Rail Igus T25 (à Vis)

N°	Référence	Désignation	Qté
1	013-01-026	Base - Système de Blocage	1
2	013-01-027	Entretoise Système de Blocage	1
3	013-01-028	Pince Taraudée - Système de Blocage	1
4	013-01-029	Pince Libre - Système de Blocage	1
5	013-01-030	Ressort - Système de Blocage (1x11x9 / Standard)	1
6	2338B-8x80	Goupille Cylindrique ISO 2338 B - Ø8 x 80	2
7		Rondelle plate ISO 7089 - 8	1
8		Vis à tête cylindrique à six pans creux ISO 4762 - M3 × 10	2
9		Vis à tête hexagonale ISO 4017 - M8 × 70	1

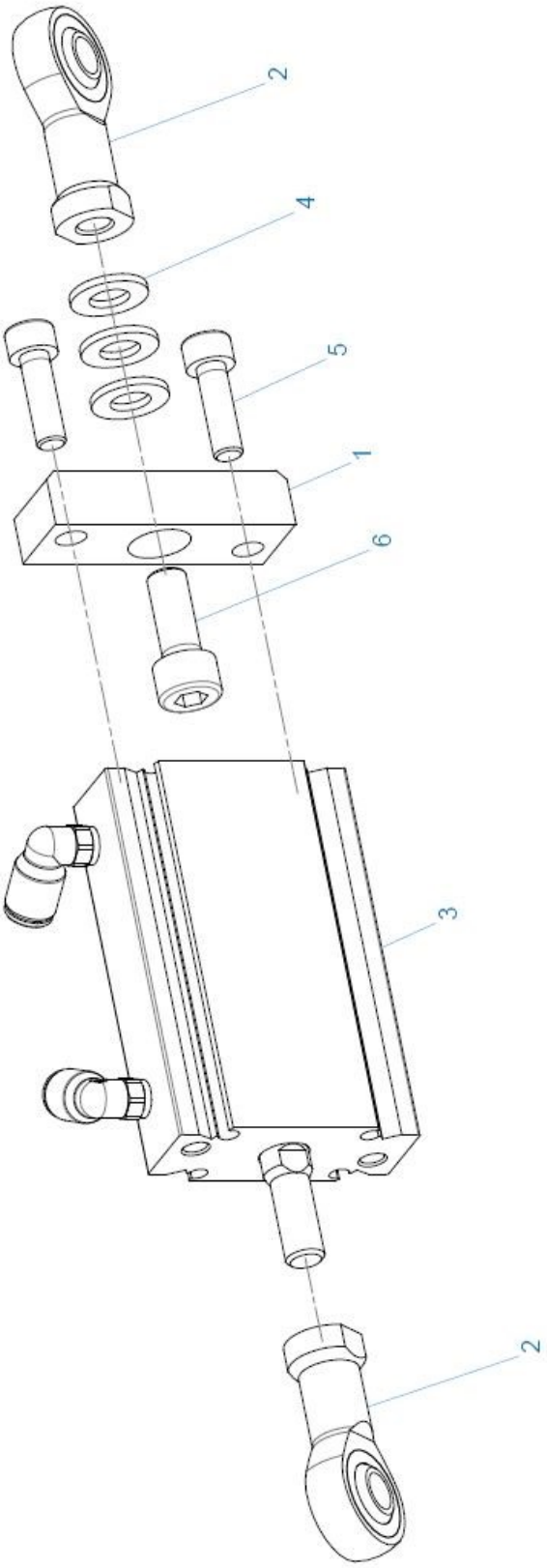


902-19-010-3 / Vérin Presseur - Entrée Entrainement



N°	Référence	Désignation	Qté
1	014-10-014	Platine Tenon Vérin	1
3	KJ8D	Embout Rotule DIN 648-M8	2
4	PN.VER.25.40.CP.DE.ST+R	Vérin Compact, Plat, Double Effet, Simple Tige Filetè Ø25-C40 + Rac. Coudé M5-Ø6	1
5		Vis à tête cylindrique à six pans creux ISO 4762 - M6 x 16	2
6		Vis à tête cylindrique à six pans creux ISO 4762 - M8 x 20	1

902-19-010-4 / Vérin Presseur - Sortie Entrainement



N°	Référence	Désignation	Qté
1	014-10-014	Platine Tenon Vérin	1
2	KJ8D	Embout Rotule DIN 648-M8	2
3	PN.VER.25.40.CP.DE.ST+R	Vérin Compact, Plat, Double Effet, Simple Tige Filetè Ø25-C40 + Rac. Coudé M5-Ø6	1
4		Rondelle plate ISO 7089 - 8	3
5		Vis à tête cylindrique à six pans creux ISO 4762 - M6 x 20	2
6		Vis à tête cylindrique à six pans creux ISO 4762 - M8 x 20	1

6.5.4. Pneumatic unit

902-19-004 / GROUPE PNEUMATIQUE

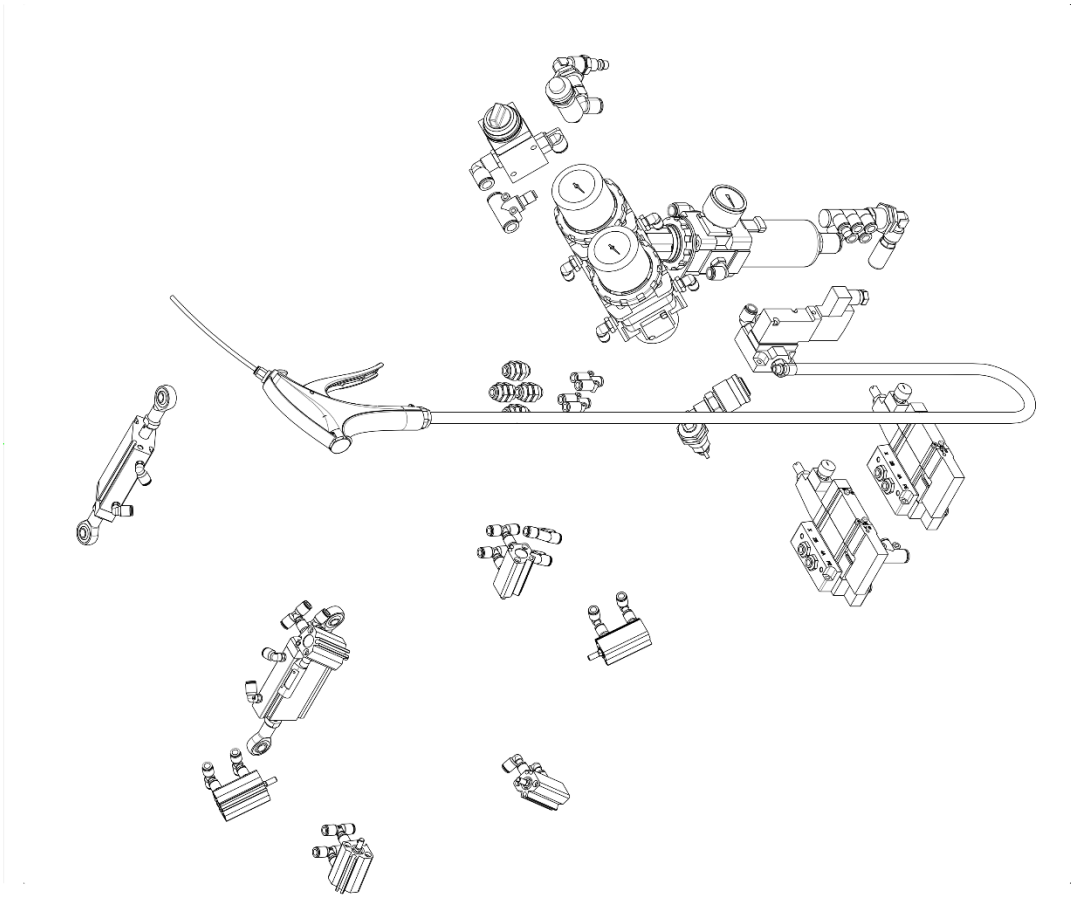


Schéma Pneumatique

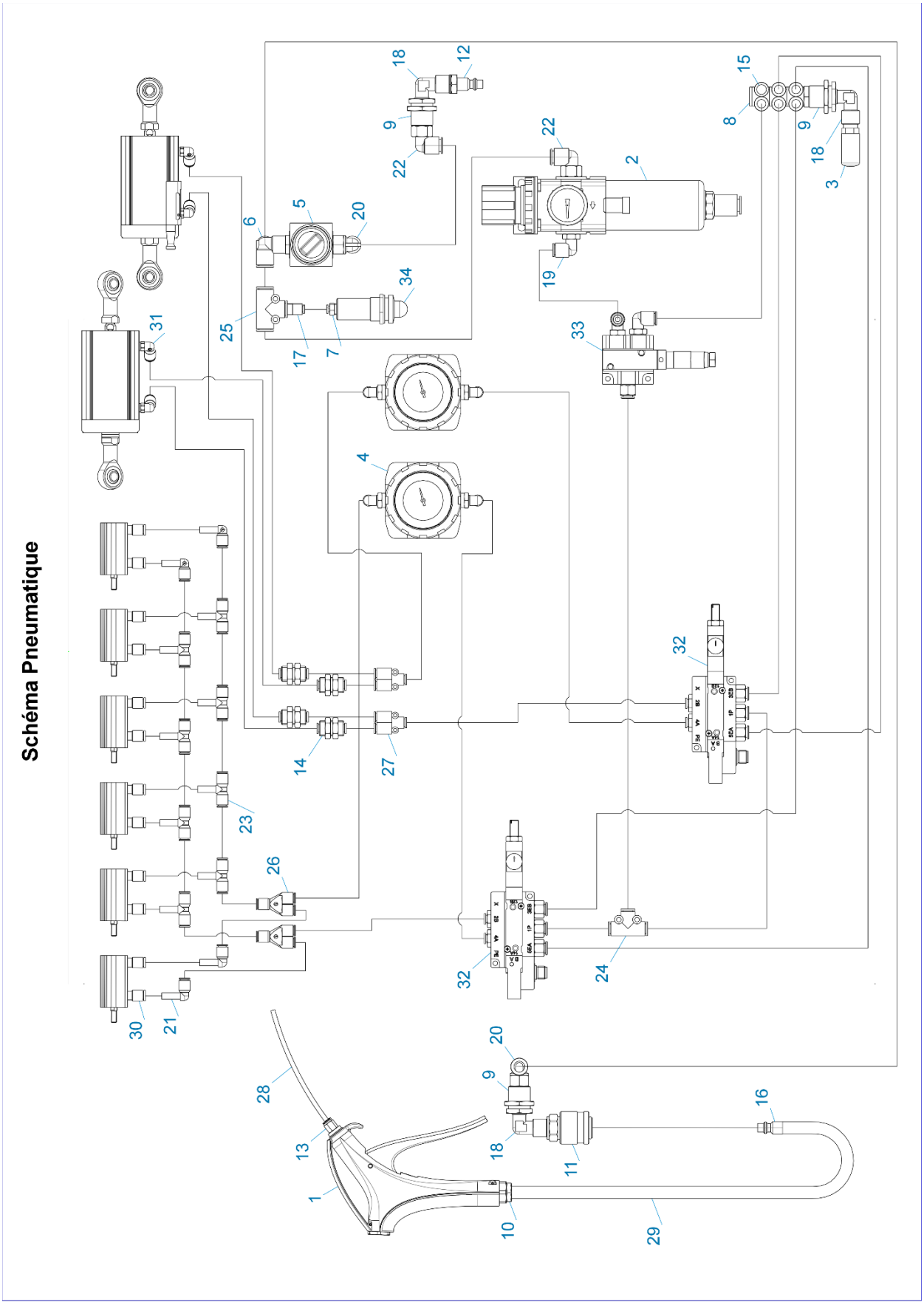
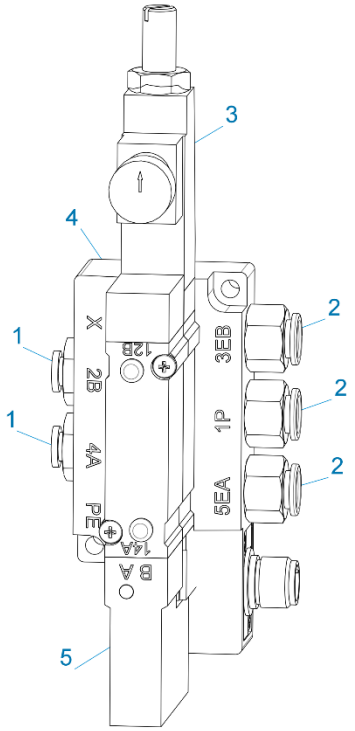


Schéma Pneumatique

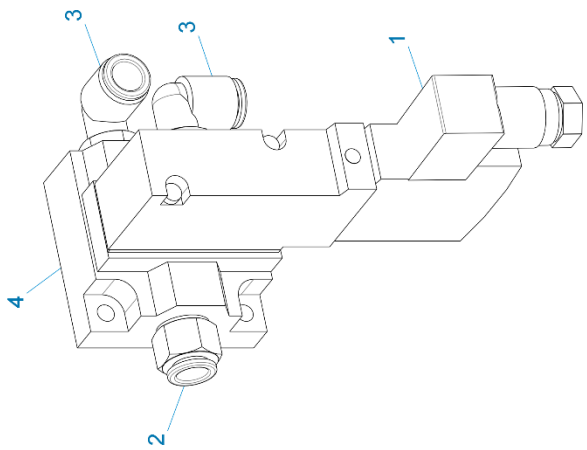
N°	Référence	Désignation	Qté
1	27102 F18	Soufflette Prevost 27102 F18	1
2	AC30-QCX014	Filtre Régulateur AC30 Complet (BM6/BM9)	1
3	AN20-02	Silencieux D'Echappement G1/4 - L40	1
4	ARG40-QKZA33	Régulateur de Pression ARG40 + Raccord	2
5	EVM230-02-34RA	Vanne 2/2 et 3/2 à commande mécanique, européen EVM200	1
6	KQ2D10-02AS	Raccord Triangle Piquage 1/4M - Ø10	1
7	KQ2H04-01AS	Raccord instantane d'implantation Union male R 1/8 RI 4 plastique	1
8	KQ2ZT08-02AS	Triple Raccord Banjo Double Ø8 - G1/4	1
9	PN.RA.I.1/4F.TC	Raccord Traverse Cloison Droit G1/4F	3
10	PN.RA.I.1/4M.8M	Douille Annelée 1/4M - Ø7-9M	1
11	PN.RA.I.1/4M.CFB12	Corps Coupleur Serie 24 (ISO6150B12) Male BSP Cyl. - G1/4M	1
12	PN.RA.I.1/4M.CMB12	Embout Coupleur Serie 24 (ISO6150B12) Male BSP Cyl. - G1/4	1
13	PN.RA.I.1/8M.4F	Raccord (Piquage) Droit Male Cyl. 1/8M-Ø4F	1
14	PN.RA.I.6F.TC	Raccord Instantanés Traverse Cloisons Droit Ø6F	4
15	PN.RA.I.8M.B	Bouchon Enfichable Male Ø8	1
16	PN.RA.I.8M.CMB12	Embout à Douille Annelée Serie 24 ISO 6150B12 - Ø8	1
17	PN.RA.I.10M.4F.R	Réduction Enfichable Droite Ø10M>Ø4F	1
18	PN.RA.L.1/4M.1/4F	Raccord Adaptateur Coudé (Laiton Nickelé) - R1/4M - G1/4F	3
19	PN.RA.L.1/4M.8F	Raccord Coudé Piquage Conique Male R1/4 - Ø8F	1
20	PN.RA.L.1/4MC.10F	Raccord Piquage Coudé Cyl. Male G1/4 - Ø10F	2
21	PN.RA.L.6M.6F	Raccord Equerre Egale Encliquetable Ø6	4
22	PN.RA.L.G1/4M.10F	Raccord Coudé Piquage Conique Male G1/4 - Ø10F	2
23	PN.RA.T.6F.6M.6F	Raccord TE Egal Encliquetable au Centre Ø6 (M), Ø6 Femelle	8
24	PN.RA.T.8F	Raccord Instantané T Union Egal Ø8F	1
25	PN.RA.T.10F	Raccord Instantané T Union Egal Ø10F	1
26	PN.RA.Y.6F	Raccord Instantané Y Simple Egal Ø6	2
27	PN.RA.Y.6F	Raccord Y Enfichable Egal Ø6F	2
28	PN.TU.4.TRANS.L120	Tube de Sortie Soufflette Ø4 transparent, Long. 120mm	1
29	PN.TUY.8.BLEU.3000	Tuyau Pneumatique Ø8 Intérieur, long. 3m (Bleu)	1
30	PN.VER.12.20.C.DE.ST+R	Vérin Compact Double Effect, Simple Tige, Ø12-C20 + Raccord Droit M5-Ø6	6
31	PN.VER.25.40.CP.DE.ST+R	Vérin Compact, Plat, Double Effet, Simple Tige Fileté Ø25-C40 + Rac. Coudé M5-Ø6	2
32	SY-QKXA89	ElectroDistrib. 5/2 Monostable SY5000 + Accessoires	2
33	VQZ-QKZA36	Electro Vanne de Sécurité (Vidange Circuit Pneu.)	1
34	VR3100-10G	Voyant de Présence d'Air	1

SY-QKXA89 / ElectroVanne Régulateur 5/2 Monostable Série SY5000+Accessoires



N°	Référence	Désignation	Qté
1	PN.RA.I.1/4M.6F	Raccord Piquage Droit Conique Male R1/4 - Ø6F	2
2	PN.RA.I.1/4M.8F	Raccord Piquage Droit Conique Male R1/4 - Ø8F	3
3	SY50M-00-A1	Interface Régulator sur A + Manomètre	1
4	SY50M-27-1-W0-02F	Embase 5 Orifices 1/4 > Connecteur M8	1
5	SY5100-5U1	ElectroDistributeur SY5000 - 5/2 monostable 24V	1

VQZ-QKZA36 / Vanne de Sécurité



N°	Référence	Désignation	Qté
1	K43S-5-05(F)	Connecteur DIN 15x15 (8mm) Sumoulé - Cable 5m	1
2	PN.RA.L.1/4M.8F	Raccord Piquage Droit Conique Male R1/4 - Ø8F	1
3	PN.RA.L.1/4M.8F	Raccord Coudé Piquage Conique Male R1/4 - Ø8F	2
4	VQZ315-5YO1-02F-Q	Electrodistributeur 3/2, Série VQZ315, Joint Elastique, Montage sur Embase - 1/4 (24V)	1

6.6 Electrical diagram