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0.0: REVISIONS NOTICES

- 2025-12-16: Updated spare part list. Updated exploded views
- 2022-12-22: Added multipack crossing version in layout and homing sequence. Added Kinetix 240v version spare part list.
- 2022-04-06: Translation from French to English (PM)

1.0: SAFETY PRECAUTIONS



CAUTION

- The Flat bread bagger is covered with a safety door. For any interventions during functioning of the machine regarding to product jam, material disfunction, cleaning, etc: operator must open the door to stop the machine assuring maximum safety and minimizing risk;
- The equipment described in this manual designed and manufactured to the highest KLR standards. Special attention made to ensure that the operation of the machine is safe and convenient;
- Even with the safety cover opened or closed, keep hands away from the working machine. Go against this notice can result in a severe injury or death;
- Always use two (2) lockout devices, one on the supply and one on the air supply when performing any maintenance or cleaning;
- If the system is linked to another machine or install onto another machine. Lock the electrical box of the other machines before performing any maintenance on this equipment. Please refer to the local regulations and laws on locking out machinery;
- When working in the electrical box. Disconnect the equipment at the source and use a lockout device to avoid any risk of danger. Make sure you also have the space required to complete the work to avoid any risk of danger.
- Any modifications with any aspect of the mechanical, safety, electrical design, design, or any parts connected with the equipment will void the warranty and liability of KLR Systems. If a change is required, you should contact KLR Systems for approval. All technical handling must be done by a qualified technician or by KLR Systems;
- KLR is not responsible for any abuse, mishandling, misuse, improper maintenance and repair by owners and users;
- Equipment must be supervised when operating;



CAUTION

- This machine designed to be as safe as possible. Danger areas have been enclosed with guards and doors for better protection;
- Safety switches: DO NOT bypass any safety components for any reason. Violation will void all guaranties and responsibility from KLR Systems. If a safety switch is broken, the machine will not start, but the safety switch must be replaced before starting the machine;
- Safety panel (fix panel) or safety doors: As a safety, component does not try to remove or unscrew them unless it is necessary for a maintenance operation. If it is the only option, use a lockout device during this procedure and reassemble every single parts as it was when finished.
- When closing the safety door, careful about the pinch points. Make sure nobody's hands or fingers are in the way;
- When the air supply is OFF and it is required in a maintenance to move manually the bag table in order to access something. When the maintenance is over, DO NOT put the pressure back if the machine is in ready state. ALWAYS push the emergency button before putting the pressure on the machine. Go against this notice can result in equipment damage;
- When the air pressure is turned ON, the bag table may move promptly depending of what position is the bag table valve. To avoid this problem, unscrew the air regulator until it reaches 0 pressure before Turning ON the main air pressure, Then crank slowly the air supply regulator back to 80 PSI . Go against this notice can result in a severe injury or death.

KLR.5200

Serial numbers: KLR-00001 –

Beyond



Revision: 2025-12-16

2.0: IDENTIFICATION

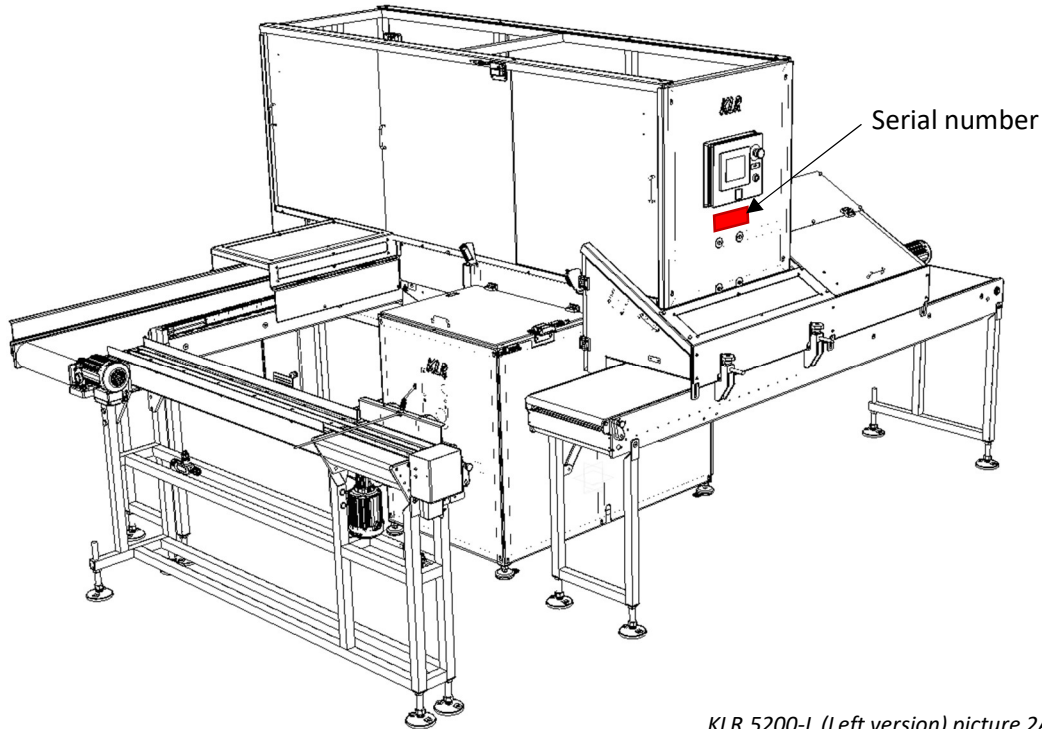
2.1: Product brand and type designation:

Automatic Duo/Trio Bagger

Model: KLR.5200

Serial number and specification location:

Below the touch screen (HMI)



KLR.5200-L (Left version) picture 2A

2.2: Name and manufacturer contact:

KLR SYSTEMS INC. Packaging systems manufacturer

Address: 944 rue des Hérons,

City, province, Country: Saint-Pie, Québec, Canada

Zip code: J0H 1W0

Phone: 450-388-0404

Web site: <http://klrsystems.com/>

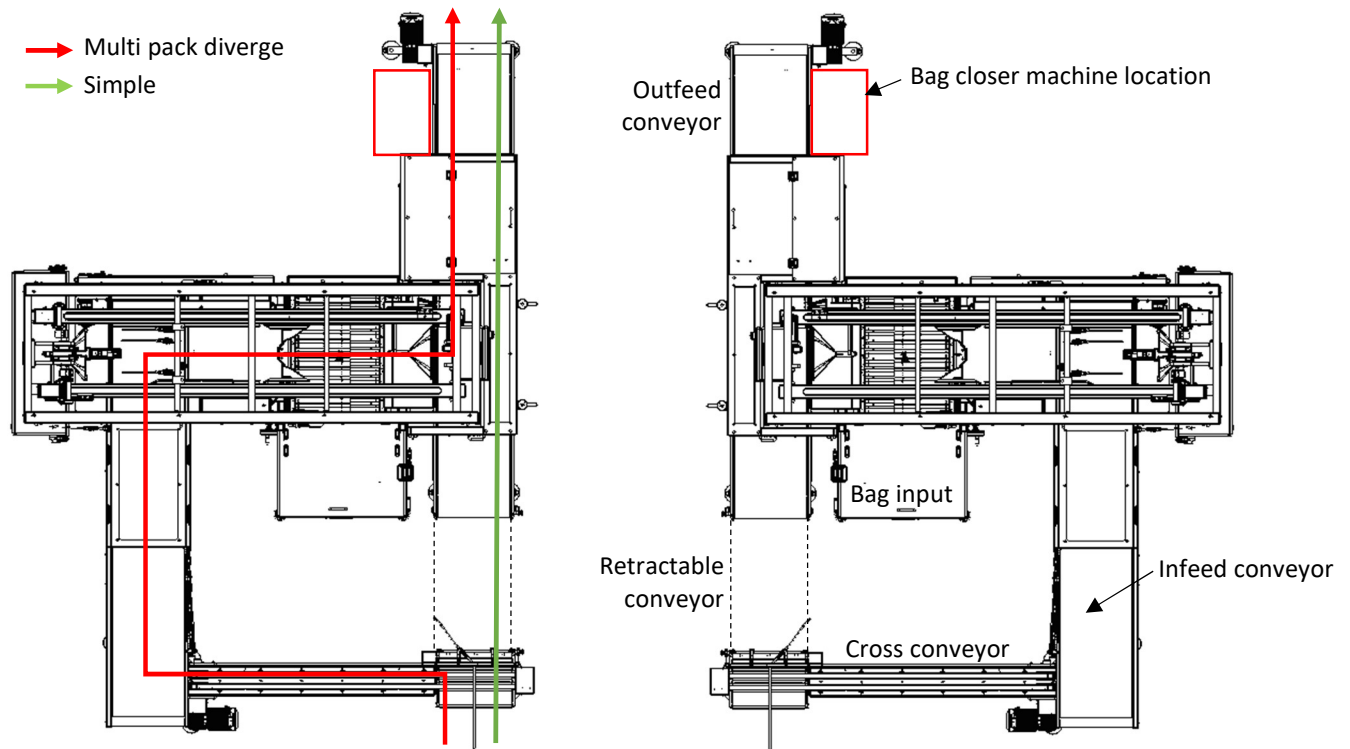
Technical support Email: support@klrsystems.com

For other information: info@klrsystems.com

3.0: PRODUCT SPECIFICATION

3.1: Right or left version

Standing on the operator side of the machine (able to work with the touch screen) and looking toward the direction of products. The hand closer to the machine tells what version (right or left).



KLR.5200 picture 3A

3.2: Model

KLR.5200

3.3: Power data – Electricity and Pneumatic

220 V – 3 Phases – 20 AMP

80 PSI – 8 CFM

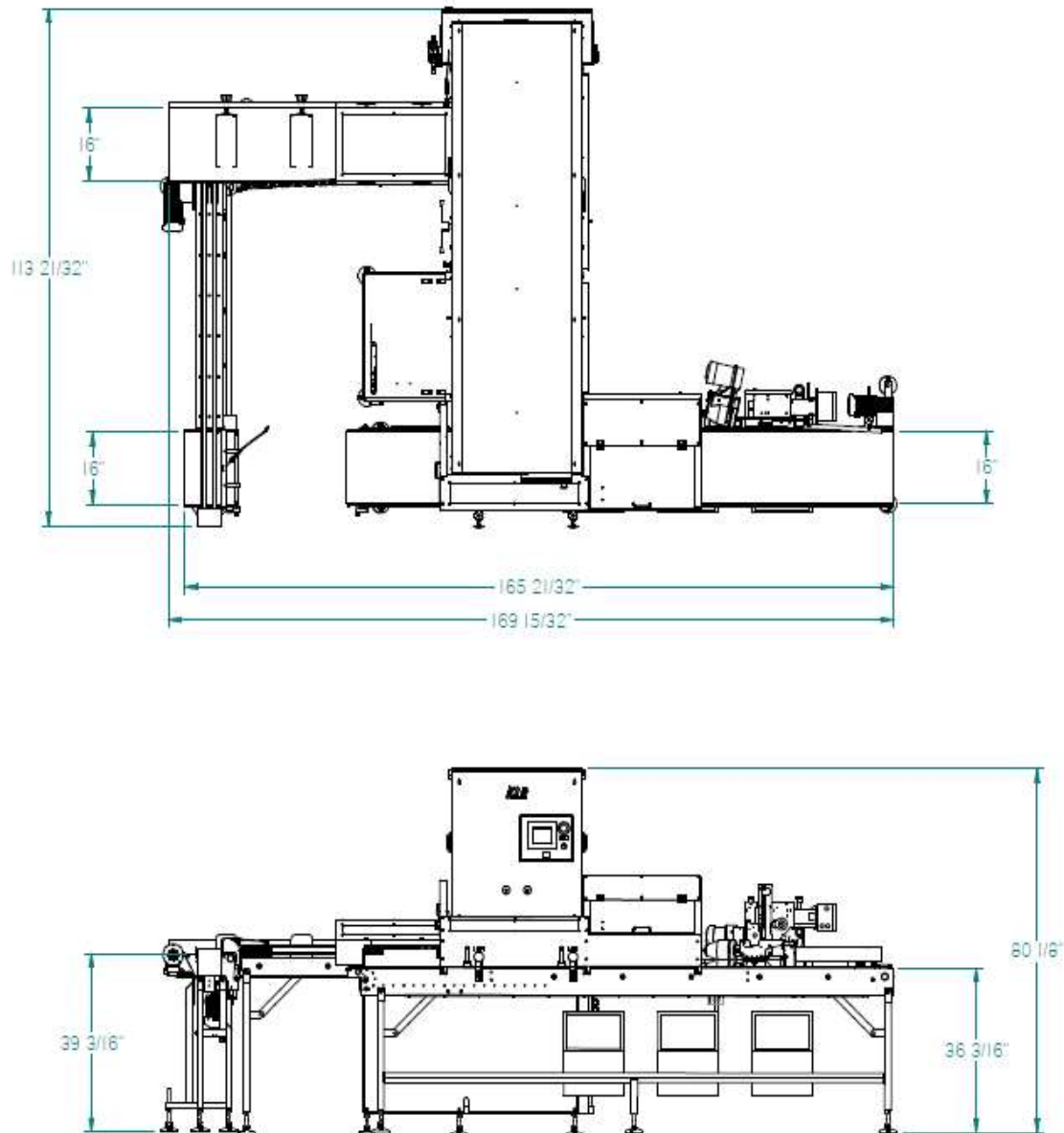
This machine also requires equipment to close the bags. Those equipments will need a 120v outlet as well as an 80PSI air supply

4.0: INSTALLATION

4.1: Minimum space required

The KLR.5200 is highly customizable. Your layout may vary from the list. Conveyor length are also subject to change according to the customer needs. Always ask KLR to provide an accurate layout measurement.

4.1.1: Single crossing (Typical layout)



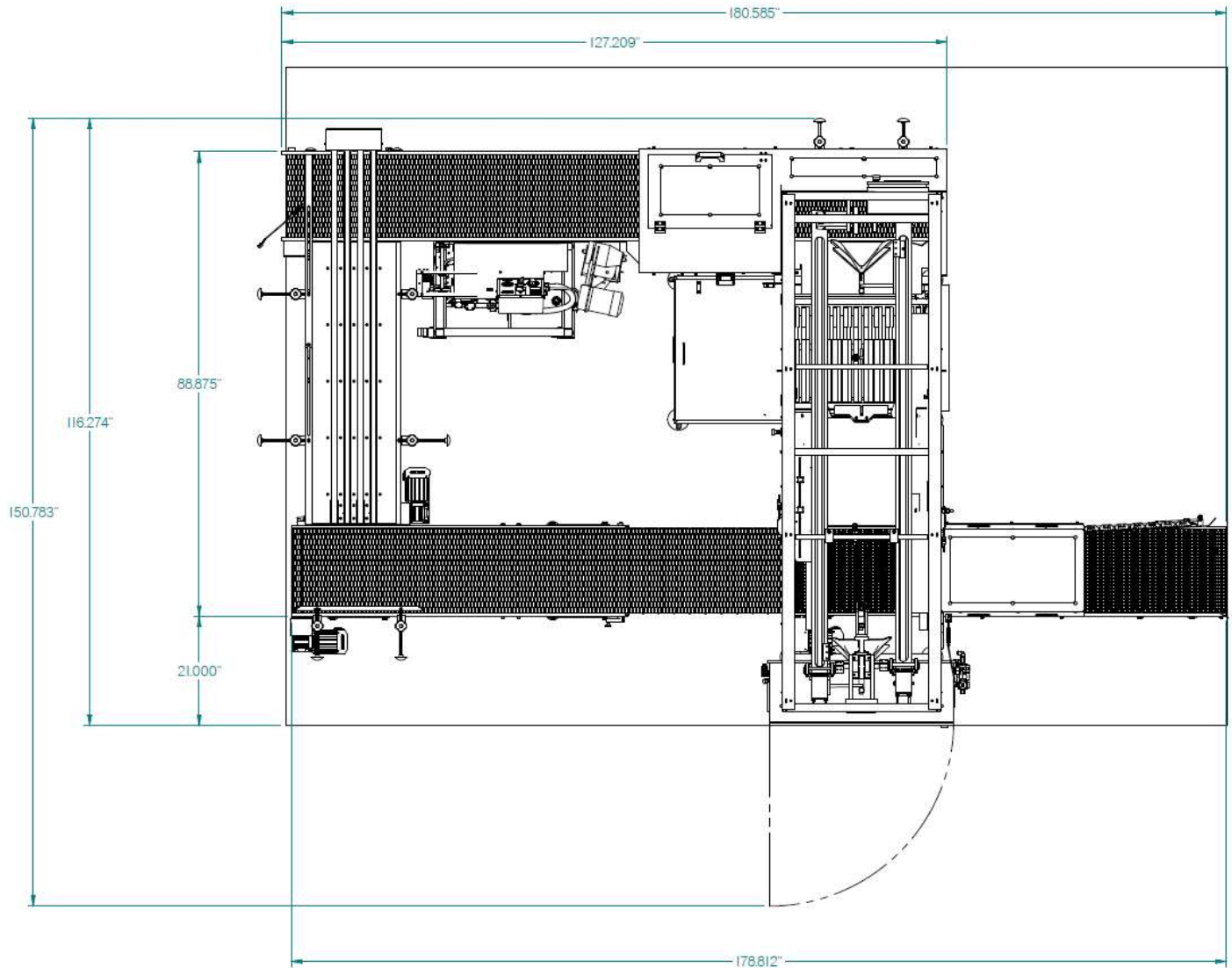
KLR.5200

Serial numbers: KLR-00001 –
Beyond



Revision: 2025-12-16

4.1.1: Multipack crossing



4.2: Unpacking procedure

1. Remove all the screws marked in red on the wooden crate.
2. Remove all bolts that hold the machine in place in the crate.
3. With a forklift, lift the machine from below the structure.
4. Reverse the lift truck and lower the machine as low as possible as soon as the machine is completely out of the crate.
5. When in final position, level the supports.
6. Pierce at least one anchor per support.

4.3: Before starting the machine

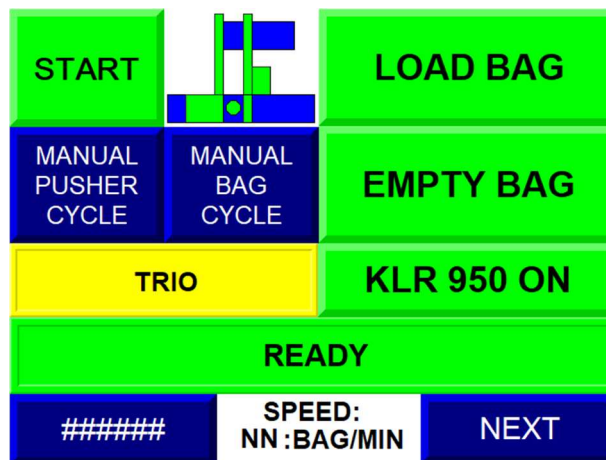
1. Before starting the equipment, check that the connected voltage is according to the voltage required in the instruction manual.
2. Check that all support points are level and stable on the floor.
3. Check that there is no product other than pre- bagged bread on the belts.
4. Check that there is no source of obstruction in the mechanisms.
5. Check the adjustment of the belts before starting.

5.0: OPERATION

	<p>➤ Before using the machine, every operator of the machine and maintenance personnel must have taken part in a training session given by a KLR systems technician.</p>
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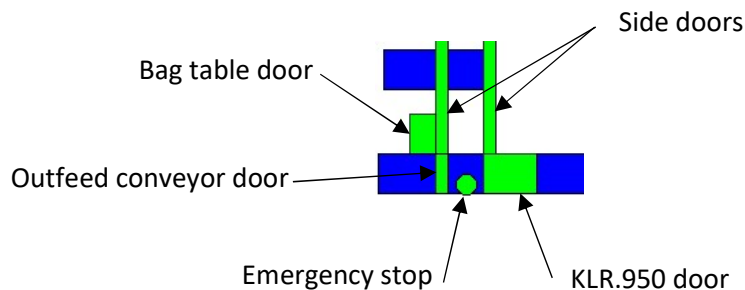
5.1: Main screen

Touch panel main page: perform standard machine operations, such as bag loading, start or stop the machine, see operating speed, see which recipe is currently activated and also diagnose the any reason why the machine may have stopped. There is also a handy counter to see how much product has gone through the machine.



HMI picture 5A

On the diagnostic pictogram below, you can visually know which safety relay is currently activated. Green color means this section is ready for operation. The yellow color means that the machine is requesting a “RESET” (blue button next to the touch panel). The color red means that one or more doors are open or the emergency stop button is pressed. Make sure that each door is properly closed and the emergency stop has been triggered. Subsequently, press the “RESET” button and switch on the equipment via the touch panel by pressing the “START” button.



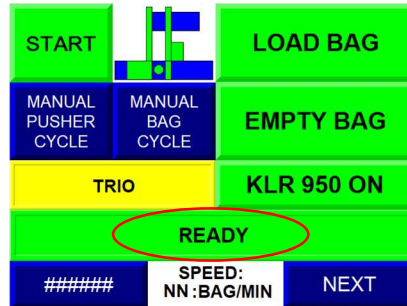
HMI picture 5B

5.2: Change over (multipack).

5.2.1: Change recipe

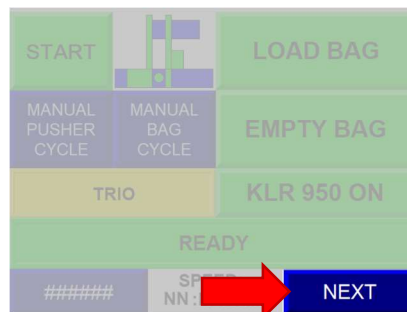
A recipe is all the machine parameters associated with a product. Essentially, the speed of the conveyors and the delays of the sensors which are changed in the recipe to allow a smoother running of the machine with each of the products. Follow the instruction to change the recipe:

1. Make sure the machine is “READY” (all green).



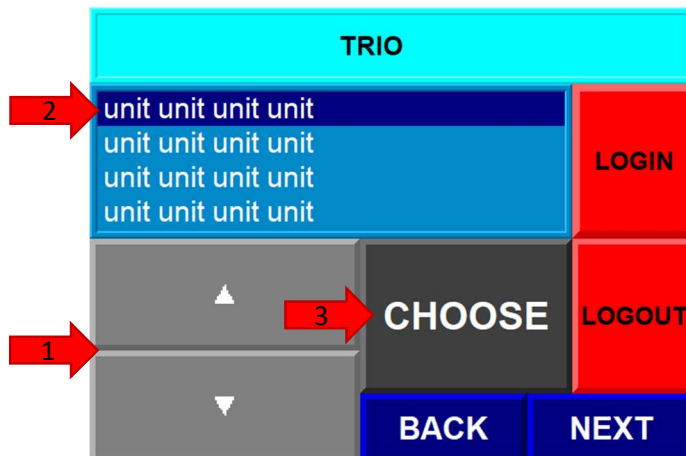
HMI picture 5C

2. By pressing the “NEXT” button, you will reach the recipes page.



HMI picture 5D

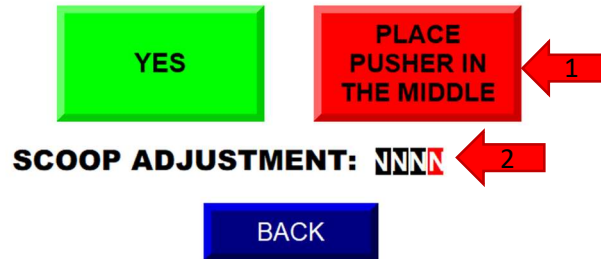
3. Use the arrows (1) to select a recipe (2), and press “CHOOSE” (3).



HMI picture 5E

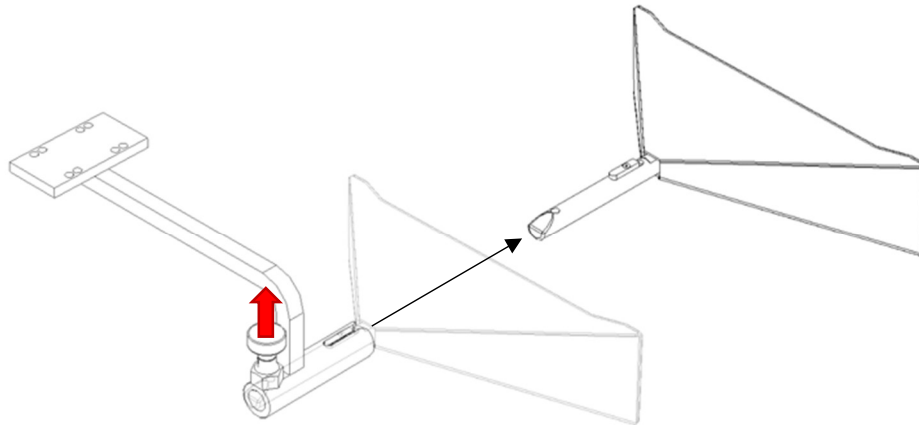
4. A pop-up screen will appear if a manipulation is required. If the machine was ready, now press “PLACE PUSHER IN MIDDLE” (1). The pusher can alternatively be moved by hand if doors are opened. Take mental note of “SCOOP ADJUSTMENT” value for next adjustment (2).

HAVE YOU TAKE CARE OF INSTALLING THE GOOD PUSHERS?



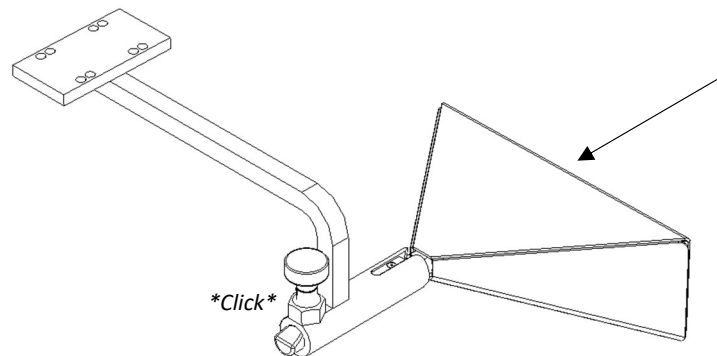
HMI picture 5F

5. If necessary, change the pushers. Pull the plunger and pull the pusher out. Put it in the pusher tray for storage.



Pusher holder picture 5G

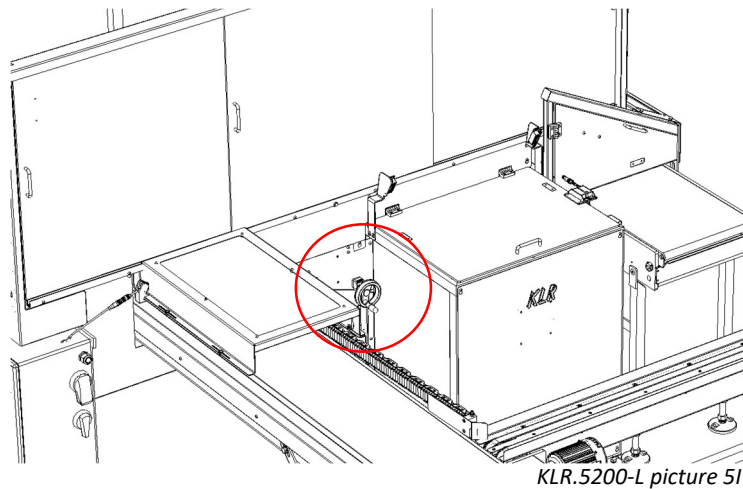
6. Insert the good pusher until it is secure.



Pusher holder picture 5H

**Pushers type or appearance may vary

7. Make the adjustment of the scoop with the manual crank according to the value displayed on the pop-up screen. The manual is beside the bag loading area. Take note there are multiple layout designs for this equipment.



KLR.5200-L picture 5I

8. Press “YES”.

**HAVE YOU TAKE CARE OF
INSTALLING THE GOOD PUSHERS?**

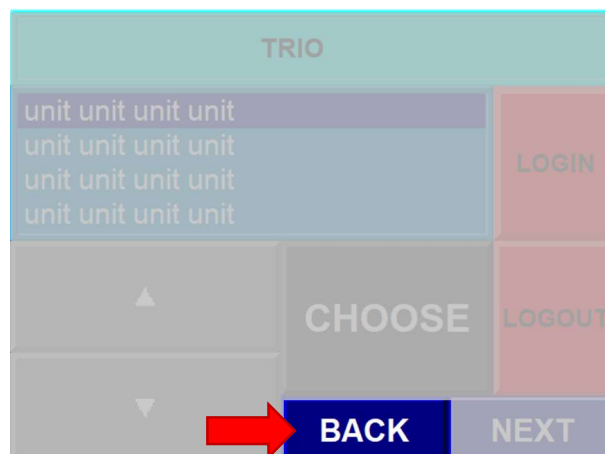


SCOOP ADJUSTMENT:

BACK

HMI picture 5J

9. Press “BACK” to get to the main page. Once the recipe has been selected, it is advisable to check on the main page if the recipe has been properly loaded.



HMI picture 5K

5.2.2: Change bag

In DUO and TRIO operation, the machine must be supplied with bags. The bag table door can be opened when the machine is in operation. By opening this door, the two servo motors connecting the bag table will immediately be cut off from the electrical supply make it safe. That said, the bag table section on the pictogram will turn yellow and you will need to press “Reset” after filling the bags.

1. Prepare the bags and open the door of the bag table: remove any rubber grommets or cardboard under the bag stack.



Bags filling picture 5L

2. Insert the wicket in the place provided for this purpose and make sure that the wicket is well sit. DO NOT insert wicket in the space in between rollers.



Bags filling picture 5M



Bags filling picture 5N

3. Remove the top cardboard and adjust, if necessary, the width of the rolls according to the length of the bags.



Bags filling picture 5O



Bags filling picture 5P

4. Check the bottom of the bag stack to make sure they are placed correctly. Place the bottom bags or remove the last bag so that everything is flat.

Ideal

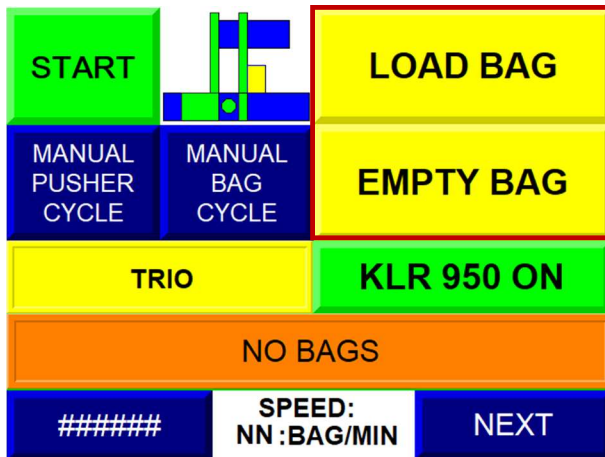


Bags filling picture 5R

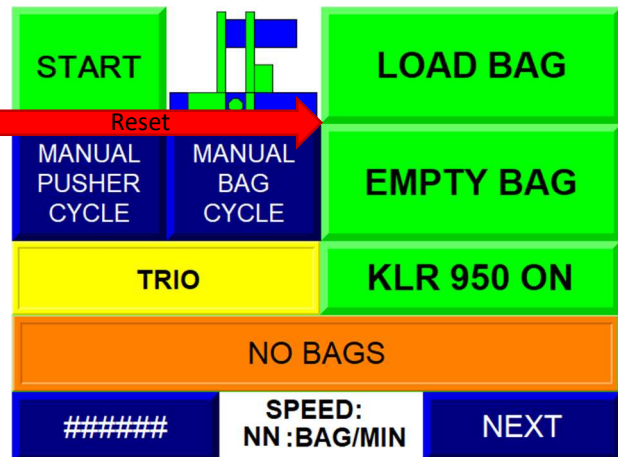


Bags filling picture 5R

5. Close the door and press “RESET” on the front panel, otherwise the bags will not change automatically if the pictogram remains yellow.



HMI picture 5S



HMI picture 5T

6. Press LOAD BAG and make sure bag are correctly loaded.

The status will then tell the operator the next wicket still needs to be loaded.

NEXT BAGS WICKET NOT READY

7. Repeat 1 to 5 only to put a second wicket.

5.2.3: Mode multipack

To put it in multipack, perform these operations:

1. Turn the crank to retract the removable part of the outfeed conveyor.
2. Raise the transfer conveyor panel making sure it is securely latched.
3. Close the exit conveyor door.
4. If machine is stop, press "START".

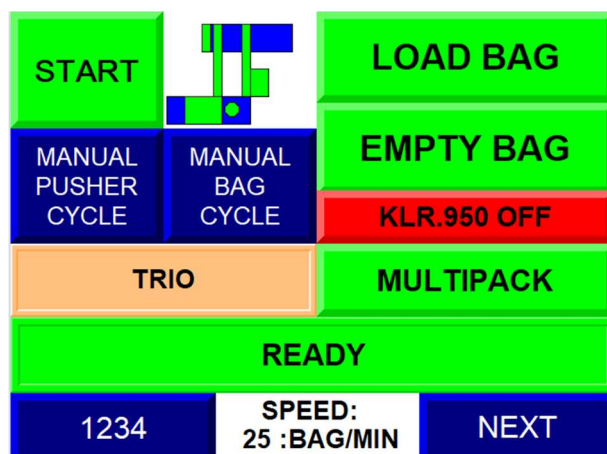


5.2.4: Mode multi with multipack crossing layout (pneumatic gate)

1. Press SINGLE/BYPASS to switch to MULTIPACK



2. Press RESET.



3. Press START.

5.2.5: Mode bypass (simple)

1. Lower the transfer conveyor panel.
2. Open the left door of the packaging machine.
3. Turn the crank to extend the belt. The sliding part of the retractable conveyor must be supported on the transfer conveyor.



Well sited

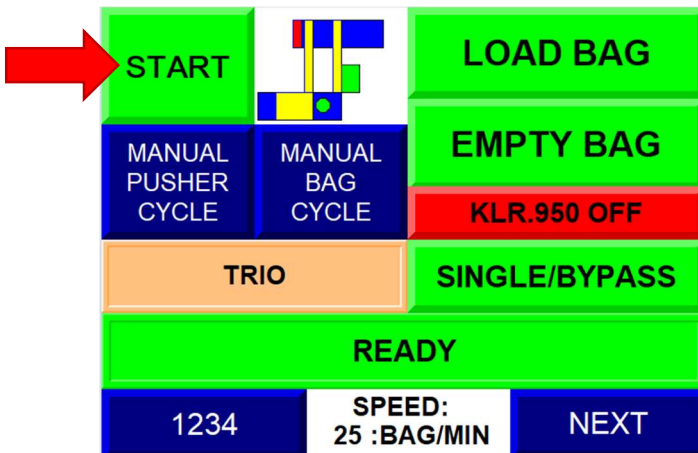
4. If machine is stopped, Press "START". Only the necessary conveyor will be running.

5.2.6: Mode bypass (simple) with multipack crossing layout (pneumatic gate)

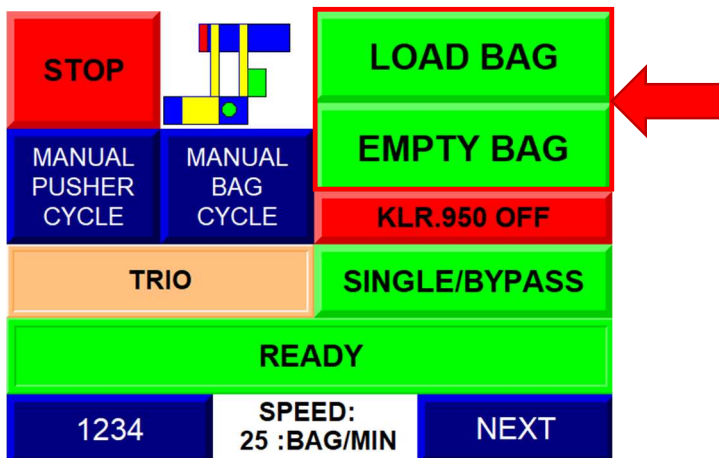
1. Press MULTIPACK button on the screen. This action will open the gate to let the loaf go through.




2. Press START



Note: In this mode, the bag table can still be used to prepare an eventual multipack production.



6.0: MAINTENANCE




➤ Before using the machine, every operator of the machine and maintenance personnel must have taken part in a training session given by a KLR systems technician.

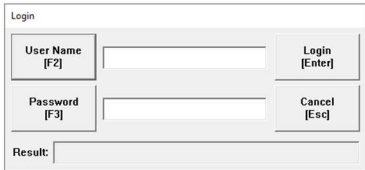
6.1: Login

For further setup and parameter modifications, follow this step to login.

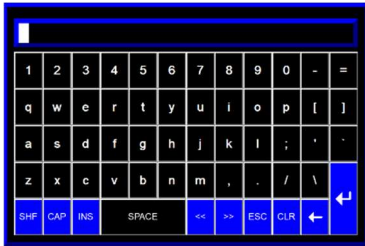
1. Press “LOGIN” and enter information in the pop-up screen.



The main menu screen displays 'TRIO' at the top. Below it are four 'unit' labels. To the right is a red 'LOGIN' button with a red arrow pointing to it. Below the 'LOGIN' button are 'CHOOSE' and 'LOGOUT' buttons. At the bottom are 'BACK' and 'NEXT' buttons.



The login pop-up screen has fields for 'User Name [F2]' and 'Password [F3]'. It includes 'Login [Enter]' and 'Cancel [Esc]' buttons, and a 'Result:' field.



An on-screen keyboard with a numeric keypad, QWERTY keys, and function keys like SHF, CAP, INS, SPACE, <<, >>, ESC, CLR, and a return key.

2. Press “NEXT” to reach other pages.

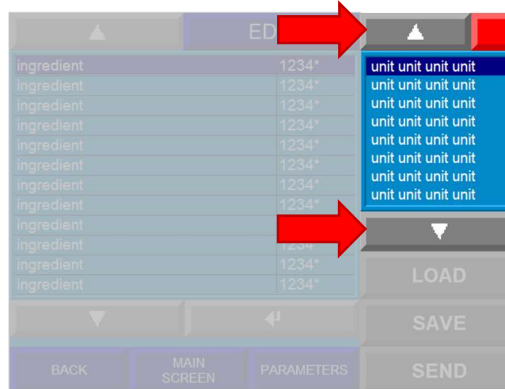


The main menu screen is shown again, but now the 'NEXT' button at the bottom is highlighted with a red arrow pointing to it.

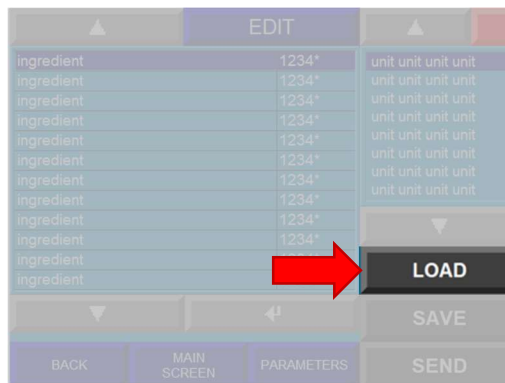
6.2: Parameters

To reach the settings page, see **Login**. Several parameters are offered to configure the machine for each product. Each recipe should therefore be associated with a particular product. Press “LOAD” to display the parameters.

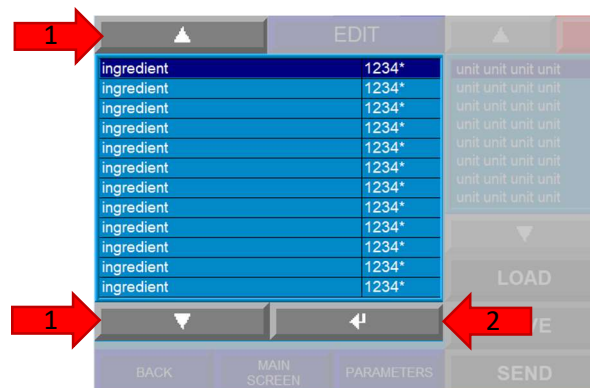
1. Select the desired recipe to be modified using the ARROWS.



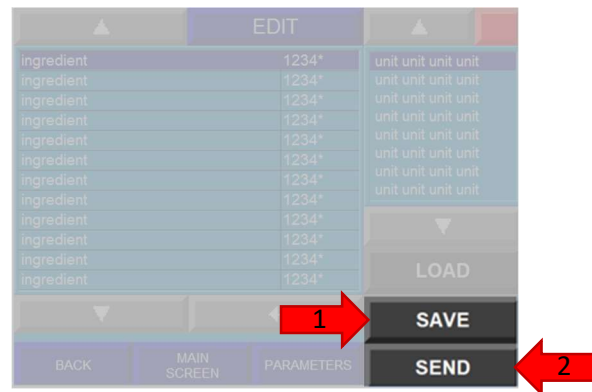
2. Press “LOAD” to display the parameters.



3. Select the desired parameter (ingredient) to be modified with the ARROWS (1) and press “ENTER” (2) once chosen.



4. Press “SAVE” (1), then “SEND” (2) for the change to take effect.



6.2.1: Definition of the parameters

6.2.1.1: Scoop width

Simply constitutes the value of the scoop adjustment display on the screen which needs to be communicated to the operator.

**HAVE YOU TAKE CARE OF
INSTALLING THE GOOD PUSHERS?**



SCOOP ADJUSTMENT: ~~NNN~~

BACK

On the other hand, for machine equipped with servo scoop adjustment option, that value translate to the real position of that servo.

6.2.1.2: Horizontal pusher speed (%)

Speed at which the pushers circulate in percentage.

6.2.1.3: Horizontal pusher rev (%)

After pushing the products on the outfeed conveyor, the pusher needs to retract from the bag. That parameter is the speed at which the pushers get out of the bag in percentage.

6.2.1.4: Horizontal pusher acc.

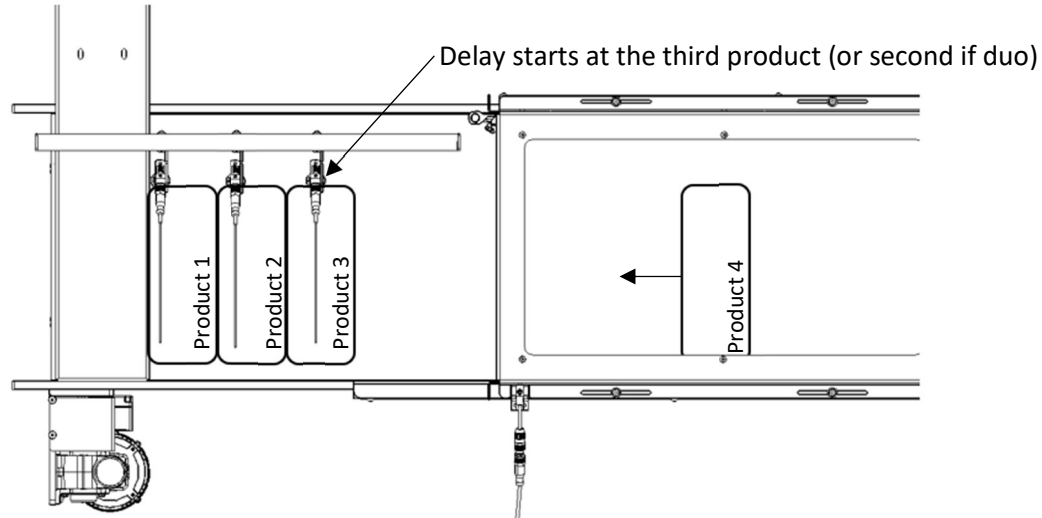
Acceleration and deceleration at which the pushers start moving.

6.2.1.5: Vertical pusher speed

Sometime called the “rotary”. This is the speed at which the pushers alternate up and down in percentage.

6.2.1.6: Pusher start delay

Delay in milliseconds the machine waits before sending the product in the bag. Delay always starts at the last sensor. A too small value will may send uncomplete package. Useful if the product arrives a bit sideways: it allows the loaf to be straighten before been pushed inside the bag.



6.2.1.6: Bag position

This value controls the final position of the bag horizontally. A greater setting will end up farther.

6.2.1.7: Release bag position

The value is from 0 – 100. Once the pusher as meet that value, the bag holder will release the bag to detach it.

6.2.1.8: Release bag time

In relation to **Release bag position**, this is how many time the bag holder stay up in milliseconds.

6.2.1.9: Bag inflate position

In relation with the actual position of the pusher. When the pusher meets that value, the machine is allowed to inflate the next bag.

6.2.1.10: Tail flip delay (ms)

After one bagged product, this is how many times before starting the tail flipper blower in milliseconds.

6.2.1.11: Tail flip duration(ms)

In relation with the **Tail flip delay (ms)**, This is how many time the blower will be activated.

6.2.1.12: Starter blower delay(ms)

In the bag inflating sequence, this is when to start the starter blower. Starter blower should be the first to inflate the bag.

6.2.1.13: Starter blower time(ms)

This is the duration which the starter blower will be activated.

6.2.1.14: Blower delay(ms)

In the bag inflating sequence, this is when to start the blower. It should subsequence the starter blower.

6.2.1.15: Blower time(ms)

This is the duration which the blower will be activated.

6.2.1.16: Blowback delay(ms)

In the bag inflating sequence, this is when to start the blowback. Blowback is the last blower to work. The goal is to remove the excess of air and preventing the pusher to catches the a puffy bag on the way back.

6.2.1.17: Blowback duration(ms)

This is the duration which the blowback will be activated.

6.2.1.18: Bag detect min ON(ms)

Time in milliseconds (ms) that the machine waits to be sure that the bag is fully inflated.

6.2.1.19: Jam infeed delay(ms)

When a jam occurs on the infeed. This is the time before sending a signal to the machine upstream via the interlock.

6.2.1.20: Infeed waiting delay (ms)

On starting, the conveyor can wait to clear out the product ready to be packed. This is the amount of time it waits when the operator press START.

6.2.1.21: Cross cylinder ON (ms)

The cross conveyor is the conveyor built with between 2-4 white belts that make the product deviate to be multipacked. Attached to this conveyor is a pneumatic cylinder that lift the belt to get in contact with the loaf. The value is how long the belt are UP.

6.2.1.22: Cross cylinder minimum OFF (ms)

To prevent to the cylinder to move up and down too fast, a value can be added to force a certain amount of time before lifting again. Act like a filter for the sensor.

6.2.1.23: Transfer conveyor speed (Hz*100)

Speed of the transfer conveyor

6.2.1.24: Cross conveyor speed (Hz*100)

Speed of the cross conveyor

6.2.1.25: Infeed conveyor speed (Hz*100)

Speed of the Infeed conveyor

6.2.1.26: Outfeed conveyor speed (Hz*100)

Speed of the outfeed conveyor

6.2.1.24: Prefeed conveyor speed (Hz*100) (option)

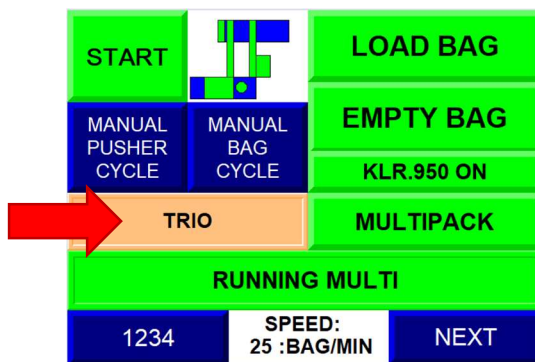
Speed of the prefeed conveyor (option)

6.2.1.25: Pack quantity

Duo = 2; Trio = 3

6.2.1.26: Recipe name

This is what the operator will see on the first page of the screen.



6.2.1.27: Recipe number

Please, do not use. Programming purposes

6.2.1.28: Outfeed stop delay (ms)

When the operator press STOP, this is how long it take before stopping the conveyor to let the bag closing machine to finish.

6.2.1.29: Transfer stop delay (ms)

The transfer conveyor is the conveyor feeding the cross conveyor and if the machine is stop at the wrong time, the cross conveyor can jam. This parameter allows the loaf to reach the sensor before stopping the conveyor.

6.2.1.30: Bag thickness (in)

Thickness of the bag is used to lift that measurement every time a bag is consumed. The purpose is the very last bag will be at the same height than the first bag.

7.0: MAINTENANCE AND SERVICING

7.1: Spare parts list for KLR.5200

Select the list according to your machine. Always ask KLR to quote an adapted spare parts list.

7.1.1: Multipack crossing (pneumatic gate) Kinetix 240V

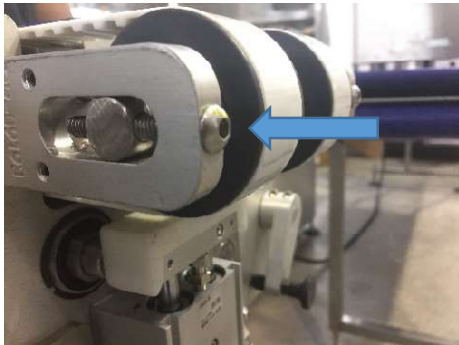
Numbers	Part numbers	Quantity	Descriptions
1	PM-01511	2	BEARING
2	PM-01541	4	CYLINDRICAL BEARING WITH COLLAR
3	SSB40-11KK	2	SPROCKET #40 – 11
4	KR-02013	1	KIT CHAIN FOR DRIVE MOTOR
5	SSB40-10KK	1	SPROCKET #40 – 10
6	KR-02015	2	KIT CHAIN ASSEMBLY
7	PE-00905	1	INDUCTIVE PROXIMITY SENSOR 14mm
8	PE-00508	1	CABLE M12 90 DEGREE
9	PP-00552	1	DUAL ROD CYLINDER
10	PP-00107-M5	4	FLOW CONTROL – SPEED CTRL, M5, SPL METER OUT
11	PP-00101	4	UNION M5-1/4 TUB
12	PM-02133	10	BEARING SPECIAL 2 SET SCREWS
13	PM-00608-B	1	TIMING BELT, ROUND WINDJET
14	PP-00589	1	NOZZLE
15	PE-00955	1	LASER SENSOR, 90mm, 10 – 30VDC
16	PE-00507-10	1	CABLE M12 STRAIGHT, 10m
17	PB-00412	2	URETHANE TIMING BELT
18	PE-00538	1	SENSAGUARD SAFETY SWITCH
19	PE-00642	1	SENSAGUARD 18MM, SAFETY SWITCH
20	PE-01522	1	SAFETY "T"DC MICRO
21	PE-01523-02	1	PATCHCORD DC MICRO FEMALE STRAIGHT 5PIN, 2M
22	PM-00273	1	STEEL KNOB RETRACTABLE PIN 1/2"-13 ZP
23	PM-00174	1	FOUR PRONG KNOB
24	PE-00546	1	CABLE 8 PINS 5 METERS
25	PE-00902-PNP	1	RETROPOLAR CLEAR FOR TRANSPARENT OBJECT
26	PE-00911	1	M12 MALE, FIELD-WIREABLE (IDC)
27	PP-00562	1	AIR CYLINDER 20-0100 (MULTIPACK CROSS. ONLY)
28	PP-00199	2	FLOW CONTROL, 1/4"TUB – 1/8"NPT – OUT
29	PE-0641	1	SERVO MOTOR KINETIX 240V
30	PE-00662	1	POWER CABLE NON-FLEX 5M
31	PE-00660	1	KINETIX VP LOW INERTIA SERVO MOTOR
32	PR-03837-1-L	1	BOTTOM LEFT SIDE SCOOP
33	PR-03837-1-R	1	BOTTOM RIGHT SIDE SCOOP
34	PR-03734-L	1	TOP LEFT SIDE SCOOP
35	PR-03734-L	1	TOP RIGHT SIDE SCOOP
36	PR-03865-V1	1	BAG HOLDER WITH STARTER BLOWER

7.2: Change belts on the transfer conveyor

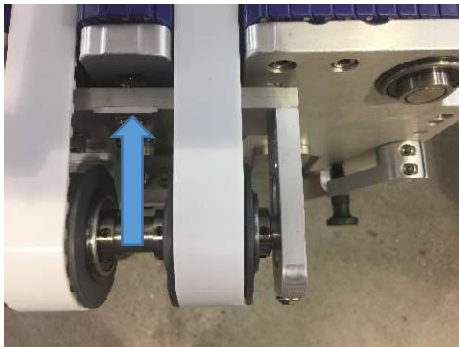
1. Turn off the equipment and put a lockout the the electrical pannel. Please refer to the security section of this document.
2. Unscrew the belt protective cover and remove the cover.



3. Using an Allen key, release the tension on the belt by loosening these screws on each side.



4. Push the belt pulley forward



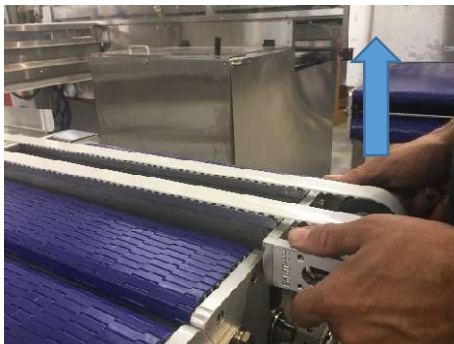
5. Remove the cover from below by unscrewing the 6 screws



6. Loosen



7. Lift the strap system and remove the straps.



7.3: Cross conveyor restriction adjustment

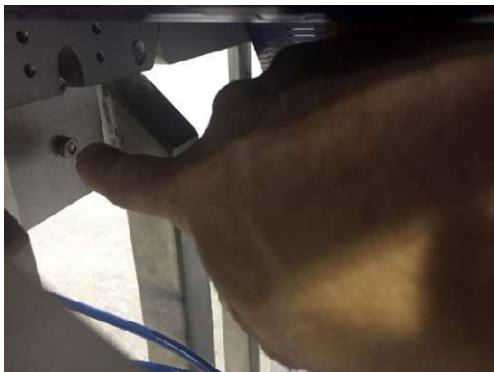
1. Unscrew the two adjustment screws



2. Unscrew the two valves



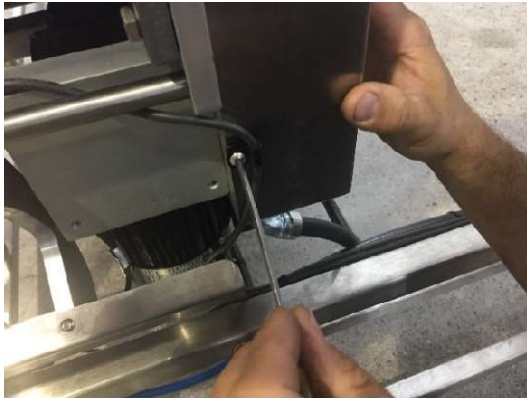
3. Unscrew the nuts for the valve support



4. Change both belts



1. Unscrew the belt system cover



2. Remove cover



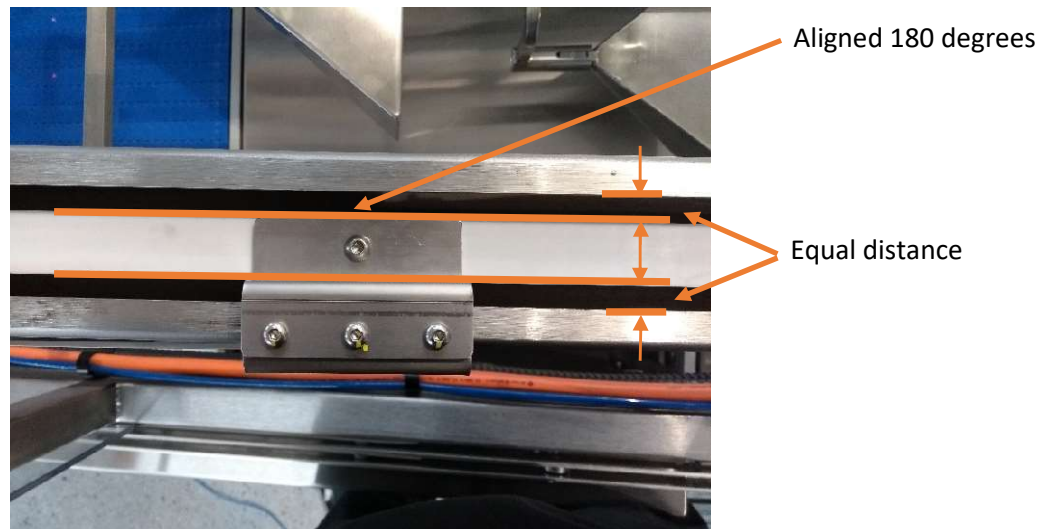
3. Release the tension on the bolt used to hold the engine in order to be able to reduce the tension and change the belt.



7.4: Pusher belts

When changing these belts, pay attention to:

1. The belt is united and oriented by the union. It must be perfectly aligned.
2. The strap must be placed in the center of the arm.
3. Voltage should be appropriate.



Tension is applied and released at the end. You will need to remove the cover (four screws)



In addition the pushers should be well synchronized. Here is the ideal result:



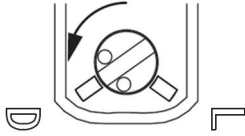
If this is not the case, release the tension of a belt and make it jump from the teeth in the toothed wheel in order to synchronize everything.

Once finished, it is important to do a reset or “homing”. See the starting sequence section.

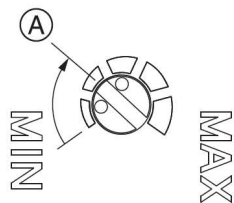
7.5: Sensor Adjustment

7.5.1: Bag sensor (Retropolar sensor)

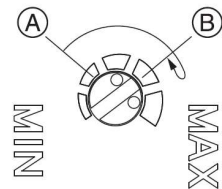
1. The sensor light should turn off when the bag is between the sensor and the reflector. To do this, the sensor must be configured in “dark on” mode.



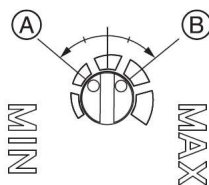
2. Hold the bag in between the sensor and the mirror.
3. Adjust sensor sensitivity



- a. Find position A. To do this, make sure the sensor can see the reflector directly. Turn the adjuster counterclockwise until the orange indicator light comes on.



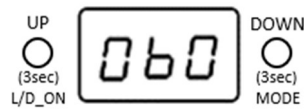
- b. Find position B. Put a bag between the sensor and the reflector. Turn until the orange indicator light turns off. Confirm by coming back the other way.



- c. The optimal position should be in the middle of positions A and B.

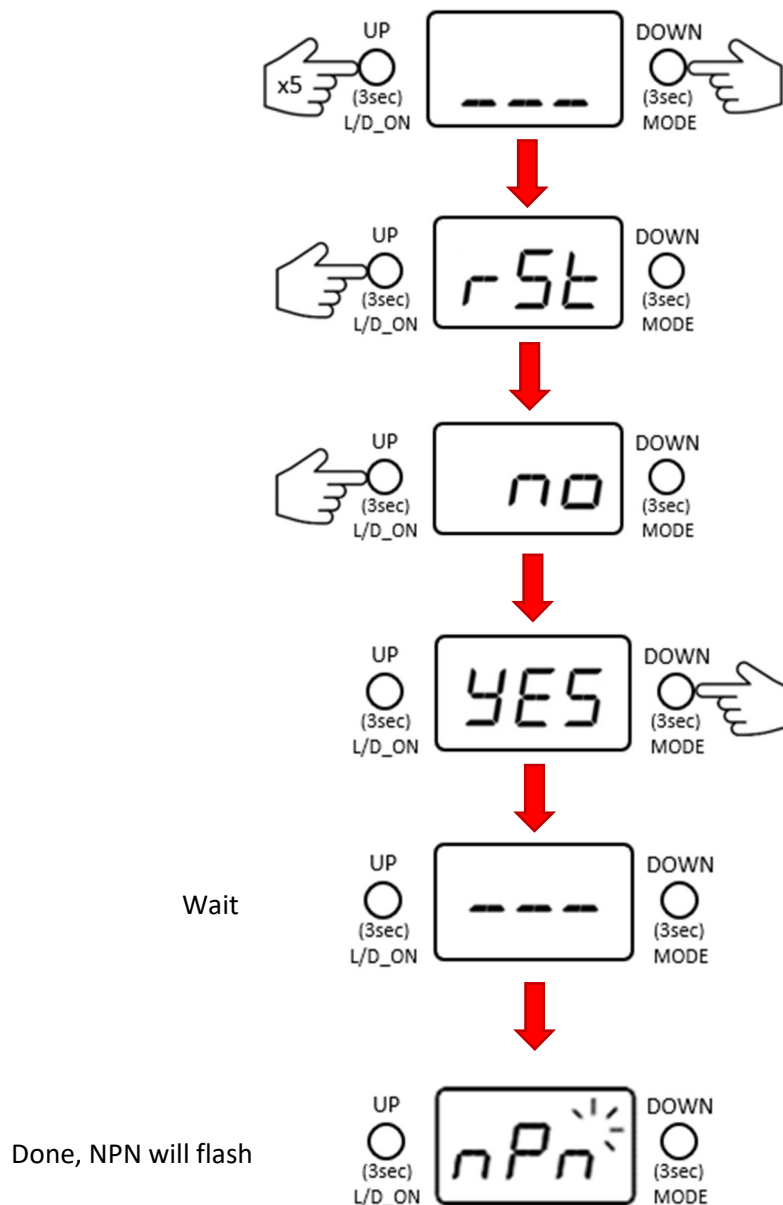
7.5.2: Product sensor (Laser sensor)

See "Bag input module" to know how to get to the sensor. On power up, display reading value:



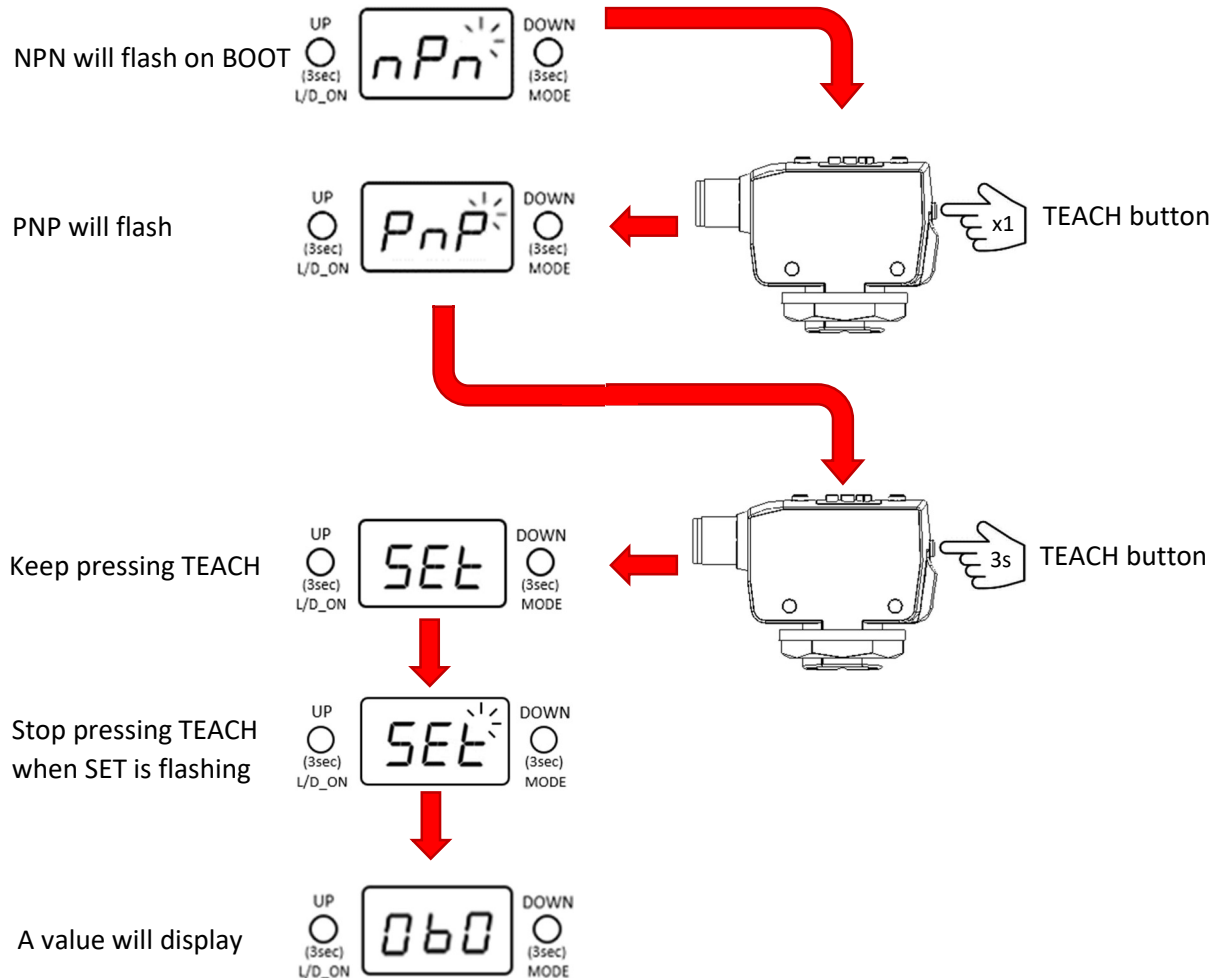
7.5.2.1: Reset to default

1. While pressing on DOWN, press five (5) times on UP. A question will then display.
2. Press UP twice to select YES.
3. Press DOWN to reset.



7.5.2.3: Teach the bag sensor

1. Select the good logic (NPN, PNP)
2. With no product in front, press the TEACH button for 3 seconds (until the SET flashes in the display).



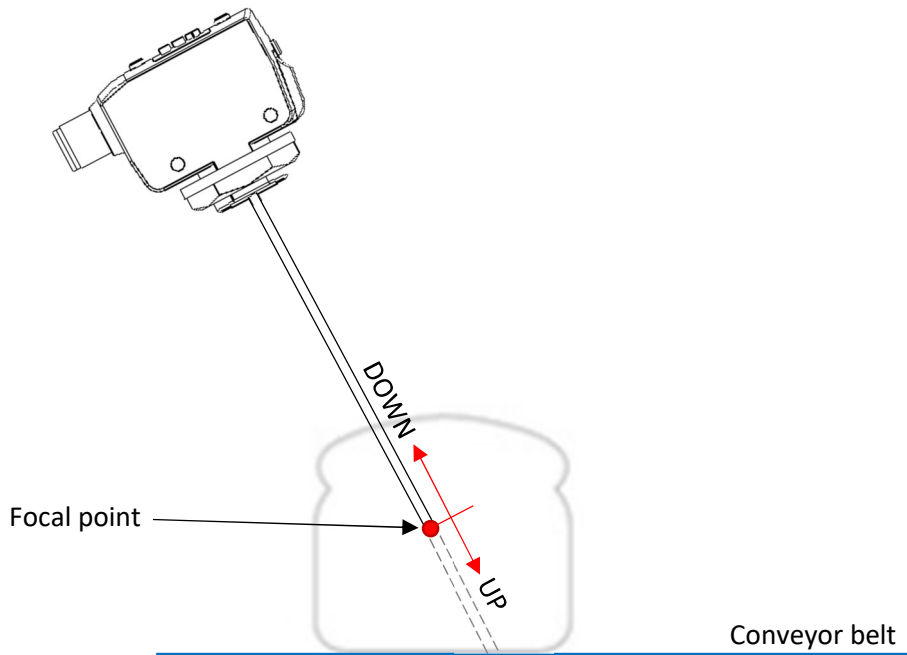
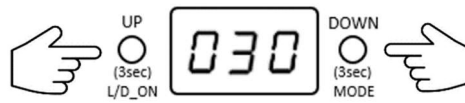
7.5.2.4: Adjust focal point

The focal point is the limit of sight of which the sensor will detect the product. Usually set in the middle of the product to accommodate product imperfection.

1. Press 1 time on UP or DOWN. The focal value will display for a short time.

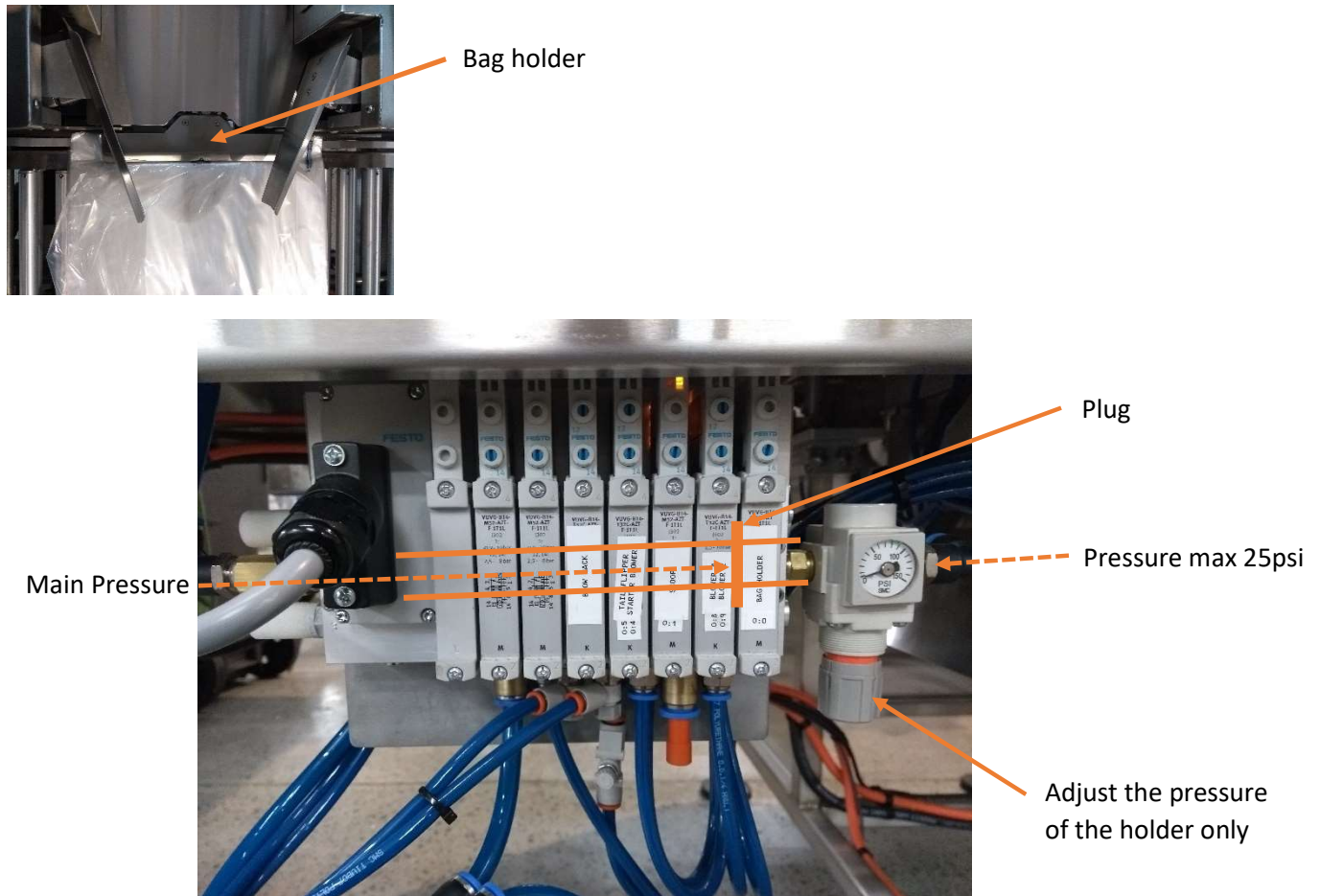


2. Press UP to extend and DOWN to shorten the distance of the detection



7.6: Pneumatic system

Bag Blocker Pressure Regulator Operation:



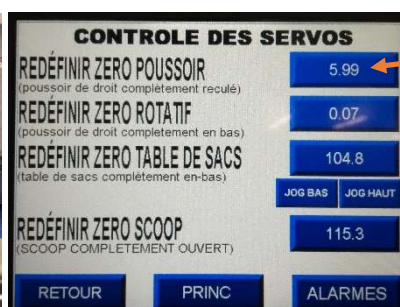
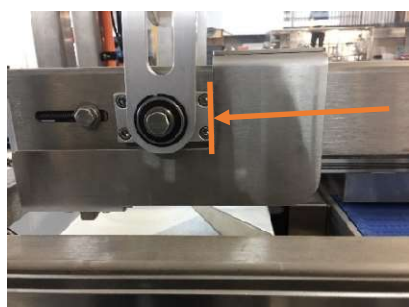
The photo above explains that there is a regulator completely dedicated to the bag holder. It is possible that the pressure is too high, and the blocker tears the bag. On the other hand, there is a parameter in the recipes which will have the effect of releasing the bag earlier or later in the sequence. This could be the cause of the bag tears. See recipe section

7.7: Homing sequence (before serial number 2727)

The start sequence should be done the moment the tension of the two pusher straps is released. You will have to enter the password in “LOGIN” to reach the advanced settings page. To function normally, you must ensure that the three servo motors are aligned in their starting position and press their “homing” button for the effect to take effect.

7.7.1: Redefining pusher zero

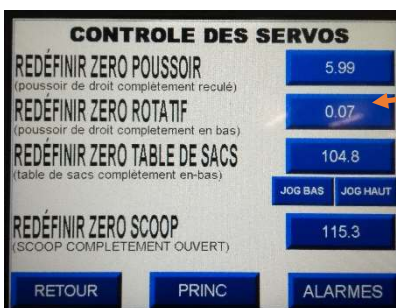
1. Manually move the plunger back to its starting position. The left pusher (visually in front of the screen) should be as close forward as possible.
2. Check that the right pusher must be as far back as possible. If this is not the case, the two belts are not correctly installed: refer to the maintenance section.
3. If everything is normal, please press its “HOMING” button.



Press to reset

7.7.2: Redefining rotary zero

1. Manually align the two connecting rods so that the tappets are as high and as low as possible.
2. Press “HOMING”.

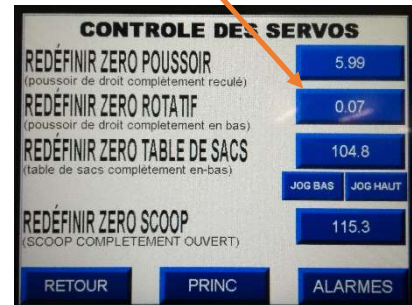
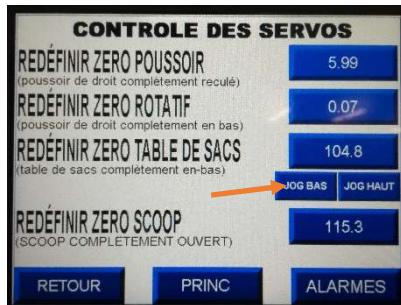


Press to reset

7.7.3: Redefining the bag table zero

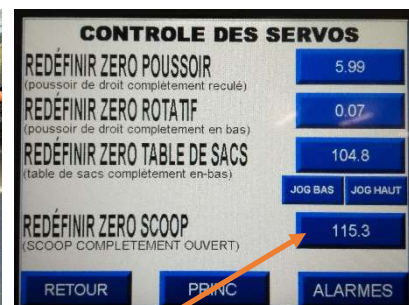
1. Press “JOG DOWN” in the servo control page until the table touches the horizontal bar of the structure. The sack table should descend only when the button is pressed.
2. Press “HOMING”

Press to reset



7.7.4: Redefining the zero of the “scoops” (optional feature)

1. Make sure the machine is not ready to start, because the servo might be applying force.
2. Turn the crank counter clockwise until the scoops are as wide as possible.
3. Press “HOMING”



Press to reset

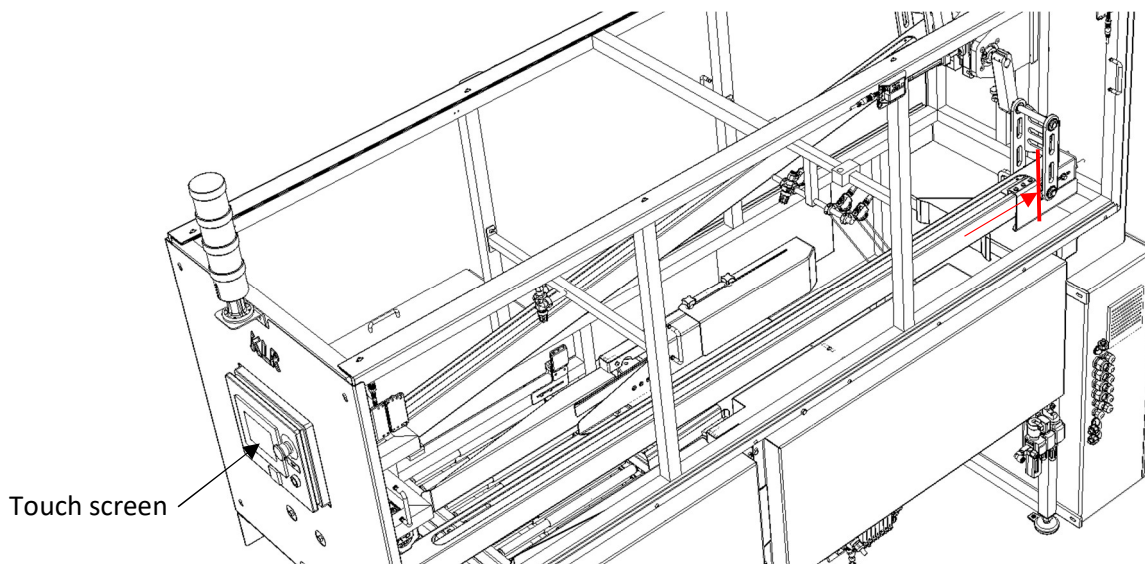
7.8: Homing sequence (Serial number 2727 and beyond)

7.8.1: Redefining pusher zero



- The layout of the machine may vary, so do the position of touch screen compared to the right and left pusher. **Always** follow the instruction directly in the touch screen.

1. Read in the screen what to be done.
2. Manually place the pusher completely against the aluminum part.



3. Press the "Homing" button in the screen.

SERVOS CONTROLS

HORIZONTAL PUSHER ZERO
(right pusher completely back)

VERTICAL PUSHER ZERO
(right pusher completely down)

BAG TABLE ZERO
(bag table completely down)

SCOOP TO TABLE HEIGHT (in) 1.234 "

12.34

12.34

12.34

JOG DOWN JOG UP

REMASURE PILE HEIGHT
ACT: 0,123

SERVOS CONTROLS

HORIZONTAL PUSHER ZERO
(right pusher completely back)

VERTICAL PUSHER ZERO
(right pusher completely down)

BAG TABLE ZERO
(bag table completely down)

SCOOP TO TABLE HEIGHT (in) 1.234 "

00.00

12.34

12.34

JOG DOWN JOG UP

REMASURE PILE HEIGHT
ACT: 0,123

BACK

PRINC

FACEPLATES

BACK

PRINC

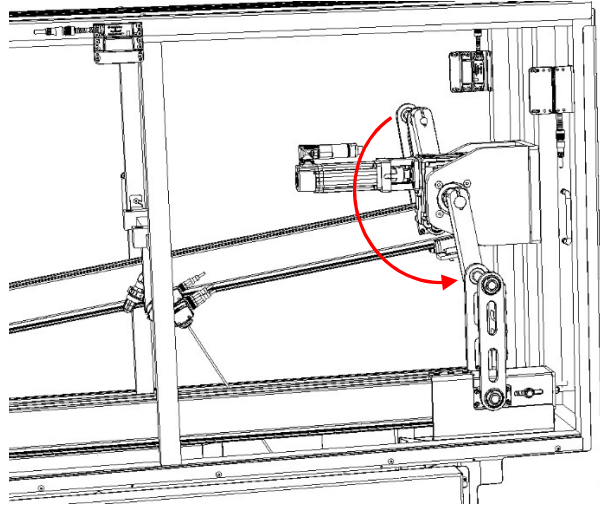
FACEPLATES

7.8.2: Redefining rotary zero



- The layout of the machine can vary, so do the position of touch screen compared to the right and left pusher. **Always** follow the instruction directly in the touch screen.

1. Align manually the pusher so it is located the lowest possible.



2. Press the "Homing" button in the screen.

SERVOS CONTROLS

HORIZONTAL PUSHER ZERO

(right pusher completely back)

VERTICAL PUSHER ZERO

(right pusher completely down)

BAG TABLE ZERO

(bag table completely down)

SCOOP TO TABLE

HEIGHT (in) 1.234 "



00.00	
12.34	
12.34	
JOG DOWN	JOG UP
REMASURE PILE HEIGHT ACT: 0.123	

SERVOS CONTROLS

HORIZONTAL PUSHER ZERO

(right pusher completely back)

VERTICAL PUSHER ZERO

(right pusher completely down)

BAG TABLE ZERO

(bag table completely down)

SCOOP TO TABLE

HEIGHT (in) 1.234 "

00.00	
00.00	
12.34	
JOG DOWN	JOG UP
REMASURE PILE HEIGHT ACT: 0.123	

BACK

PRINC

FACEPLATES

BACK

PRINC

FACEPLATES




7.8.3: Redefining bag table zero

The machine does measure itself when no bag is present. Then when the bags are loaded, it will compare with the first value to know how tall the bag stack is.




1. Remove all bag from the bag table.
2. Press reset.
3. Go to the Servos controls page and JOG DOWN until the bag table is completely down to the stopper.

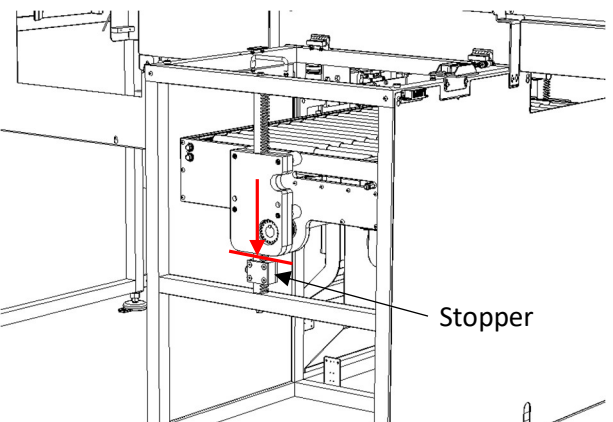
SERVOS CONTROLS

HORIZONTAL PUSHER ZERO (right pusher completely back)	00.00
VERTICAL PUSHER ZERO (right pusher completely down)	00.00
BAG TABLE ZERO (bag table completely down)	12.34
SCOOPTO TABLE HEIGHT (in)	1.234 "

REMASURE PILE HEIGHT
ACT: 0.123






Stopper

**One panel has been hidden for better understanding*

4. Press the "Homing" button in the screen. The bag table will raise automatically, and touch probe the sensor. A green box will appear when the homing is in progress.

SERVOS CONTROLS

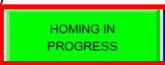


HORIZONTAL PUSHER ZERO (right pusher completely back)	00.00
VERTICAL PUSHER ZERO (right pusher completely down)	00.00
BAG TABLE ZERO (bag table completely down)	12.34
SCOOPTO TABLE HEIGHT (in)	1.234 "







REMASURE PILE HEIGHT
ACT: 0.123

SERVOS CONTROLS

HORIZONTAL PUSHER ZERO (right pusher completely back)	00.00
VERTICAL PUSHER ZERO (right pusher completely down)	00.00
BAG TABLE ZERO (bag table completely down)	00.00
SCOOPTO TABLE HEIGHT (in)	1.234 "

REMASURE PILE HEIGHT
ACT: 0.123

7.9: Documentation for drive

For any questions regarding the programming of the control panel, please refer to the manuals below :

Powerflex 525:

http://literature.rockwellautomation.com/idc/groups/literature/documents/um/520-um001_-en-e.pdf

Servo Kinetix 5500:

http://literature.rockwellautomation.com/idc/groups/literature/documents/um/2198-um001_-en-p.pdf

Allen Bradley Compactlogix 5069-L320ERM PLC:

http://literature.rockwellautomation.com/idc/groups/literature/documents/um/5069-um001_-en-p.pdf

Safety relay Allen Bradley 440C-CR30 :

http://literature.rockwellautomation.com/idc/groups/literature/documents/um/440c-um001_-en-p.pdf

8.0: Maintenance and cleaning by the user

- We recommend cleaning the belts with an air jet after each day of use.
- We recommend contacting a qualified technician for any electrical and mechanical problems
- Users are not allowed to perform any operation or repair requiring the use of tools. Only qualified technicians are allowed to perform this type of operation.

Safety:

- All operations must be carried out in a safe environment without risk to the user and the equipment.

Regular maintenance:

- Before each use, check that each belt runs in the correct direction before each use. If a noise is heard, check the belts and all moving parts, and contact a qualified technician for service.
- If in doubt, contact a qualified technician to prevent any damage and source of risk to the equipment.
- Maintenance and deep cleaning must be done by qualified technicians
- We recommend blowing air over the belts to prevent clogging after each day of use.
- We recommend referring to the manual or to a KLR Systems technician for any mechanical and electrical problem.

KLR.5200

Serial numbers: KLR-00001 –
Beyond



Revision: 2025-12-16

9.0: Address and contact for after-sales service

KLR SYSTEMS INC.

944 rue des Hérons

St-Pie, QUÉBEC, CANADA

JOH 1W0

(450) 388-0404

We recommend contacting a KLR Systems technician for any problem that cannot be solved by qualified personnel. For any issues related to programming or software issues, please call 450-388-0404.

KLR.5200

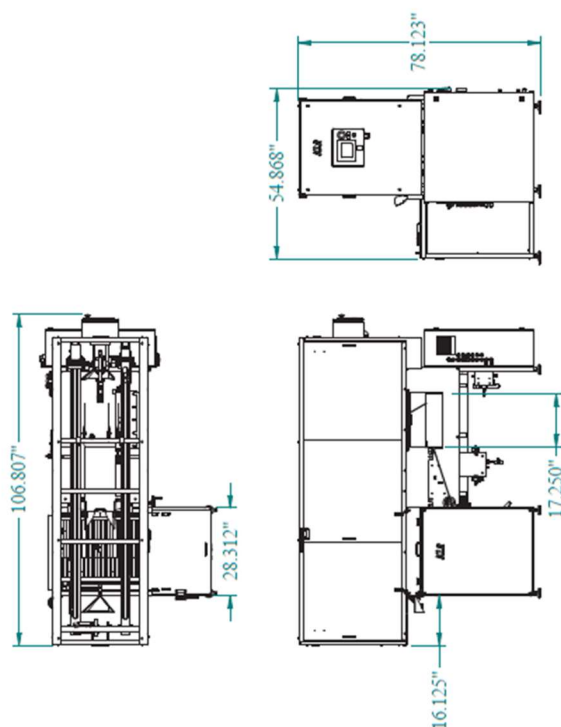
Serial numbers: KLR-00001 –

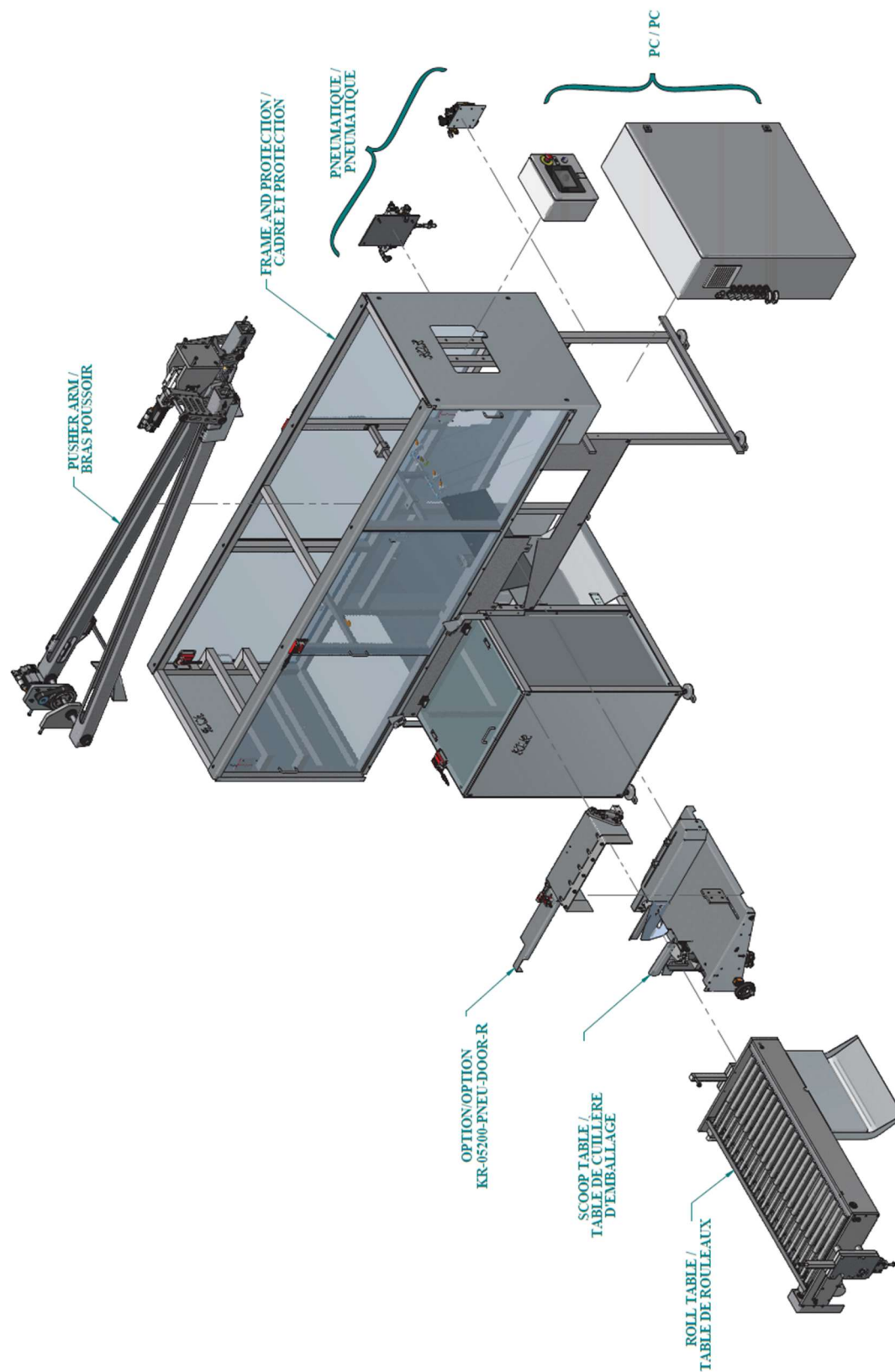
Beyond

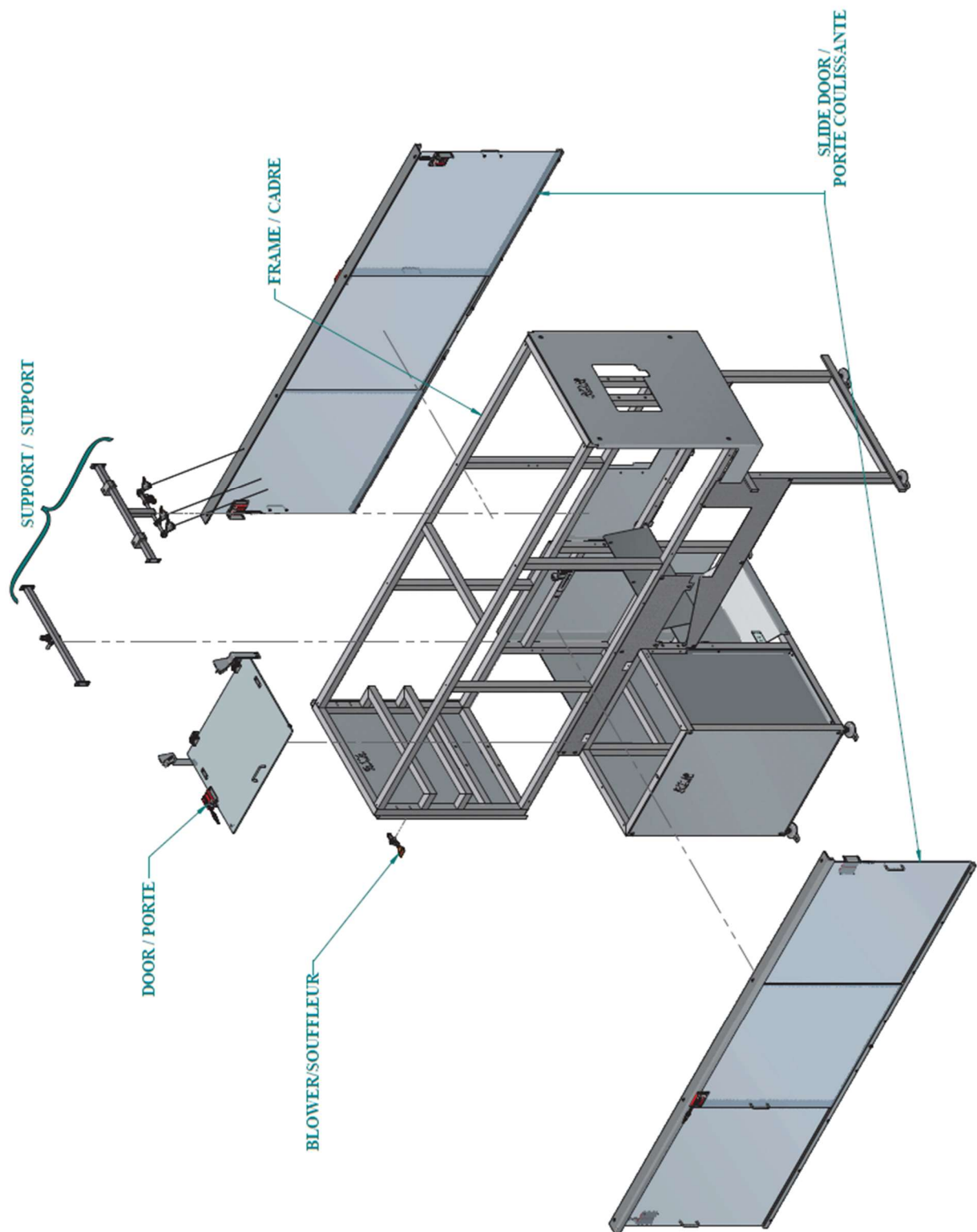


Revision: 2025-12-16

10.0: Exploded views





10.1: Frame and protection

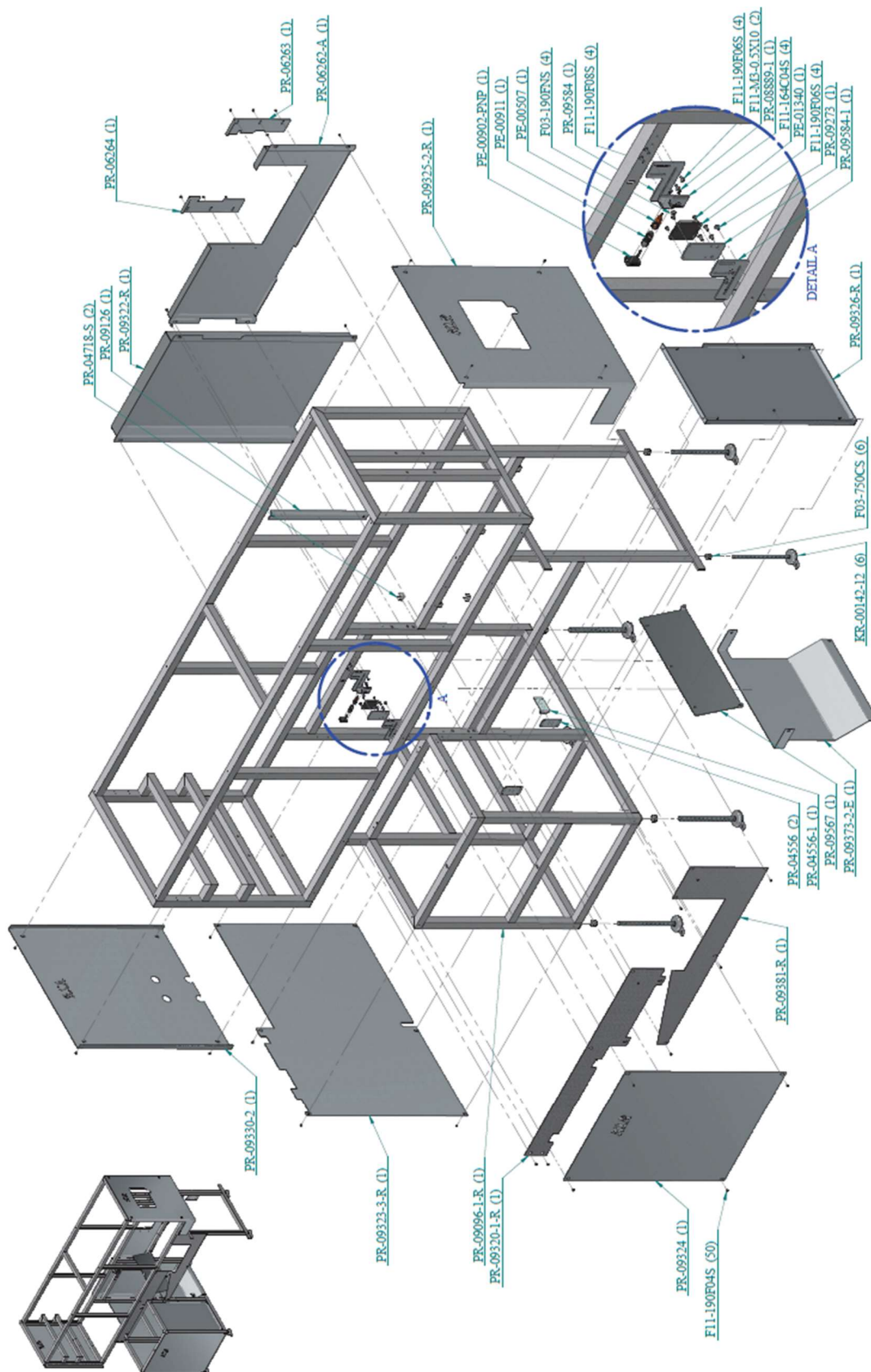
KLR.5200

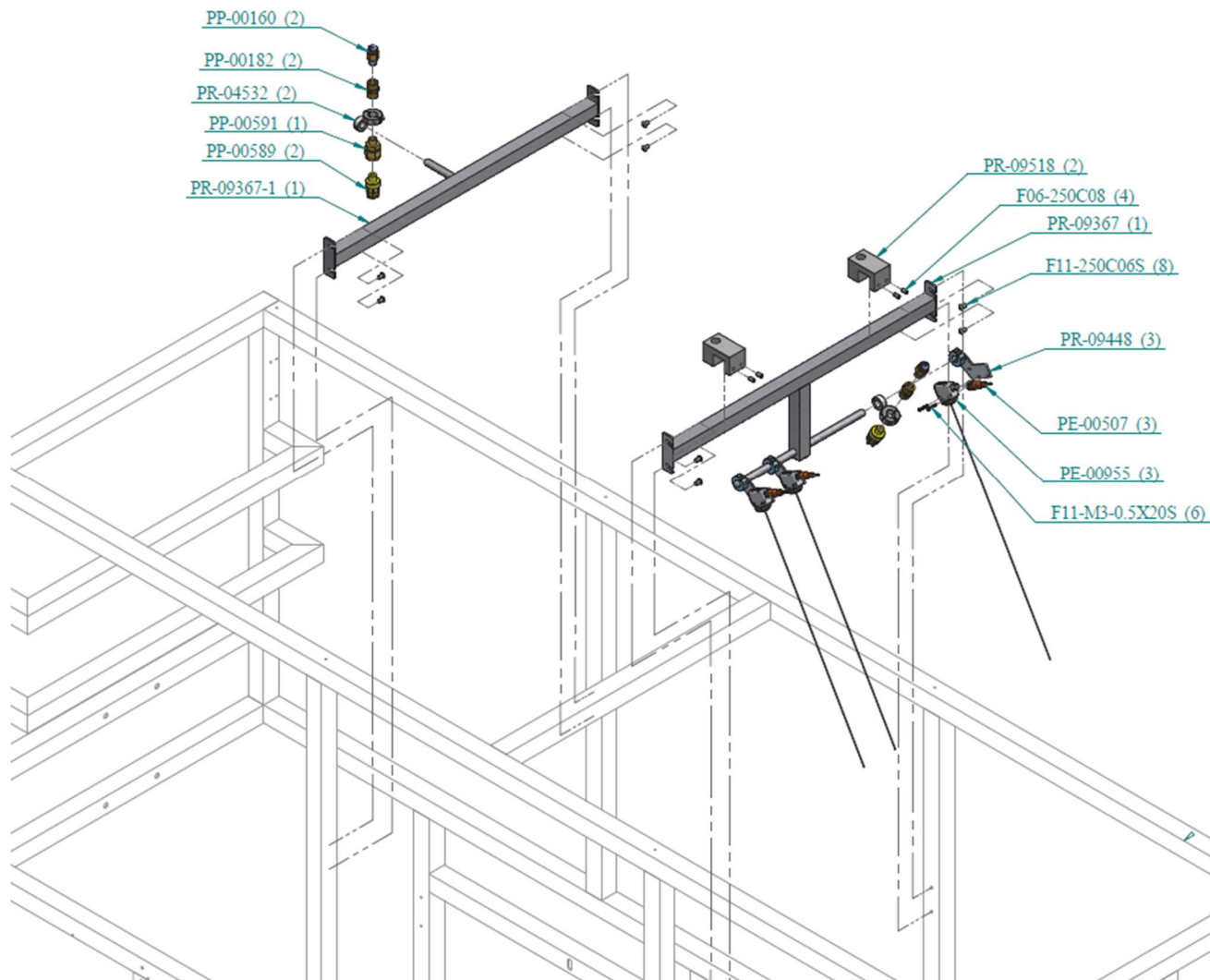
Serial numbers: KLR-00001 –

Beyond

10.2: Frame

Revision: 2025-12-16



10.3: Blower and sensor support

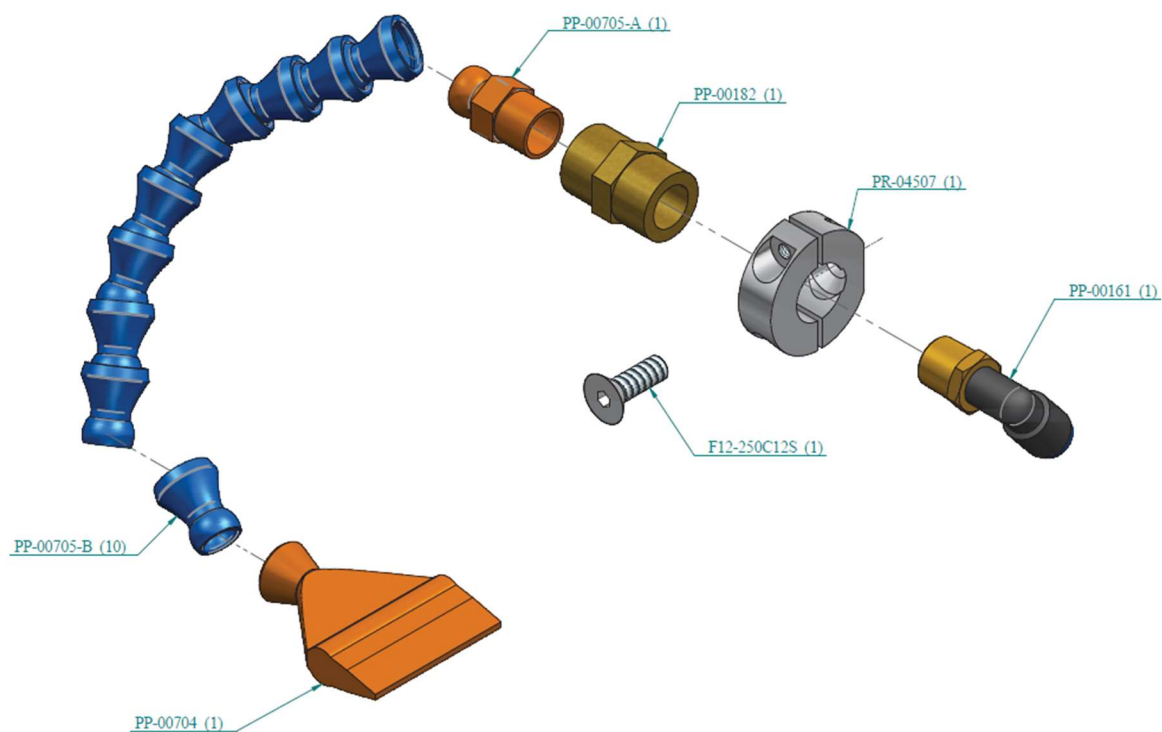
KLR.5200

Serial numbers: KLR-00001 –

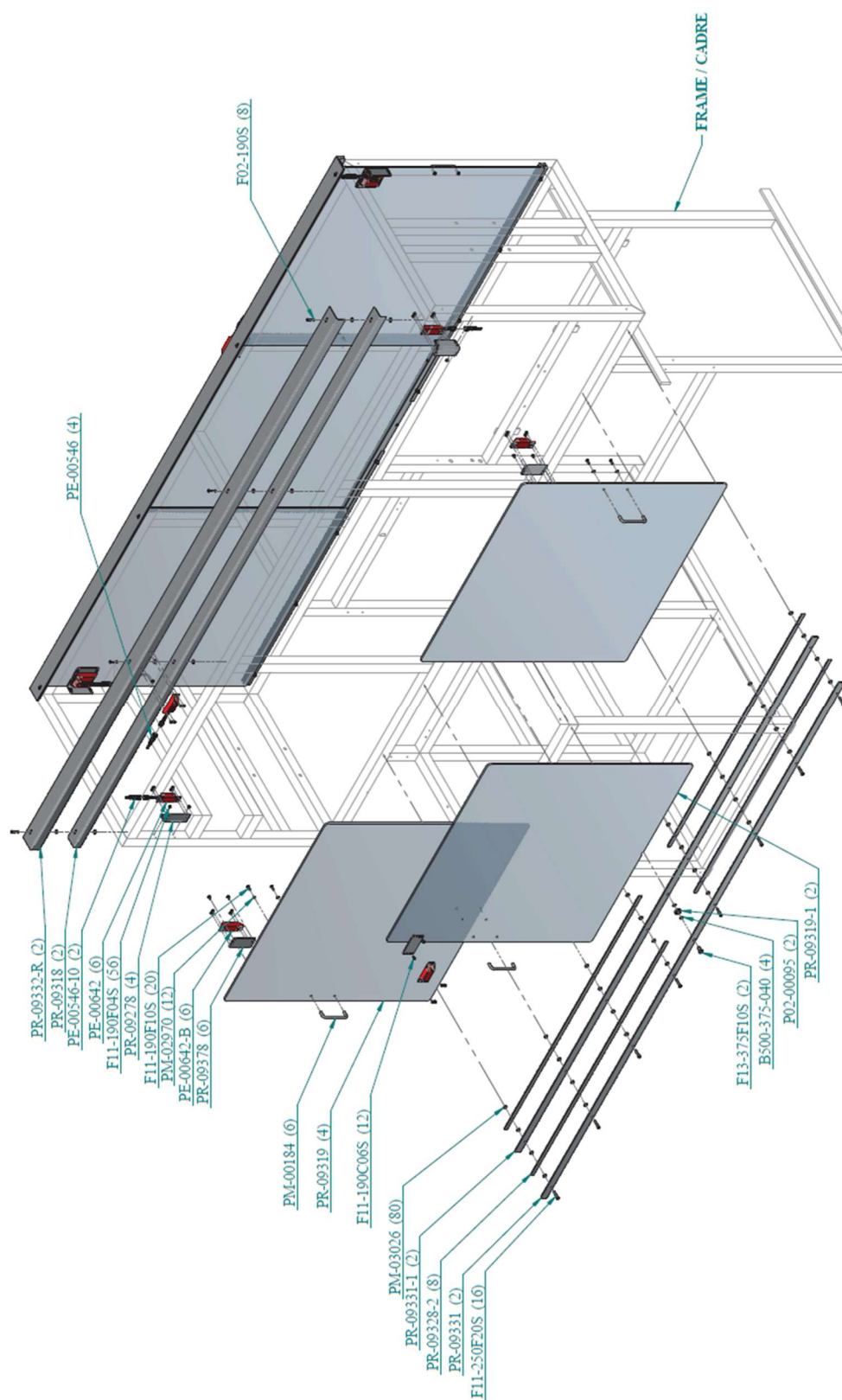
Beyond

10.4: Tail flipper

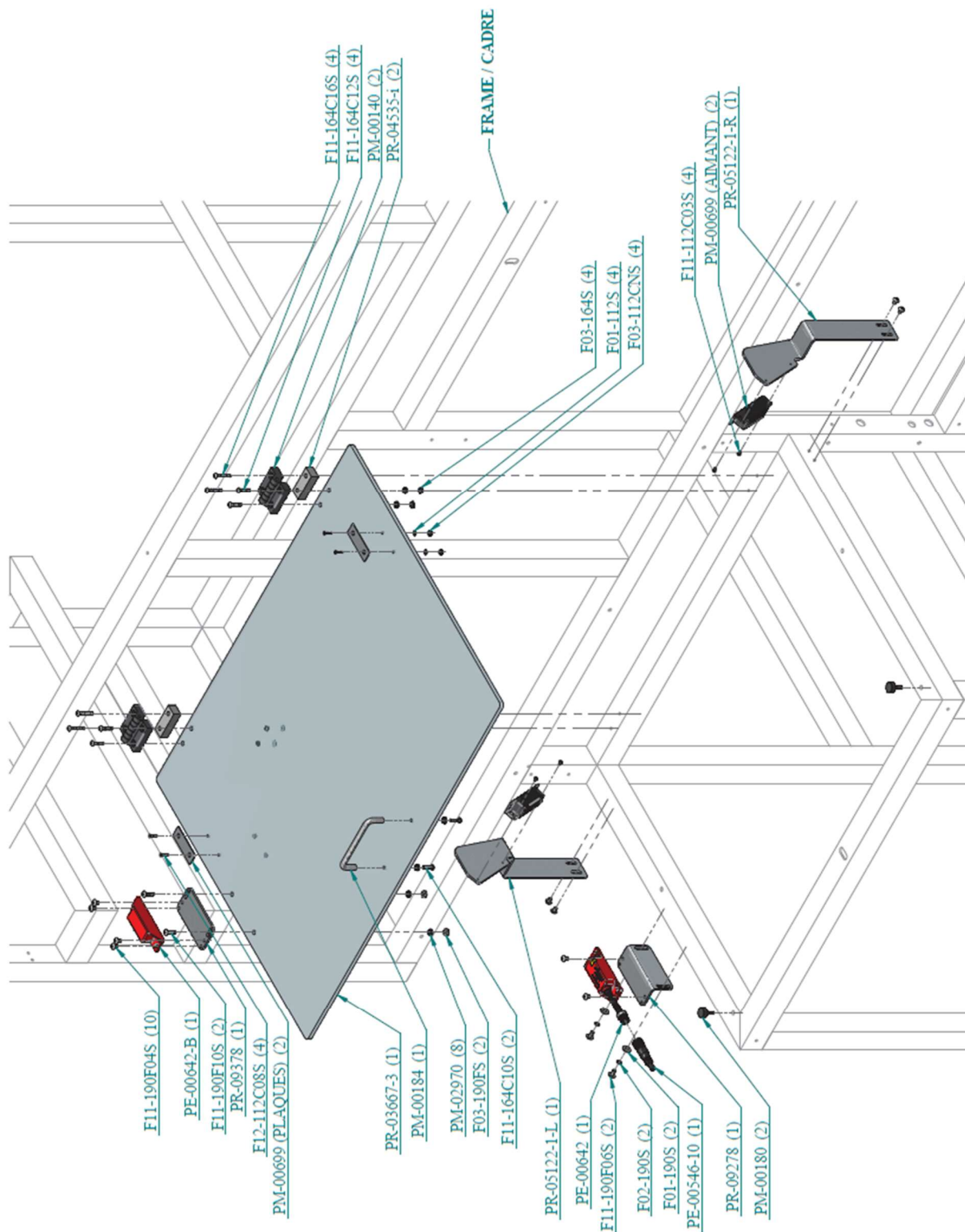
Revision: 2025-12-16

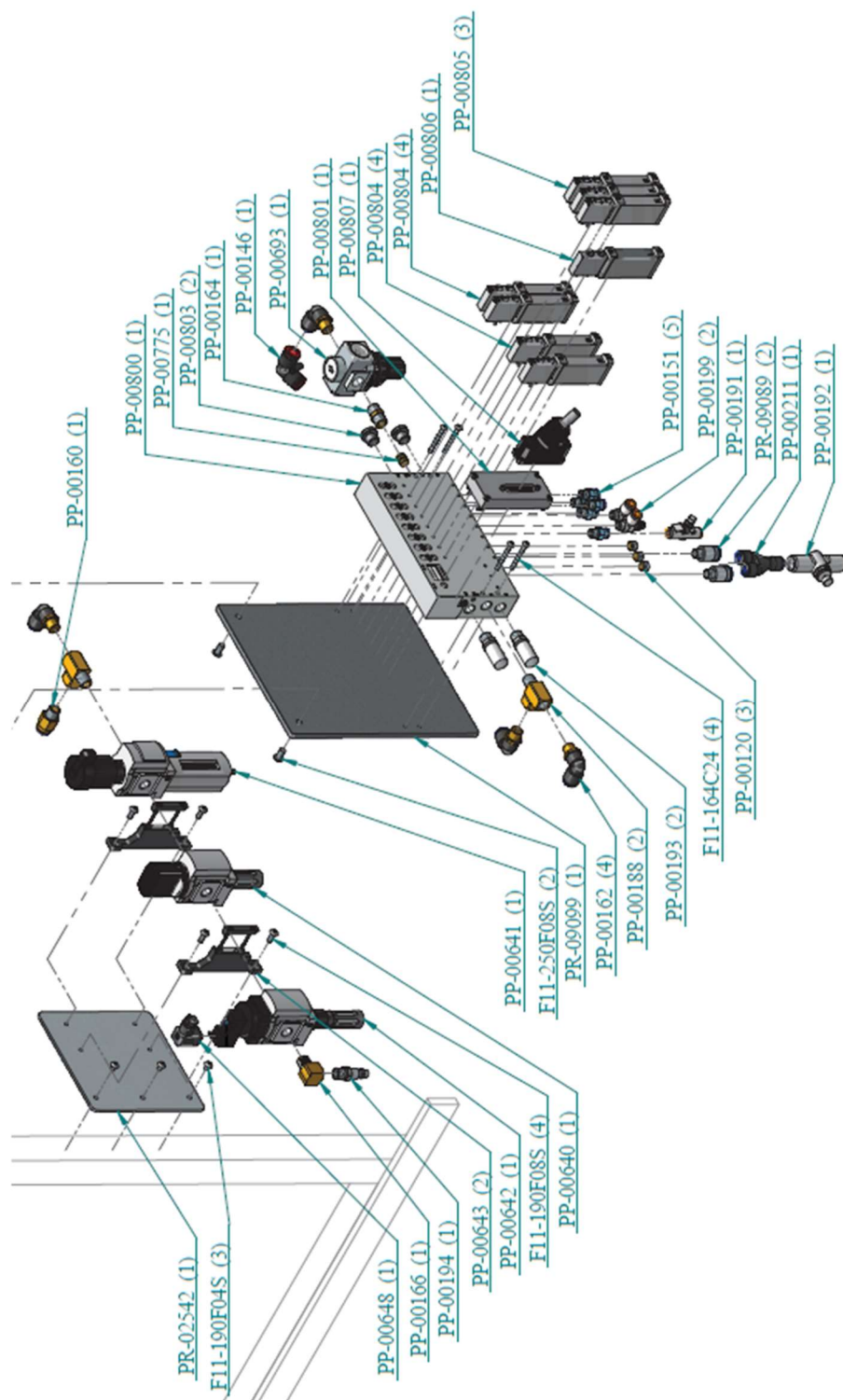


10.5: Safety door

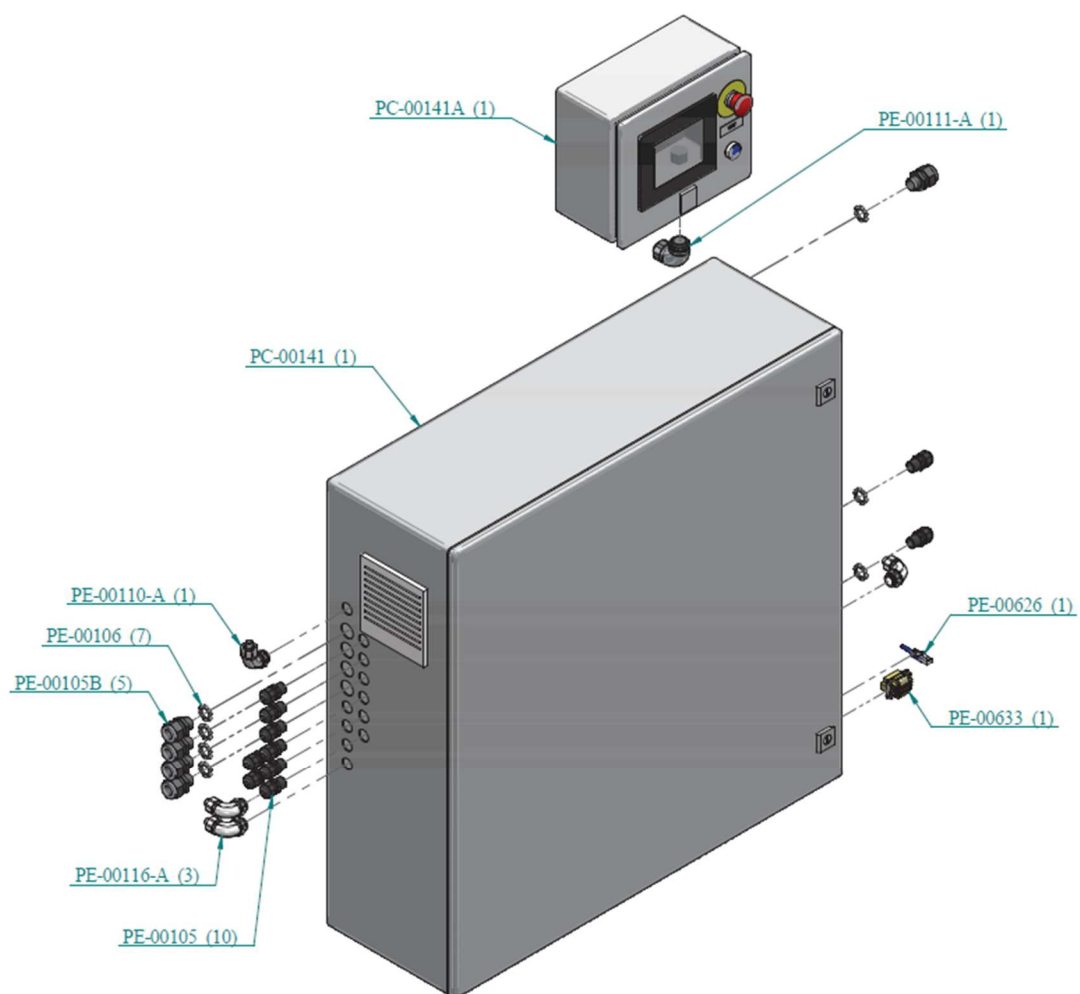


10.6: Bag table door

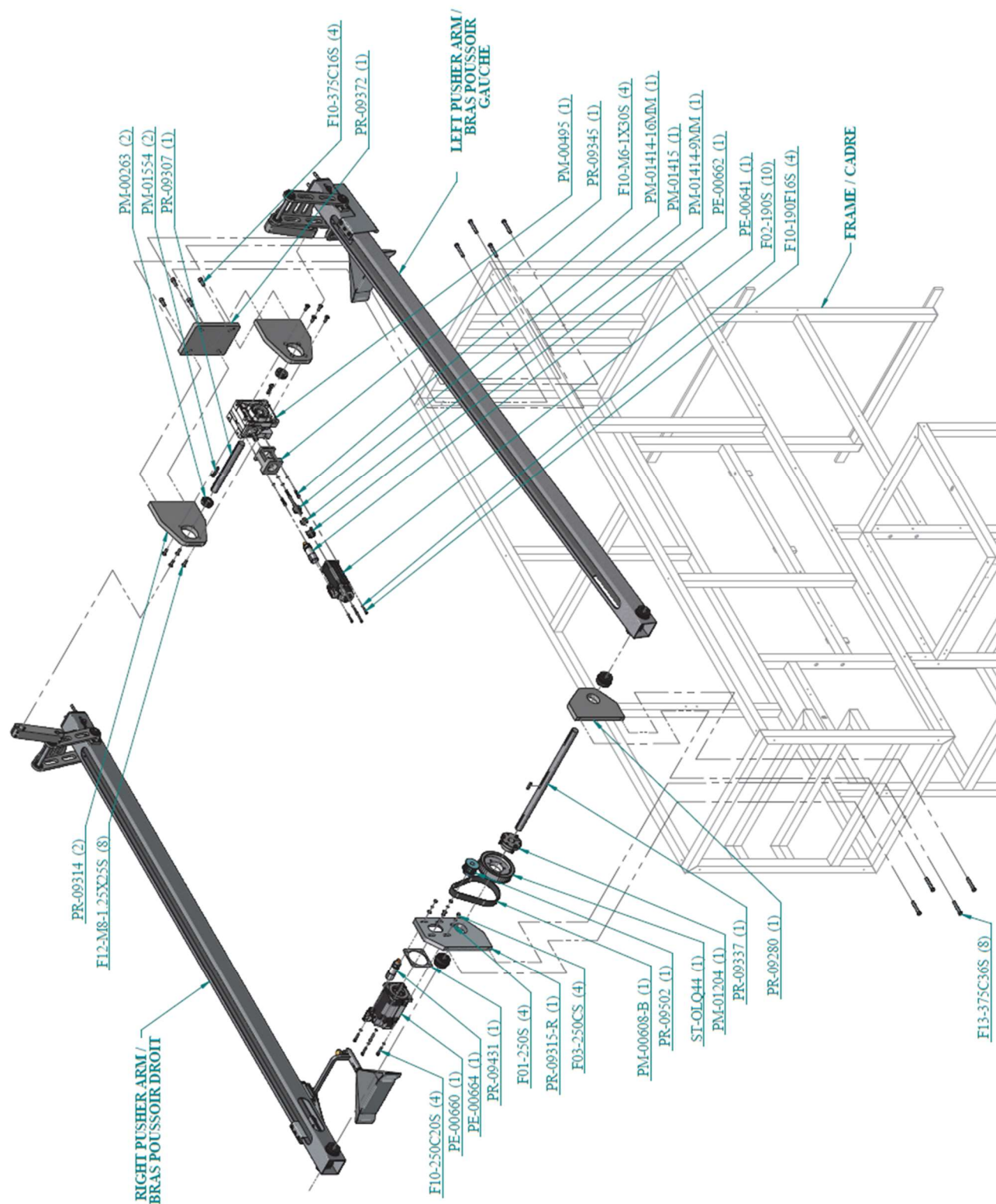




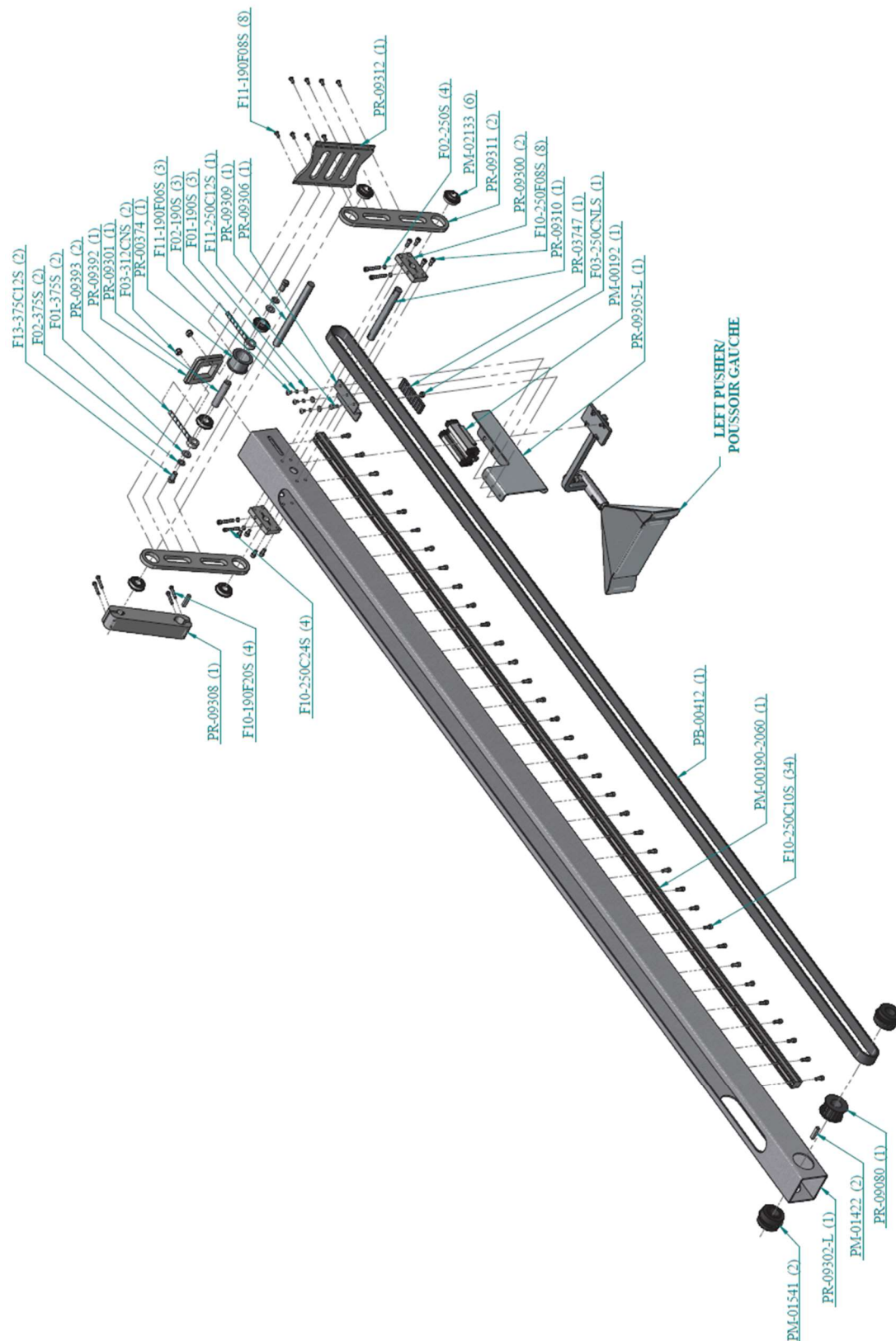
10.8: Control panel



10.9: Pusher arms



10.10: Left pusher



KLR.5200

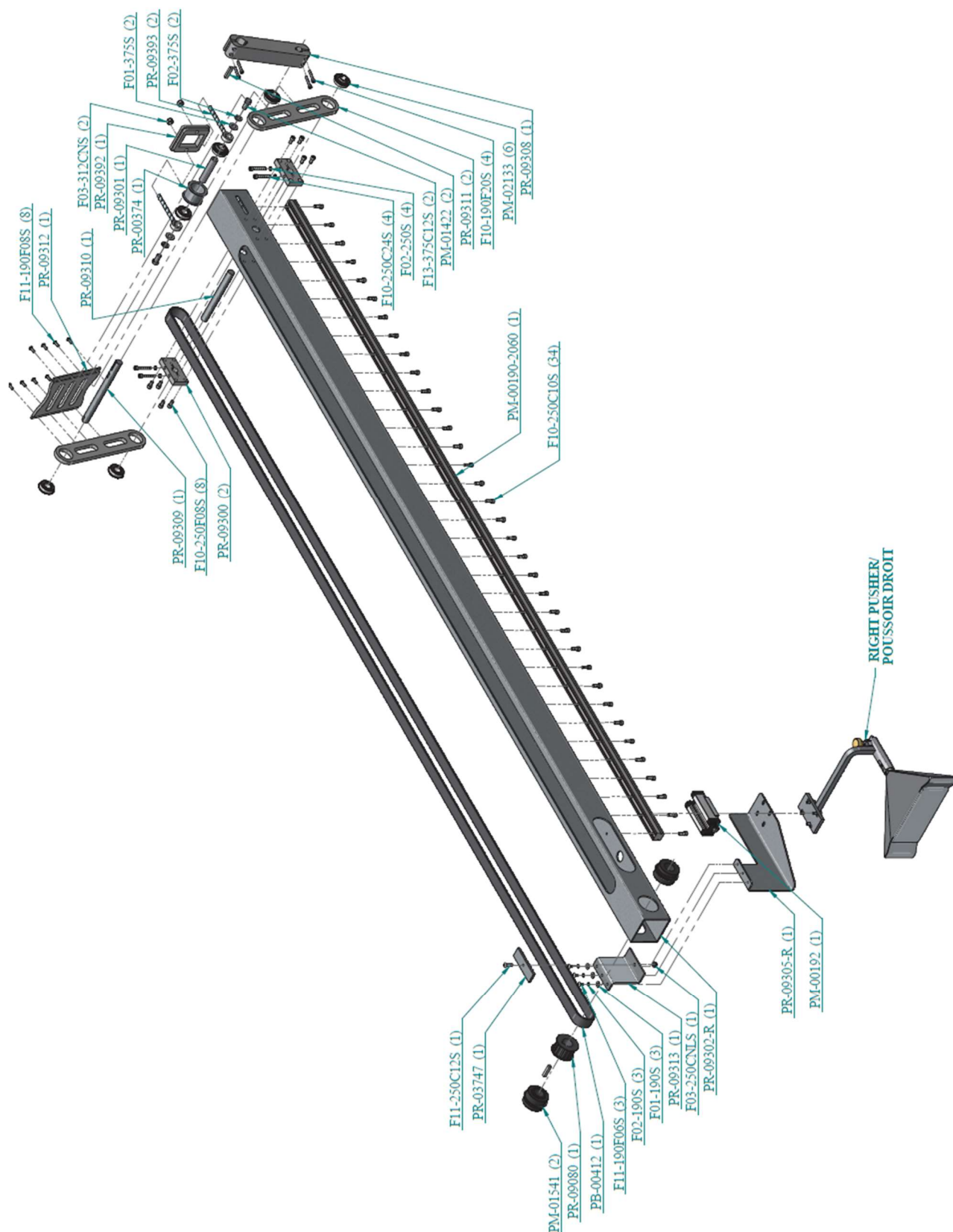
Serial numbers: KLR-00001 –

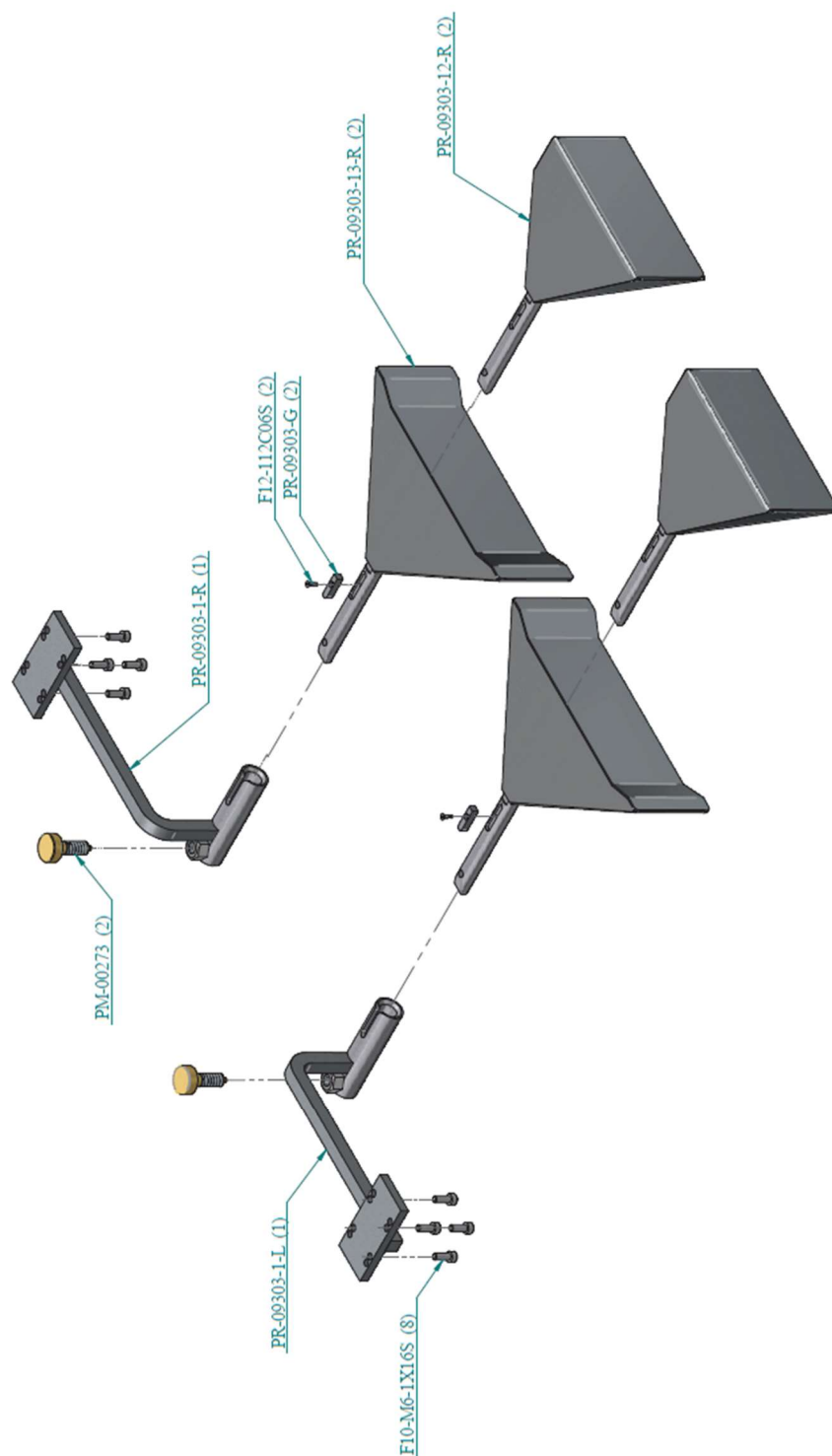
Beyond



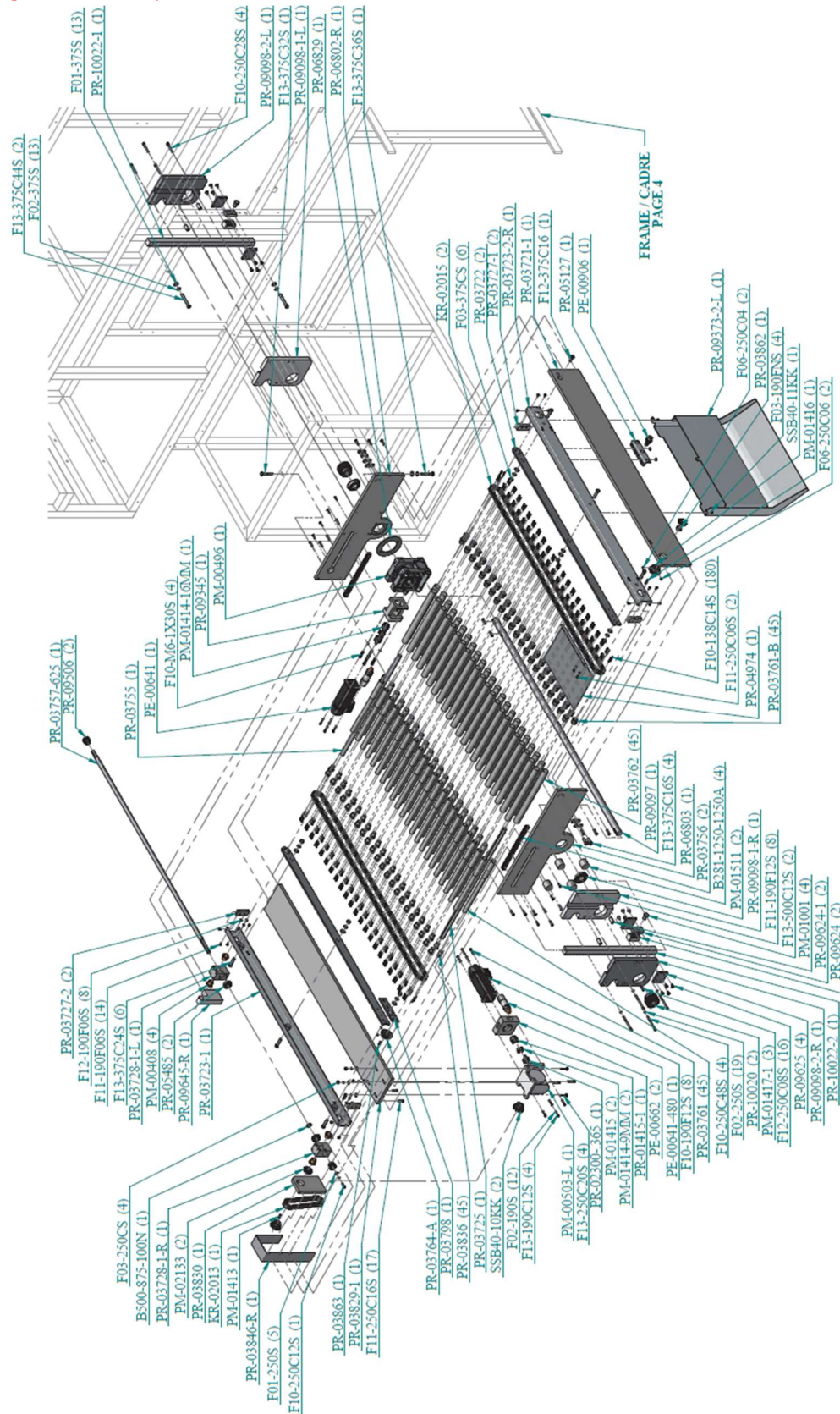
Revision: 2025-12-16

10.11: Right pusher

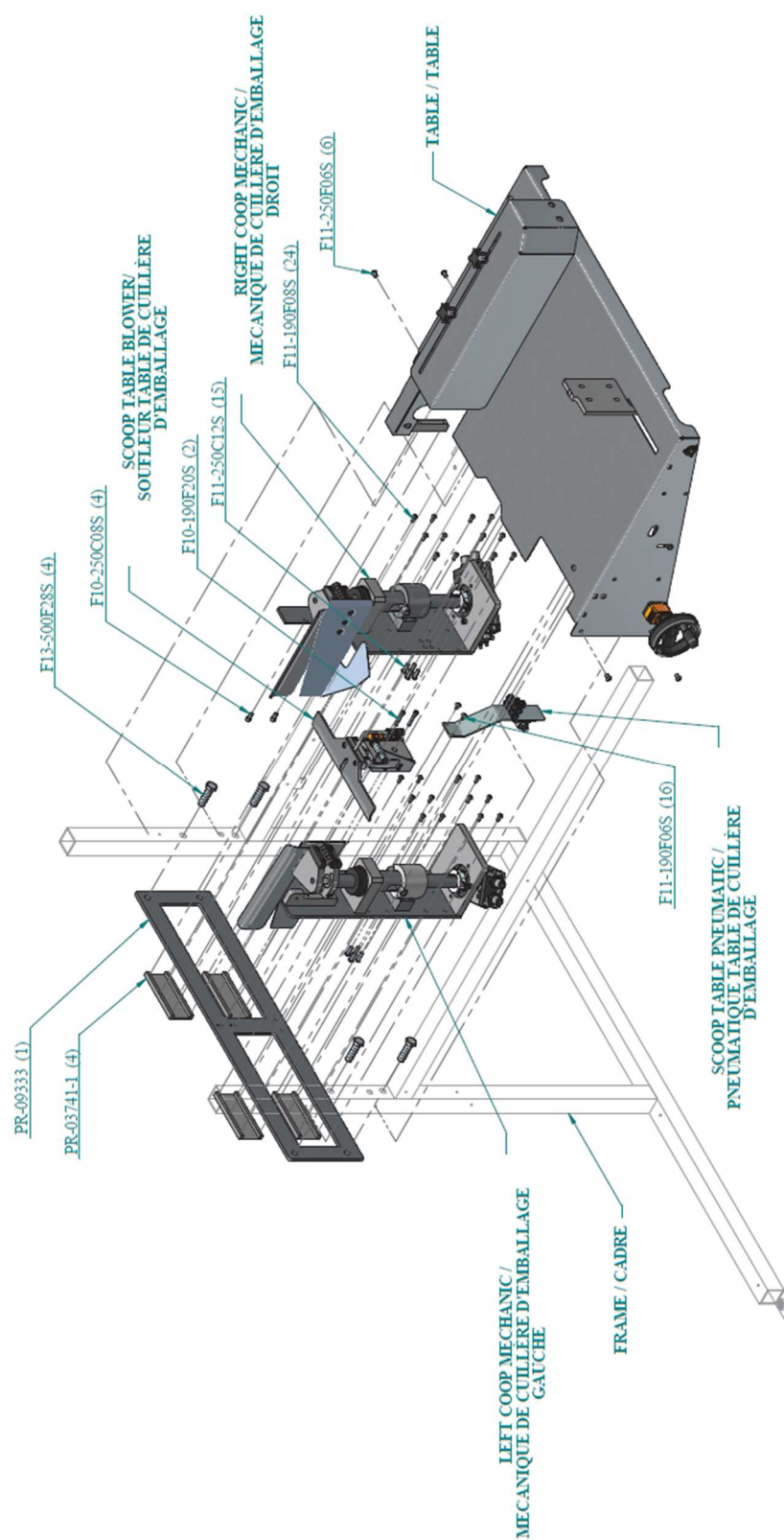




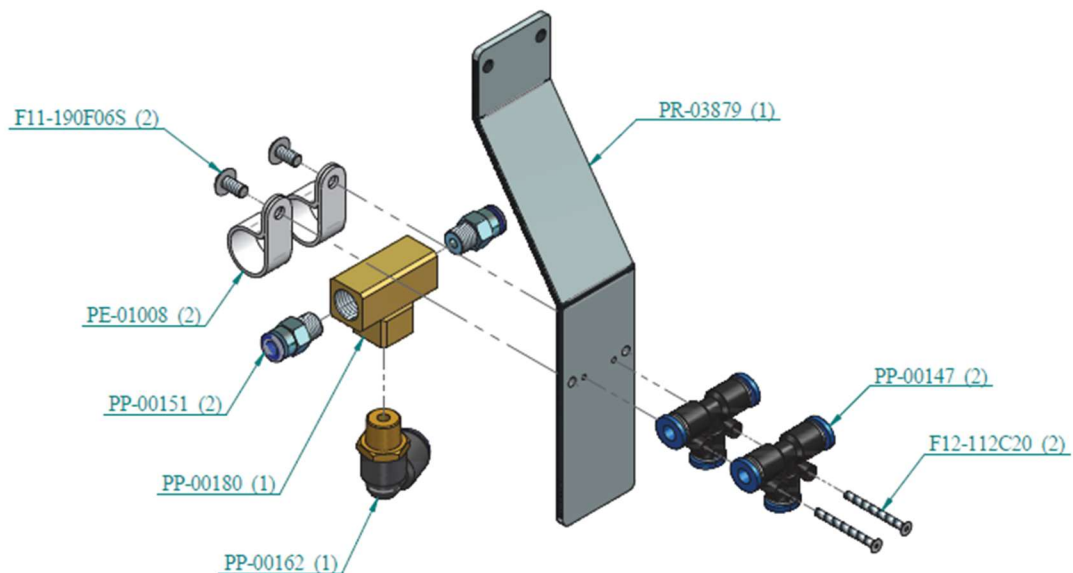
10.13: Bag table conveyor

FRAME / CADRE
PAGE 4

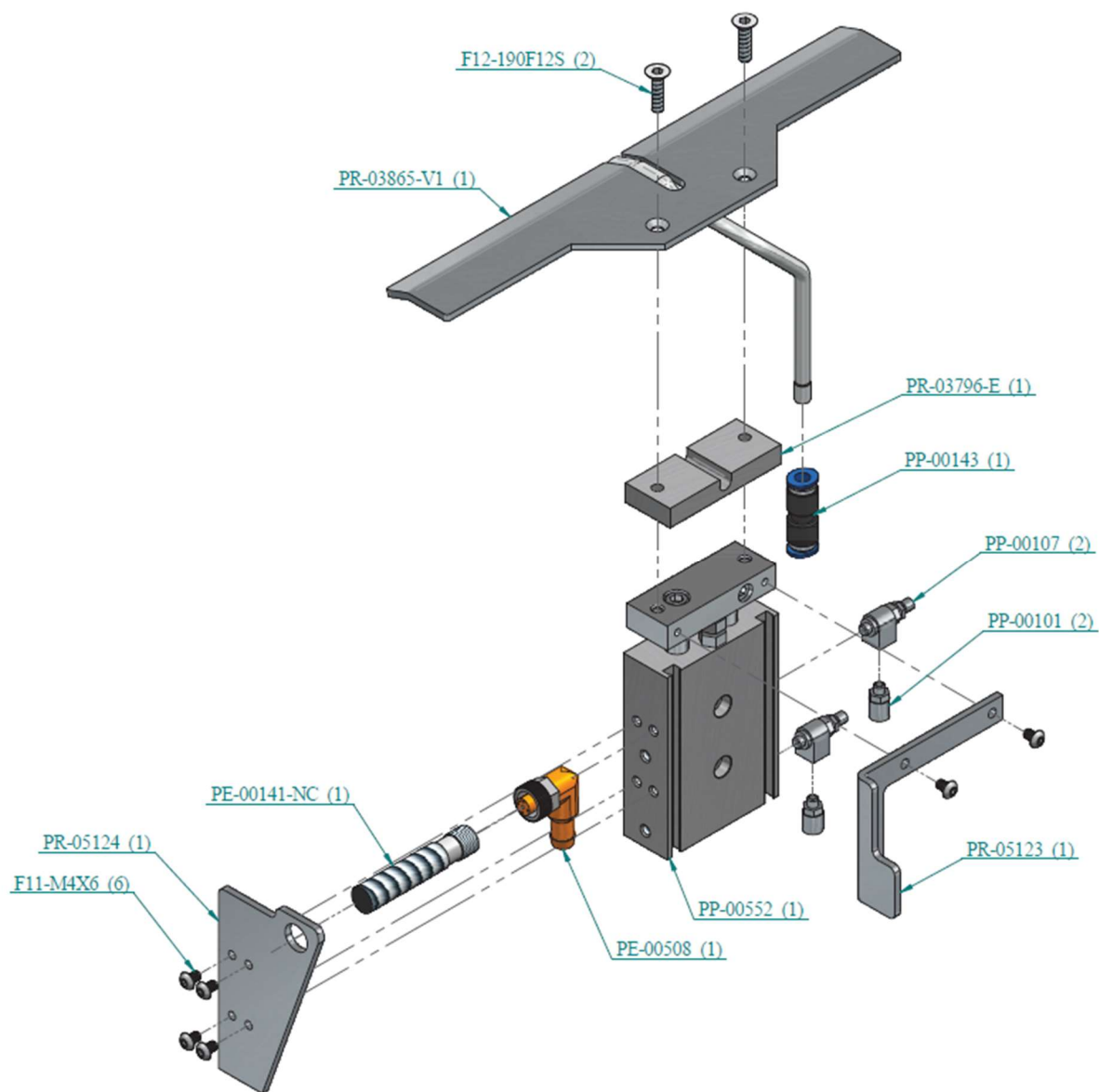
10.14: Scoop mechanic



10.15: Scoop pneumatic



10.16: Bag holder



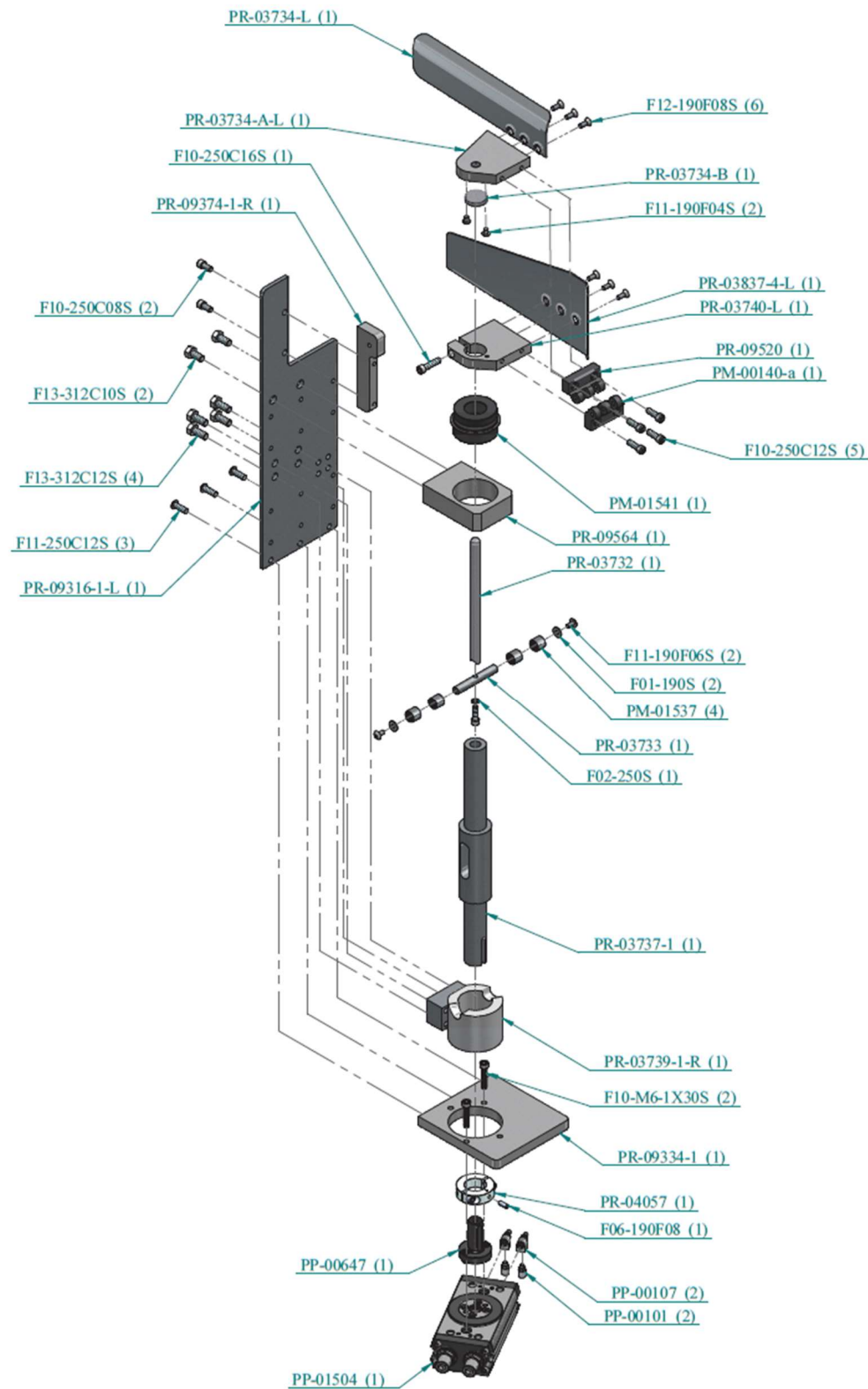
KLR.5200

Serial numbers: KLR-00001 –

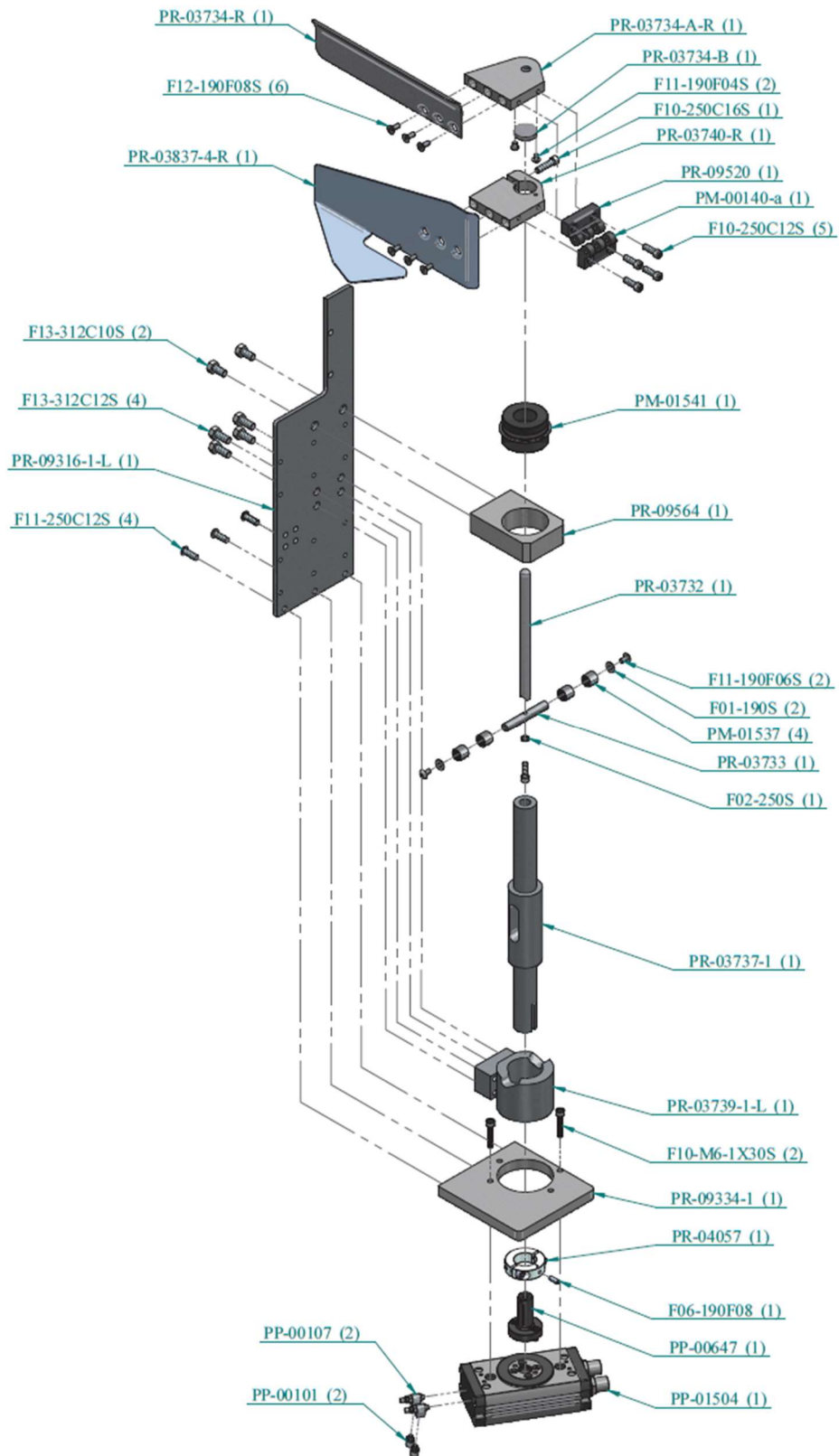
Beyond

10.17: Left scoop

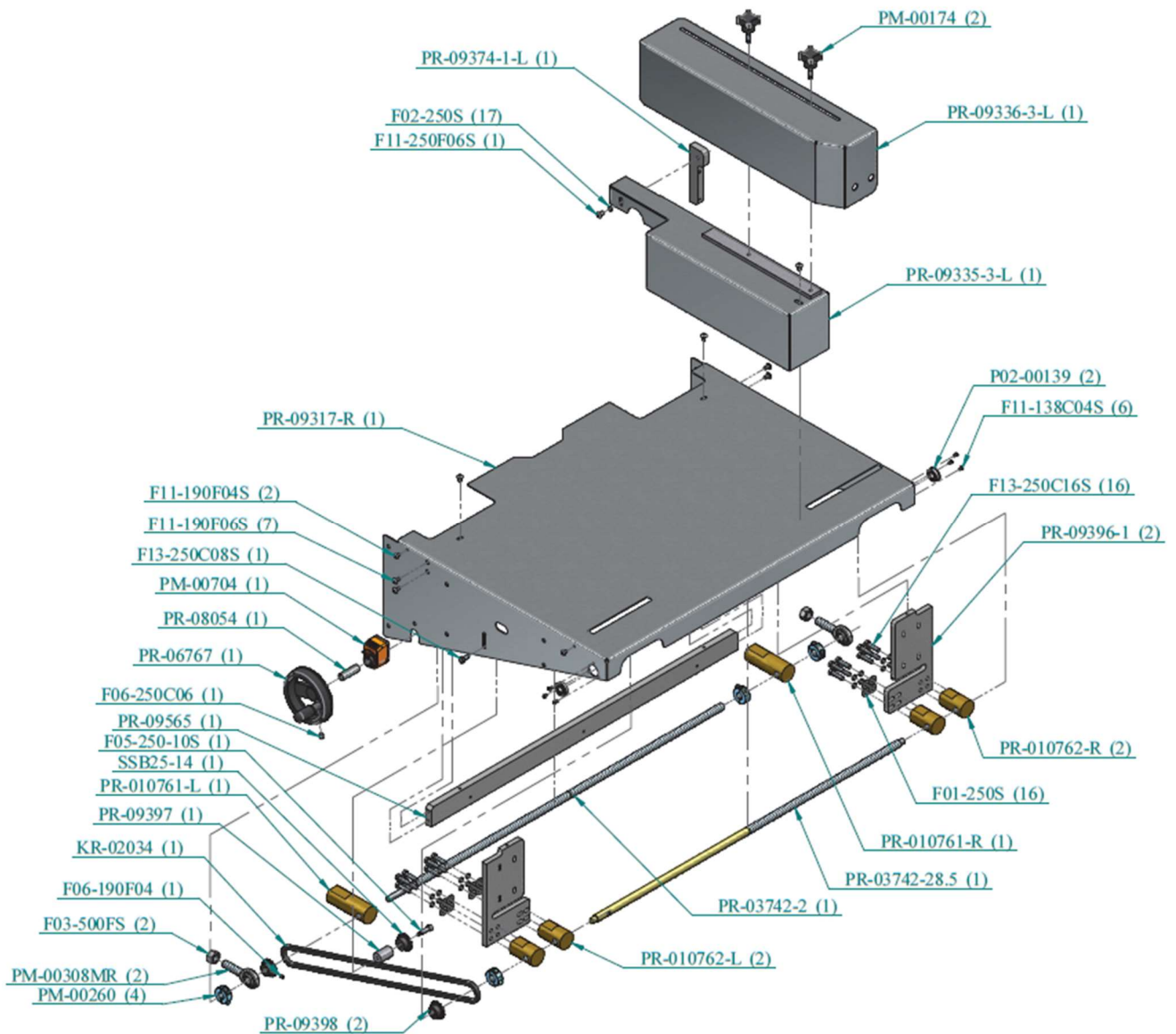
Revision: 2025-12-16



10.18: Right scoop



10.19: Scoop width adjustment



10.20: Option pneumatic door (KR-05200-PNEU-DOOR)

