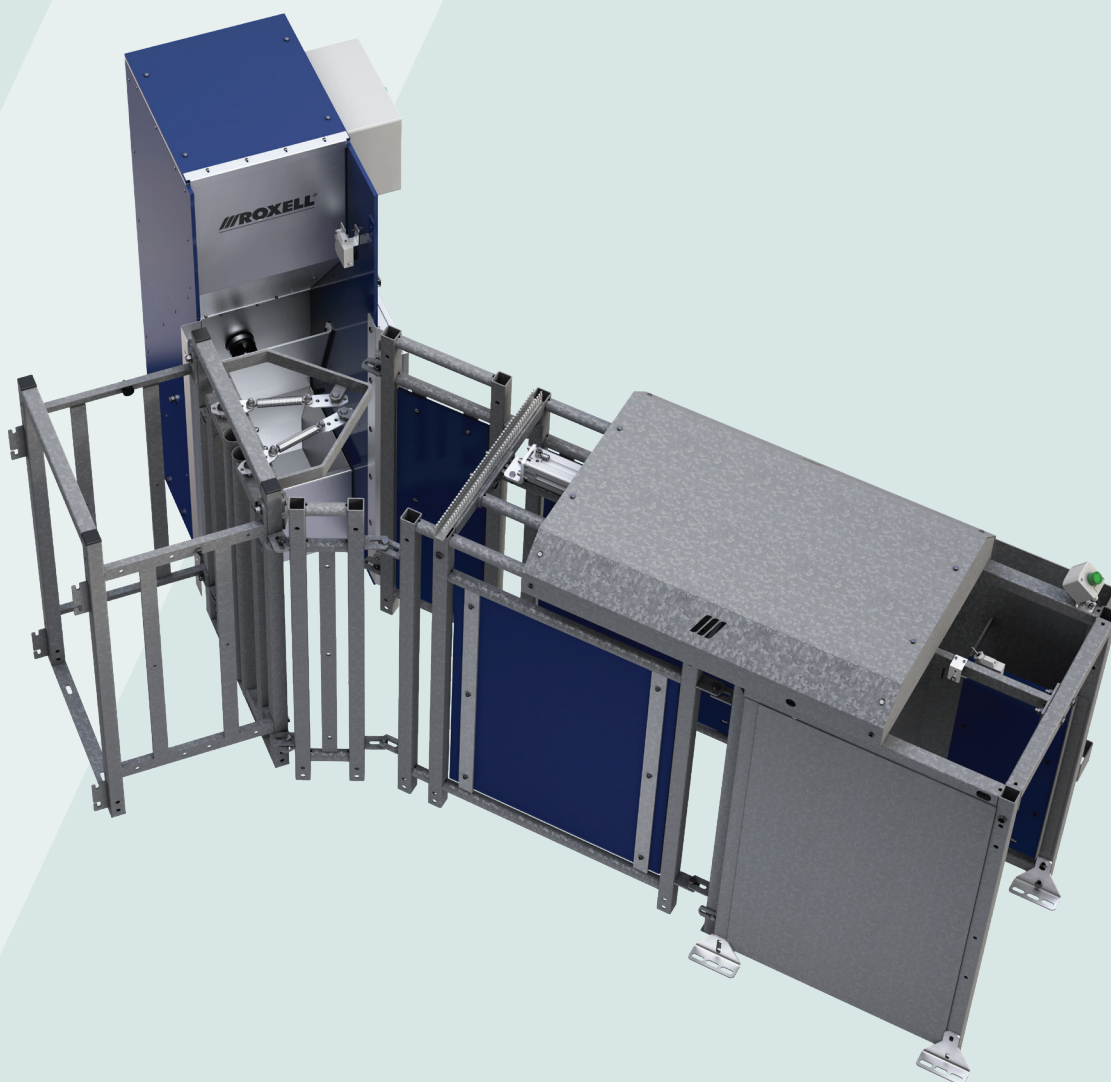




FidosTM

Use and Assembly Guide



Original use and assembly guide

TABLE OF CONTENTS

DISCLAIMER

GENERAL INFORMATION

PART I : INSTRUCTIONS FOR THE USER

GENERAL SAFETY RULES	I-1
FIDOS - ELECTRONIC SOW FEEDING CONCEPT	I-2
SYSTEM ARCHITECTURE (PRE-CONFIGURED)	I-2
FIDOS FEEDING STATION - GENERAL VIEW	I-3
ID CHECK - CONNECTION FIDOS STATION	I-4
MAINTENANCE INSTRUCTIONS	I-5
ALARM LIST	I-5
TROUBLE SHOOTING GUIDE	I-6
OVERVIEW COMPRESSOR	I-7
DECLARATION OF INCORPORATION - EC-DECLARATION OF CONFIRMITY	

PART II : COMPONENTS

FIDOS FEEDING STATION - GENERAL VIEW	II-2
PHOTOELECTRIC SWITCH ASS'Y	II-3
AUGER ASS'Y	II-3
CYLINDER Ø50-STROKE 100 MM	II-3
IN-LINE SOLENOID VALVE 5/2 24V	II-3
WATER REGULATION ASS'Y	II-4
SHOCK ABSORBER Ø40X30MM - SHOCK ABSORBER Ø30X20MM	II-4
SPRING FOR EXIT GATE	II-4
BALL JOINT	II-4
BUSHING 16/12	II-4
SENSOR INDUCTIVE PNP	II-5
FENCE 3 , - H 940 MM	II-5
FLOOR MOUNTING BRACKET	II-5
FLOOR MOUNTING BRACKET LONG	II-5
HINGE SET	II-6
HINGE SET 45° STOP	II-6
MOTOR ASS'Y	II-7
MFEED TROUGH - 2 FEED TYPES	II-7
EARTAG FDX YELLOW (KIT 100 PCS)	II-8
EARTAG MALE YELLOW (KIT 100 PCS)	II-8
EARTAG PLIERS	II-8

PART III : INSTALLATION INSTRUCTIONS

GENERAL SAFETY RULES	III-1
FIDOS FEEDING STATION - GENERAL VIEW	III-2
TOOLS	III-3
TO INSTALL THE FEEDING STATION	III-4
TO INSTALL THE PROFILE FOR THE EXIT 45°	III-9
TO INSTALL THE PROFILE FOR THE STRAIGHT EXIT	III-10
TO ASSEMBLE THE EXIT GATE	III-11
TO INSTALL THE EXIT 45°	III-14
TO INSTALL THE STRAIGHT EXIT	III-15
TO CONNECT THE FEEDING STATION	III-17
TO INSTALL THE FEED TROUGH - 2 FEED TYPES	III-19
CALIBRATION FEED PORTIONS	III-19
FIDOS - ELECTRONIC SOW FEEDING CONCEPT	III-20
CALCULATION POWER CONSUMPTION	III-20
EXAMPLE CALCULATION	III-20
CONNECTION FIDOS STATION	III-21

DISCLAIMER : The original, authoritative version of this manual is the English version produced by ROXELL bvba. Subsequent changes to any manual made by any third party have not been reviewed nor authenticated by Roxell. Such changes may include, but are not limited to, translation into languages other than English, and additions to or deletions from the original content. Roxell disclaims responsibility for any and all damages, injuries, warranty claims and/or any other claims associated with such changes, inasmuch as such changes result in content that is different from the authoritative Roxell-published English version of the manual. For current product installation and operation information, please contact the customer service and/or technical service departments of Roxell. Should you observe any questionable content in any manual, please notify Roxell immediately in writing to: ROXELL bvba - Industrielaan 13, 9990 Maldegem - Belgium.

General information

IMPORTANT: These instructions must be read, understood and all points observed by the user, the responsible and operating personnel.

Obey the legal regulations and the applicable rules

This concerns, among other things, the European regulations and directives transposed into national legislation and/or the laws, safety and accident prevention regulations that apply in the user's country.

During assembly, operation and maintenance of the installation the legal regulations concerned and the applicable technical rules must be obeyed.

Intended use

The installation has been designed solely for intensive livestock use and has been developed according to the applicable rules of good workmanship. Extra loading of the product is therefore prohibited. Any other use is considered to be improper use. The manufacturer is not responsible for damage resulting there from. The user bears sole responsibility.

Not-intended use

All use different than described in "Intended use" is at the responsibility of the end user.

Liability

The (Extended) Warranty will not apply if any of the following has occurred: failure to conduct incoming goods inspection with regards to the Products, improper handling, transportation, modification or repair; accident, abuse or improper use; improper assembly, installation, connection or maintenance (having regard to Roxell's most current assembly, installation, connection and maintenance manuals); force majeure; negligence, lack of supervision or of maintenance on the part of customer; normal wear and tear; use of cleansing agents and disinfectants that are excluded in Roxell's most current use and maintenance manuals; use of cleansing agents and disinfectants in violation with the instructions received from the suppliers; or use of the Products in an ATEX-surrounding.

The (Extended) Warranty shall not apply in the event of a defect caused either by materials or accessories supplied by or services rendered by Customer; or by an intervention by a person or entity which is not authorised or qualified for carrying out such intervention. Furthermore, the (Extended) Warranty will only apply if the Products are used in livestock houses and if all parts or components of the Products are supplied by Roxell.

Roxell will not be liable for any damages caused due to improper use, assembly, installation, connection or maintenance of the Products. In this respect, the Customer expressly acknowledges that (i) all use, assembly, installation, connection or maintenance must be done in accordance with Roxell's most current assembly, installation, connection and maintenance manuals and (ii) the electrical installation on which the Products must be connected must be done in accordance with applicable local legislation on electrical installations. Furthermore, the Products must be tested both mechanically and electrically in accordance with state of the art techniques and applicable local legislation.

Personnel Qualifications

User

The person who uses a function or operation of a product for their work or who works on the product. The user must be able to read the instructions for use and fully understand them. The user has knowledge of the functioning and construction of the installation.

Technically trained person

An expert who can assemble and maintain the installation (**mechanically/electrically**), and resolve malfunctions. On the basis of his/her technical training and experience, he/she has sufficient knowledge to be able to assess activities, recognise possible dangers and rectify dangerous situations.

Storage

Put all parts to be assembled in a room or at a location where the not yet assembled components are protected against weather influences.

Transport

Depending on the size of the parts and according to local circumstances and local legislation, the parts of the machine have to be transported with a forklift.

The forklift must be operated by a qualified person and in accordance with the rules of good workmanship. When lifting the load, always check if the center of gravity of the load is stable.

Dismantling

Dismantle the installation and its components in accordance with the environmental legislation of the country or the local authorities applicable at that time. All functioning products and exchange parts must be stored and disposed of in accordance with the applicable environmental regulations.

Environmental information for customers in the European Union



The European legislation requires that equipment marked with this symbol on the product or packaging must not be collected with unsorted household waste. This symbol indicates that the waste electrical and electronic equipment (WEEE) cannot be disposed of in the regular household waste. We highly recommend that you bring your product to an official collection point so that an expert can remove the waste electrical and electronic equipment. Inform yourself of local legislation on separate collection of waste electrical and electronic equipment. Respect the local regulations and never dispose of the product together with household waste.

Information about waste disposal - electrical/electronic material for companies

1 In the European Union

If you have used the product for commercial purposes and you want to dispose of it, contact Roxell who will give you information about the return of the product. It is possible that you will have to pay a disposal charge for the return and recycling. Small products (and small quantities) can be processed by the local collection agencies.

2 In other countries outside the European Union

If you want to dispose of this product, contact the local authorities for information concerning the correct disposal procedure.

The level of noise emission

The noise level of the installation in operation does not exceed 70dB(A).

LOTOTO = Lock Out - Tag Out - Try Out

Everyone needs his own lock and tag (label), which can't be removed by other persons. Inform all the persons who are influenced by the procedure.

1 To block

- Localize all sources of energy (electric, hydraulic, pneumatic).
- Switch off.
- Take the relevant installation or the process out of operation and lock it against reuse.
You can do it by placing a padlock or other blocking mechanism (Lock Out).

2 To mark

Attach a sign, label or sticker to the padlock or blocking mechanism to reveal the nature and the expected duration of the work to other persons (Tag Out).

3 To check

- Check if the source of energy is switched off.
- Remove any remaining energy.
- Check that the installation or process is actually safe (Try Out).

Use personal protective equipment.

Ensure you wear personal protective equipment (gloves, dust masks...).

Illuminance - Sufficient lighting

- **A minimum illuminance of 200 lux is necessary** during usage, maintenance and installation.
- Provide at the installation (**portable**) **emergency lighting in case of power failure.**

Electrical equipment, control panels, components and drive units

- To operate control panels, there must be **at least 70 cm of free space.**
- Control panels **must always remain closed.** The key of the control panel must be in possession of an authorized person.
- The necessary measures must be taken by the user to keep out **rats, mice and other vermin from the control panels.**
- If electrical equipment, control panels, components and drive units are damaged, the system must be stopped **immediately!**
- Electrical equipment, control panels, components and drive units should **never be sprayed with water or other liquid!**
- Electrical equipment, control panels, components and drive units should **never be covered with any material.**

Information about the residual risks - used safety signs








There are three levels of danger, which you can recognize from the signal word

* **DANGER**

* **WARNING**

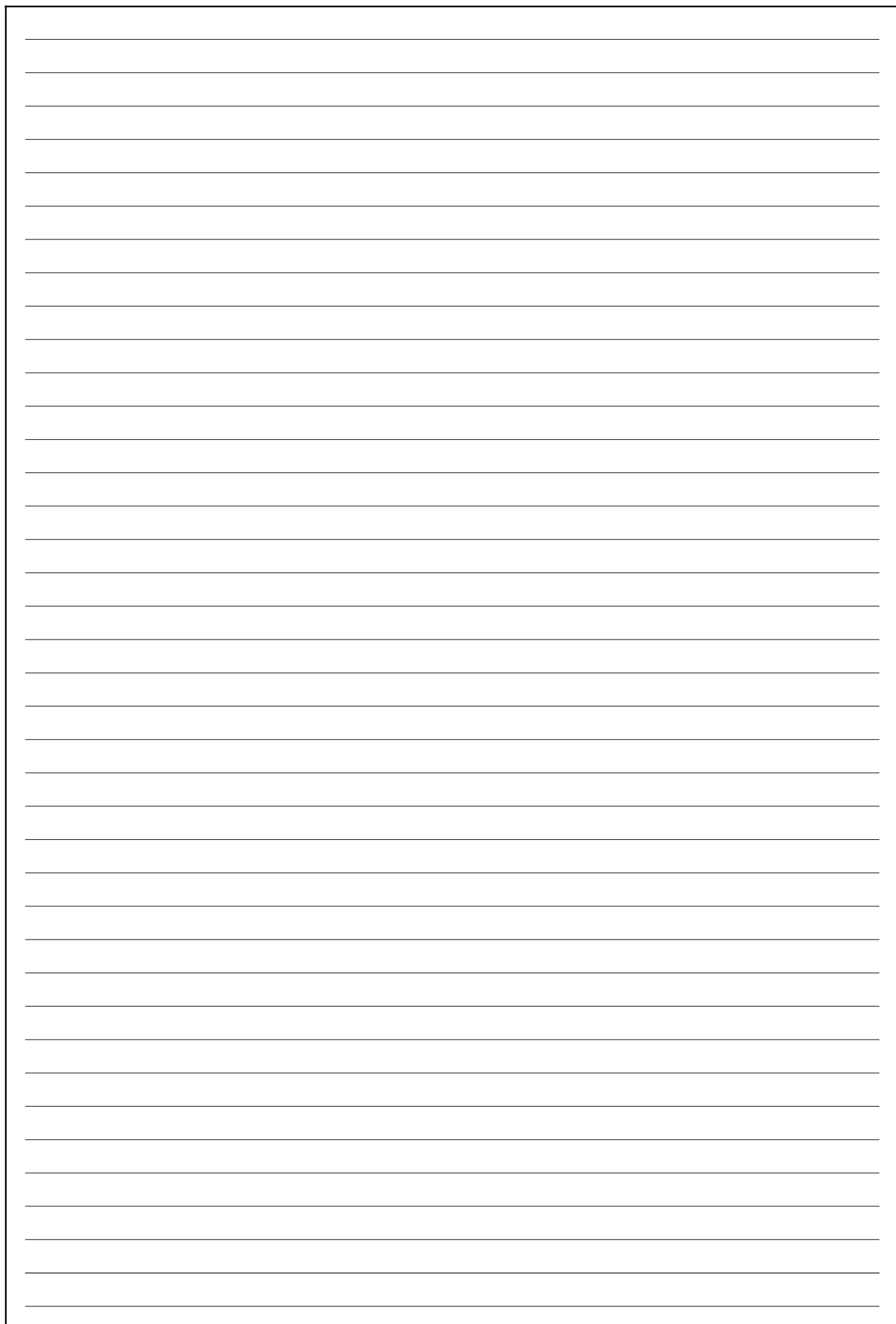
* **CAUTION**

The nature and source of the imminent danger and possible consequences of not obeying warnings is stated here!

Symbol	Meaning
	DANGER indicates a direct imminent danger that can result in a serious or even fatal accident if the safety measures are not respected.
	WARNING indicates a possible imminent danger that can result in a serious accident or damage to the product if the safety measures are not respected.
	CAUTION indicates possible, dangerous situations that can result in minor physical injury or material damage if the safety measures are not respected.
	This symbol refers to supporting information.
	Allowed
	Not allowed
	This symbol will be used to draw your attention to matters that are of great importance for your safety. It means: warning - follow the safety instructions. Disconnect the current and read the safety rules. In short: be alert. Ignoring these instructions can cause serious injuries or even death.

PART I

INSTRUCTIONS FOR THE USER



FIDOS

General safety rules

Feeding station for sows



DANGER

Carefully read the following instructions before
USING the system

IMPORTANT

- Before you do any repair, or maintenance works, always disconnect the electricity supply by switching off the main switch and air pressure.
- Use personal protective equipment.
- Beware of all moving parts, like turning doors, gates and motors.
- The installation area must be free from any obstacles, including sows.
- Never allow unauthorized persons to enter the house during your absence.
- Don't wear loose clothing.



DANGER: Crushing of hands
Pay attention to serious injuries to the hand.



DANGER: Automatic start-up



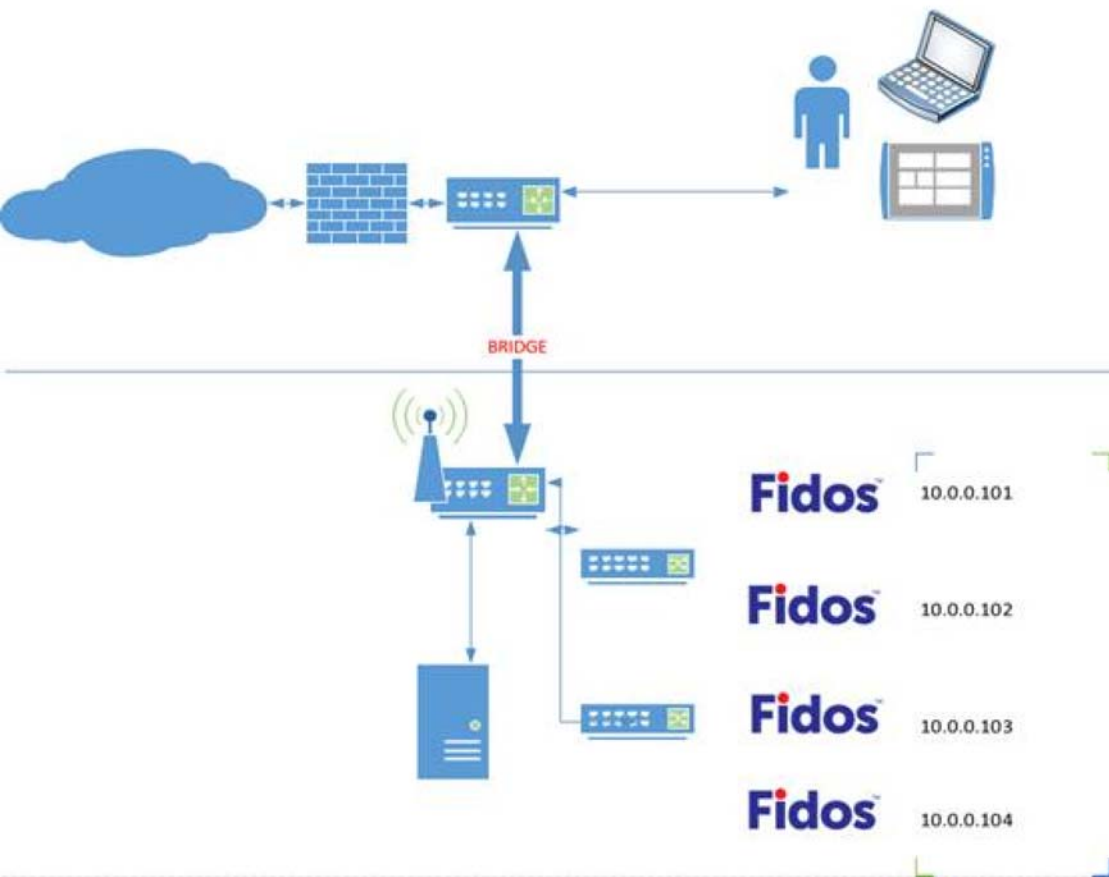
DANGER: Getting jammed
Getting jammed may cause serious injuries.



DANGER: Magnetic fields.
People with pacemakers, metallic implants or hearing aids may experience complications.
They should consult their doctor before entering a site with inverters.

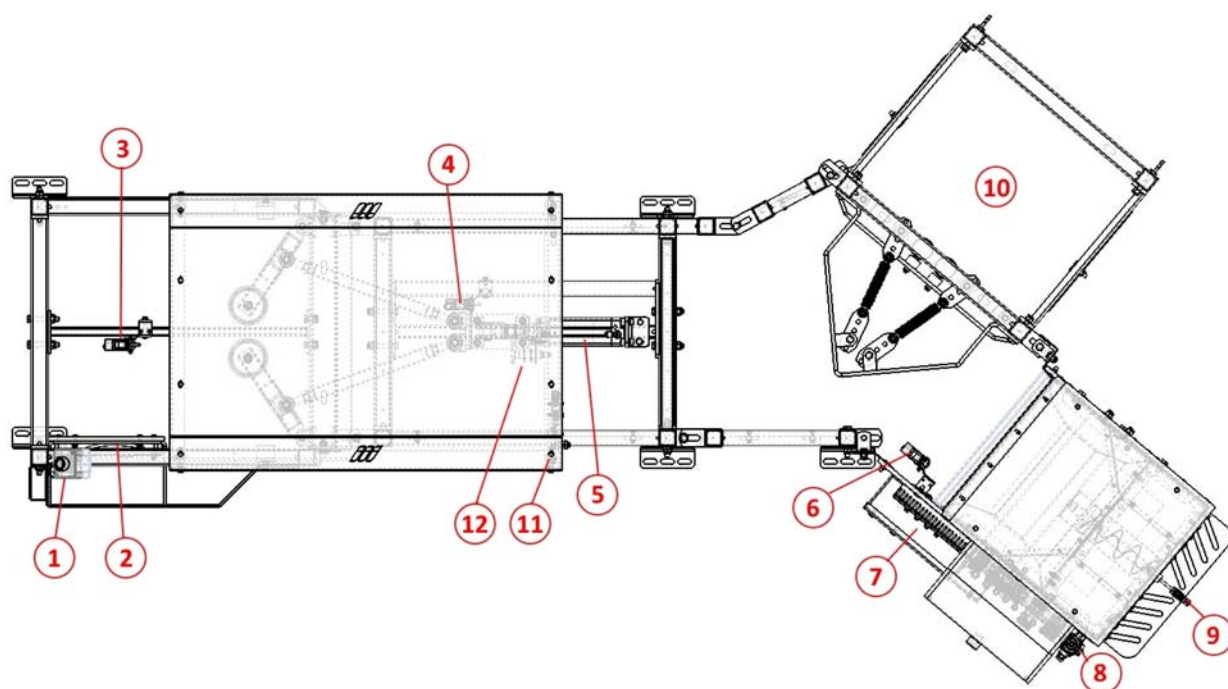
Fidos - Electronic sow feeding concept

System architecture (pre-configured)



Fidos feeding station

General view

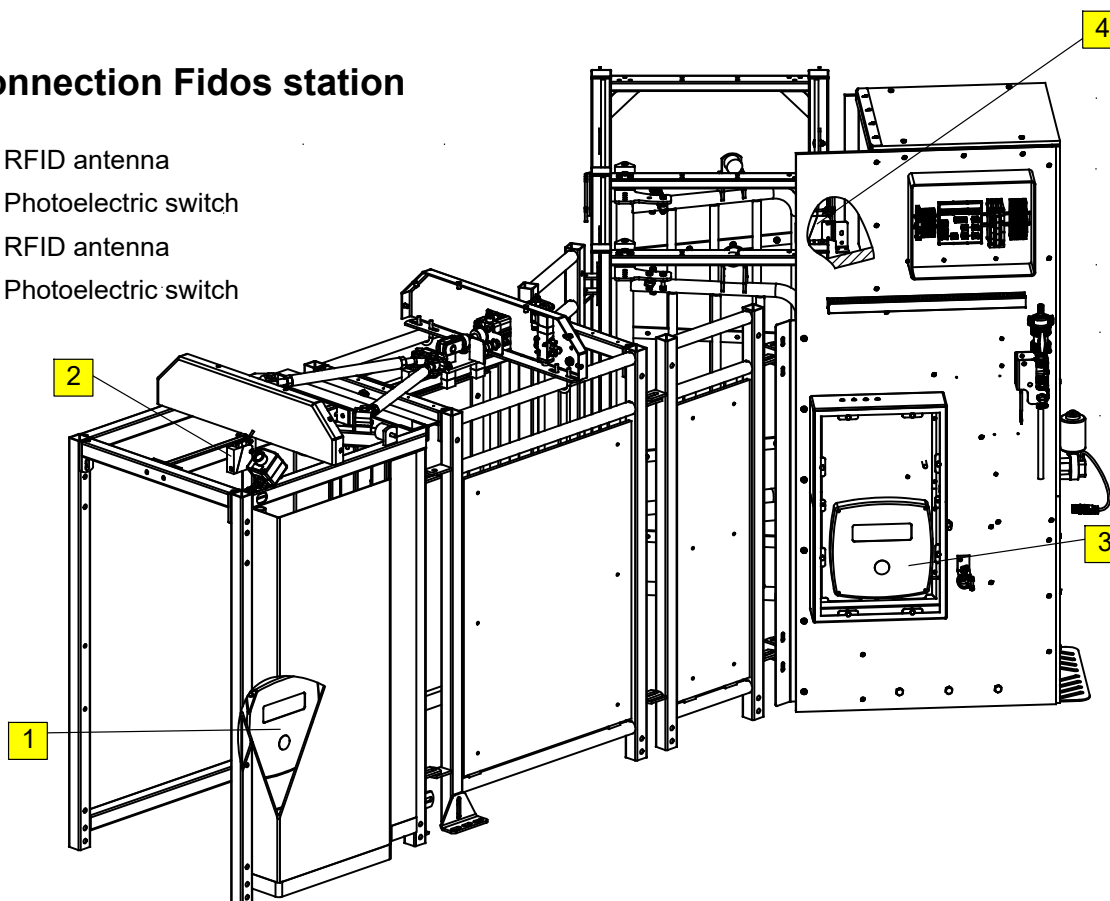


Key	Name	Explanation
1	Manual feed button	Used in the learning stage of the young animal. Use this button to make the feed trough supply motor give one portion of feed (1 turn of the motor).
2	RFID detector/antenna 1 at entrance	RFID antenna to identify animals at the entrance. In case a valid animal is detected and it still has a remaining feed quantity for that day, the gate will be opened to guide the animal in.
3	Photoelectric switch 1 at entrance	In case an animal is at the entrance without RFID tag (e.g. lost) , the animal will be provided the access if a certain time is elapsed and the maximum amount of animals without RFID eartag is not exceeded. These parameters can be set in the system parameters of the station.
4	Photoelectric switch 2 behind gate	This sensor will detect if the animal has entered the station. At this time the gate will close. Delay for closing the gate after this sensor has been activated is settable in the system parameters of the station.
5	Gate opening cylinder	This cylinder will open the gate if access is granted! A sensor detects if the cylinder works well.
6	Photoelectric switch 3 at feed trough	In case an animal is at the trough without RFID eartag, the animal will be provided with a settable amount of feed. These parameters can be set in the system parameters of the station.
7	RFID detector/antenna 2 at trough	RFID antenna to identify animals at the trough. As long as the animal is being detected by the antenna and it still has a remaining feed quantity for that day, feed portions will be dosed out.
8	Water dosing unit	An amount of water will be dosed together with a feed portion. The water flow can be adjusted by means of the pressure regulation knob.
9	Feed dosing motor	Depending on the remaining feed quantity, an animal will be fed by portions. Status of remaining feed quantity is shown. Calibration of quantity per portion can be done in the system parameters menu.
10	Exit gate	The animals leave the feeding station through this exit gate.
11	Valve for activation of cylinder	Behind the cover of the protection you can find the valve for activating the gate opening cylinder.
12	Sensor for gate position detection	Sensor to see if the cylinder or gate system is functioning as expected.

ID Check

Connection Fidos station

- 1: RFID antenna
- 2: Photoelectric switch
- 3: RFID antenna
- 4: Photoelectric switch



Situation	Explanation
Sow with RFID eartag	<p>Entrance: Sow is detected by the antenna at the entrance of the feed station (1). The double entrance gate will open. When the animal is in the feeding station and when it is detected by the photoelectric switch (5), the double entrance gate will close.</p> <p>At the trough: Sow is detected by the antenna at the feed trough (3) and registration of feed dosing is started in the computer. The animal will receive its assigned feed amount. Refer to software, animal settings. When the animal has left the station, the entrance detection will be released and a next animal can enter. Refer to software (std station settings).</p>
Sow without RFID eartag or with unknown RFID eartag	<p>Entrance: Sow is detected by the photoelectric sensor (2) at the entrance of the feed station. The sow without RFID eartag has to activate the sensor for a certain time period (45 s default setting) to make the double entrance gate open. When the animal is in the feeding station and when it is detected by the photoelectric switch (5), the double entrance gate will close.</p> <p>At the trough: Sow is detected by the the photoelectric sensor (4) at the feed trough. The animal will receive a well defined portion as entered in the software settings. A defined amount of animals (software settings, default amount: 3) can enter the station without RFID eartag and will be provided with a feed portion. This to avoid that the same animal keeps on coming back to receive infinite feed portions. When the animal has left the station or has received its amount of 'undefined feed' , the entrance detection will be released and the next animal can enter. Refer to software (std station settings)</p>

Maintenance instructions



DANGER

**Switch off the main switch first.
Use personal protective equipment.**

Actions in grey background must be done by a technically trained person.

Item to check	After 1st week	Every week	Every month	Every 6 months	What/How to check
All bolts and nuts.	X			X	Tighten. Special attention to nuts on moving parts (e.g. pneumatic gates and cylinder).
All moving parts e.g. hinges and bearings of gates.		X			Check if there is sufficient speed on the gate. Replace damaged or worn parts.
Springs above gates (exit unit).		X			Adjust or replace if there is not enough tension.
Shock absorber (entrance gate and exit unit).		X			Tension.
Cylinder			X		Replace damaged parts.
Condenser		X			Empty condenser.

Alarm list

First check the software.

Situation	Explanation
Green light does not blink on the control panel.	Everything works fine.
Quick blink of the station light.	An error has occurred, a system attention will be added in the software. The station will automatically reset and try to solve the problem. If the problem is not solvable, the status light will blink quickly (+/- 3x second).

Trouble shooting guide



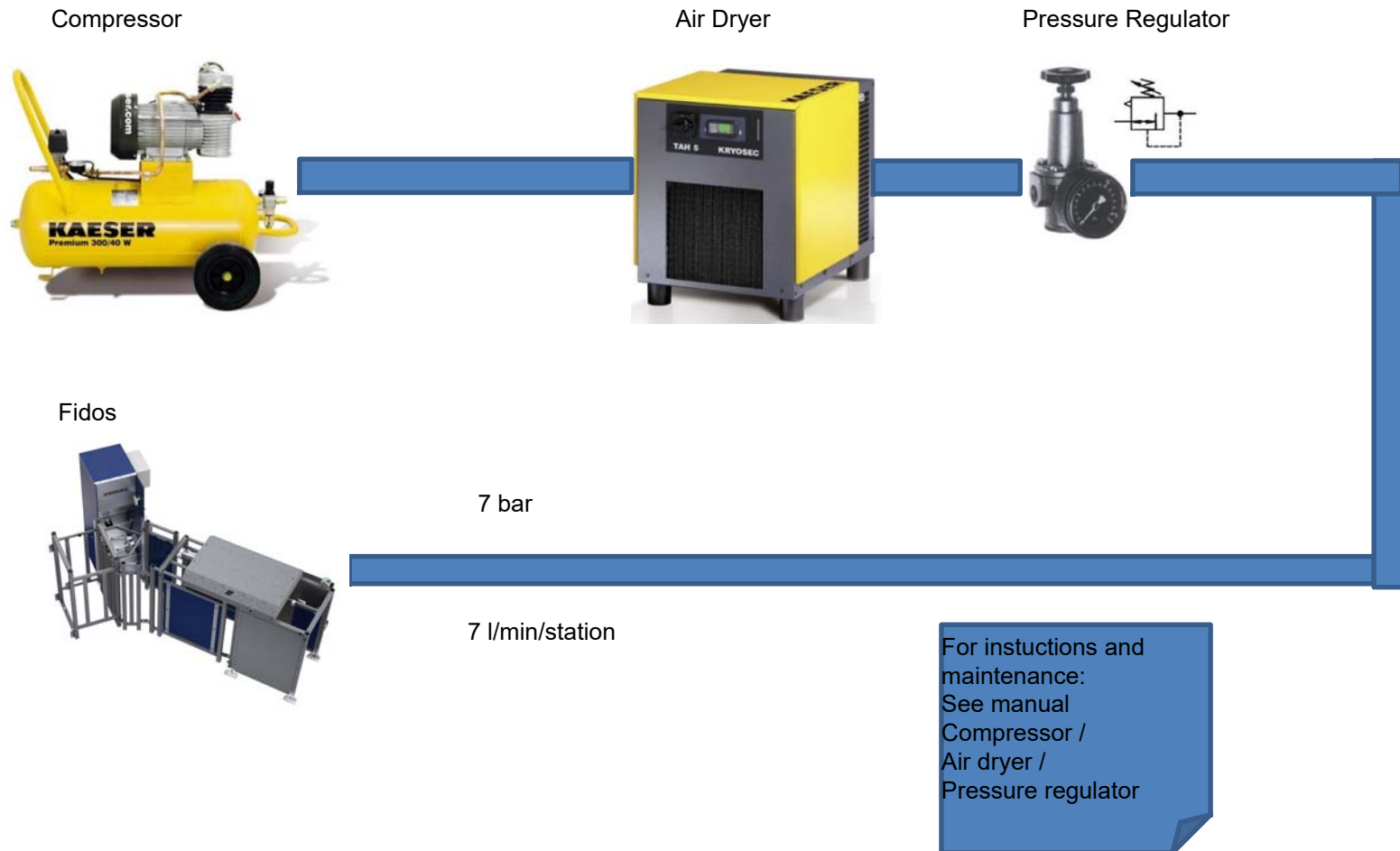
DANGER

**Switch off the main switch first.
Use personal protective equipment.**

Actions in grey background must be done by a technically trained person.

PROBLEM	CAUSE	CORRECTIVE ACTION
Malfunction of the whole installation.	- Too much dust.	- Clean the whole installation on a regular basis.
Station gate does not open.	- No air pressure.	- Check/connect air pressure.
	- Sow has no RFID eartag.	- Attach an RFID eartag to the sow.
	- Sow has no RFID eartag. Maximum number reached.	- Increase parameter. Attach an RFID eartag to the sow.
	- Sow has no RFID eartag and is not waiting long enough.	- Make sure the sow waits longer, or shorten the entrance time.
	- A sow is in the station and is fed.	- Wait until sow has finished eating.
Station gate does not open. Status light blinks.	- Error in electrical system. Defective sensor of the gate.	- Replace the inductive sensor for gate open/close detection.
	- Error in network connection.	- Check network connection and node settings. Restart is performed automatically.
	- A photoelectric sensor is dirty.	- Clean photoelectric sensor. Check system attention.
	- An antenna connection has been lost.	- Check system attention.
No feed is provided to sow.	- Empty trough or bridge in trough.	- Check the trough or feed supply system.
	- The feeding motor is defective.	- Check system attention. Perform motor test. Adjust animal settings.
	- Incorrect animal/group settings.	- Check and adjust animal settings / feed curves / feed types.
No water is provided in feed.	- Tap/faucet closed. Obstructed outlet hose.	- Open tap/faucet. Check outlet hose.
	- Water valve is not functioning.	- Do water valve test in software.
	- Water pressure regulator is closed.	- Re-adjust water pressure regulator to greater flow.

Overview compressed air





Inbouwverklaring betreffende niet voltooide machines (Richtlijn 2006/42/EG, Bijlage II.1.B)
Declaration of incorporation of partly completed machinery (Directive 2006/42/EC, Annex II.1.B)

Fabrikant/Manufacturer:
Roxell, Industrielaan 13, 9990 Maldegem
Tel: +32 50 72 91 72
Fax: +32 50 71 67 21

Verklaart geheel onder eigen verantwoordelijkheid dat het product:
Declares on its own responsibility that the product:

Fidos Nr: 040...
Voederstation voor zeugen
Feeding station for sows

Waarop deze verklaring betrekking heeft, in overeenstemming is met:

- de volgende richtlijnen: 2006/42/EG (Machinerichtlijn); 2014/30/EU (Elektromagnetische Compatibiliteit).
- de geharmoniseerde Europese Normen: EN ISO 13857; EN 349; EN ISO 12100; EN 60204-1; EN 61439-1; EN 61439-2

Het is verboden bovengenoemd product in gebruik te stellen voordat de machine waarin het wordt ingebouwd in overeenstemming met de bepalingen van de Machinerichtlijn is verklaard.

Tevens verbindt de fabrikant (of zijn gemachtigde) zich om op met redenen omkleed verzoek van de nationale autoriteiten de relevante informatie over deze niet voltooide machine door te geven. De wijze van doorgifte is digitaal. De wijze van informatievervalsing laat de intellectueel-eigendomsrechten van de fabrikant van de niet voltooide machine onverlet.

(NL)

Relating to this declaration, is in accordance with

- The following directives 2006/42/EC (Machinery Directive); 2014/30/EU (Electromagnetic Compatibility).
- The harmonised European standards: EN ISO 13857; EN 349; EN ISO 12100; EN 60204-1; EN 61439-1; EN 61439-2

This product must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the Machinery Directive.

The manufacturer (or its agent) also undertakes, at the duly reasoned request of the national authorities, to provide the relevant information concerning this partly completed machinery. The method of transmission will be digital. The manner in which the information is provided does not prejudice the manufacturer's intellectual property rights concerning the partly completed machinery. **(EN)**

Plaats, Datum / Place, Date: Maldegem, 01/01/2020

04003836

.....
Dhr. Gino Van Landuyt
Managing Director

"This part may only be filled out if all built-in subparts are delivered by Roxell"

EG-verklaring van overeenstemming (Richtlijn 2006/42/EG, Bijlage II.1.A)
EC-declaration of conformity (Directive 2006/42/EC, Annex II.1.A)

Wij/We _____
(naam installateur/name fitter)

(volledig adres en land/complete address)

Verklaren geheel onder eigen verantwoording de
Declare completely on own justification that

(naam machine/name machinery) (nummer CE-label/number CE-label)

In een installatie te hebben ingebouwd geheel volgens de Roxell-voorschriften en in overeenstemming met de bepalingen van de Machinerichtlijn.
Has been incorporated in conformity with the provisions of the Machinery Directive and the prescriptions of Roxell bvba.

(plaats, datum/place, date) (naam, handtekening/name, signature)

De EG-verklaring van overeenstemming / inbouwverklaring betreft uitsluitend de machine of niet voltooide machine in de toestand waarin zij op de markt is gebracht, met uitsluiting van de later bijvoorbeeld door de verdeler en/of installateur en/of eindgebruiker toegevoegde componenten en/of verrichte bewerkingen.

The EC-declaration of conformity / declaration of incorporation relates exclusively to the machinery or partly completed machine in the state in which it was placed on the market and excludes components which are added and/or operations carried out thereafter for instance by the distributor and/or the installer and/or the final user.

PART II

COMPONENTS

Environmentally-friendly design

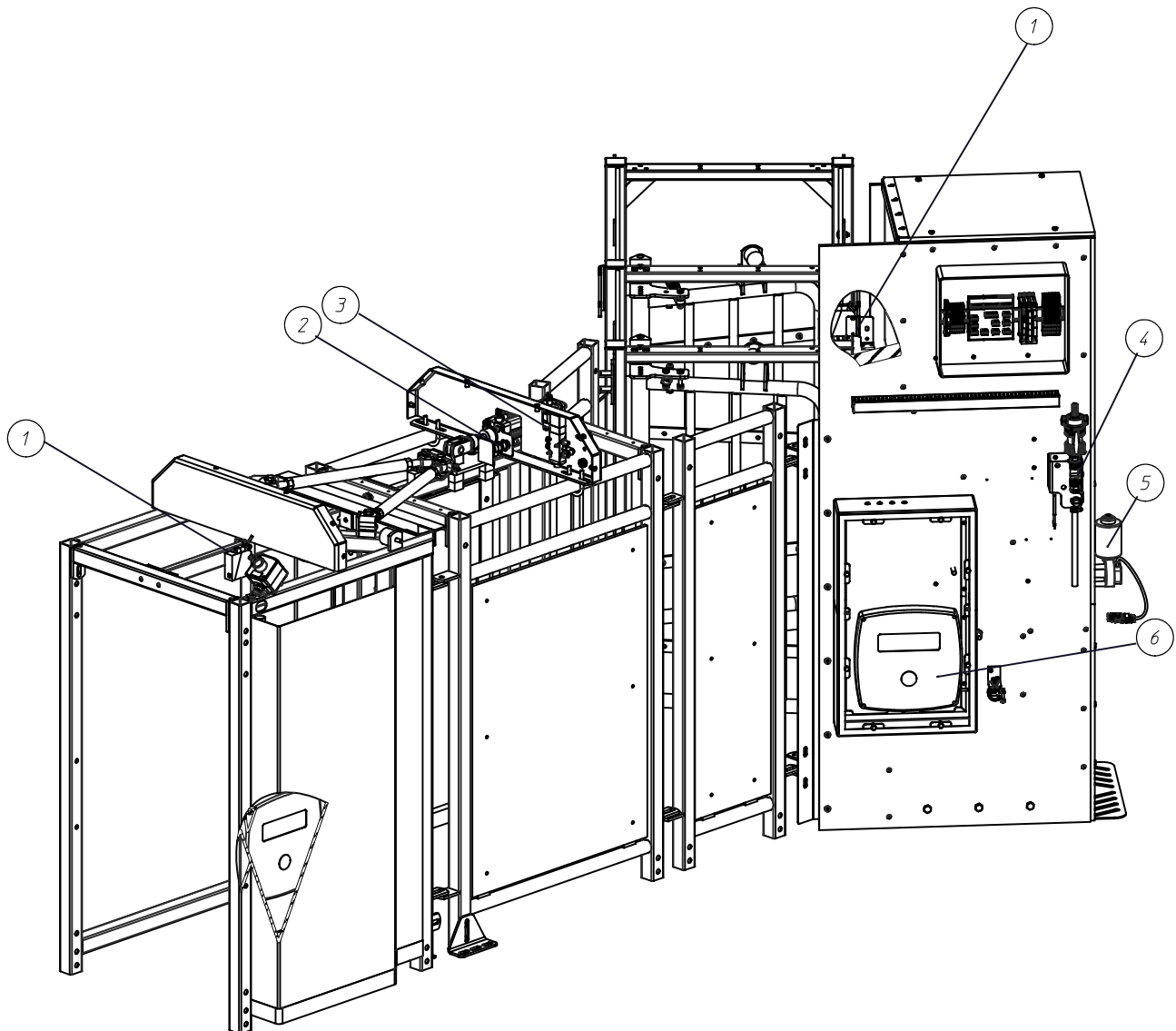
The motors comply with the Ecodesign legislation.

Communication

For all communication concerning parts/spare parts refer to the appropriate part number (not part name).

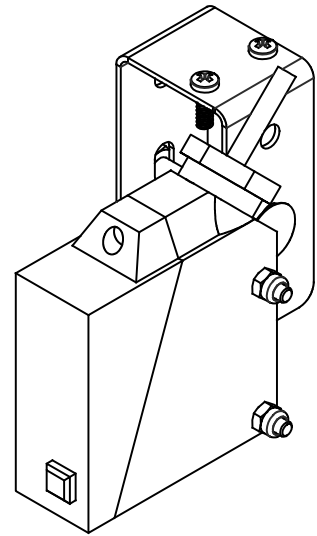
Fidos feeding station

General view

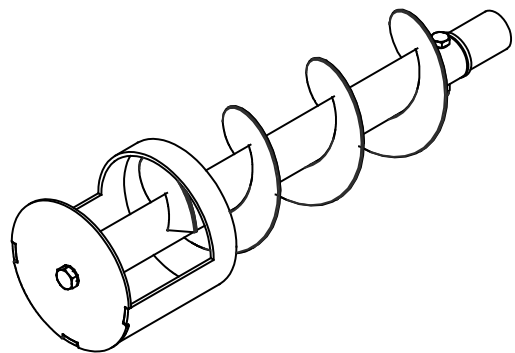


Key	Name	Part Nr.
1	PHOTOELECTRIC SWITCH ASS'Y	04009128
2	SENSOR INDUCTIVE PNP	14007084
3	IN-LINE SOLENOID VALVE 5/2 24V	14003487
4	WATER REGULATION ASS'Y	14003677
5	MOTOR ASS'Y	04008116
6	ANTENNA F/ ENTRANCE	14006892
	ANTENNA F/ TROUGH	14006896

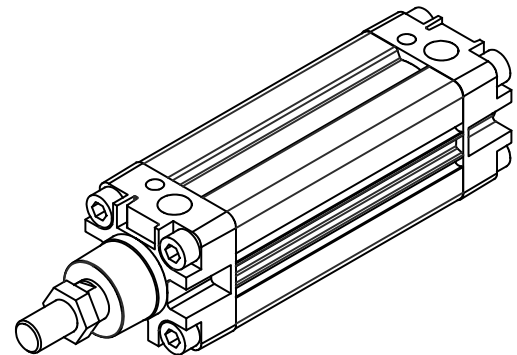
Photoelectric switch ass'y - 04009128



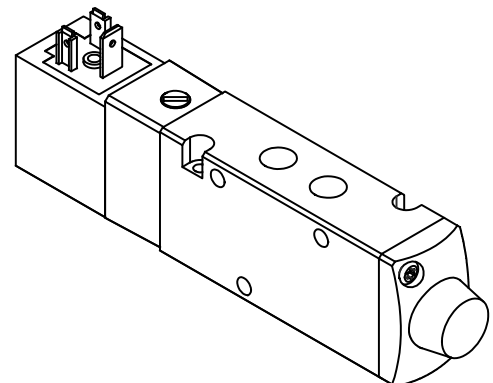
Auger ass'y Ø75 - 04010037

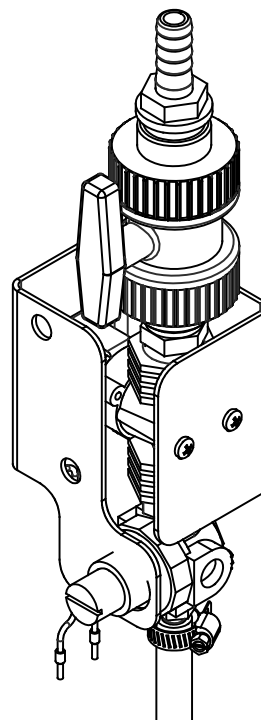
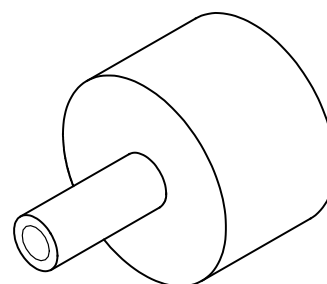
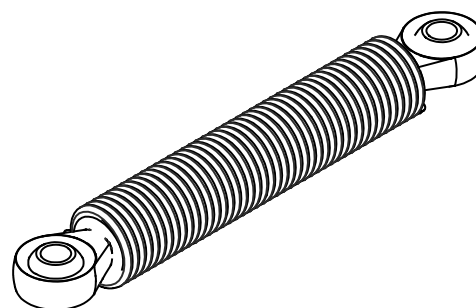
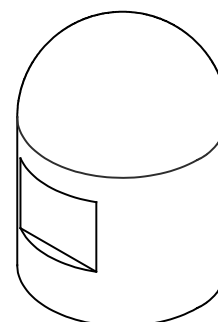
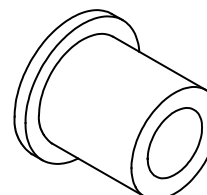


Cylinder Ø50-stroke 100 mm - 14003438

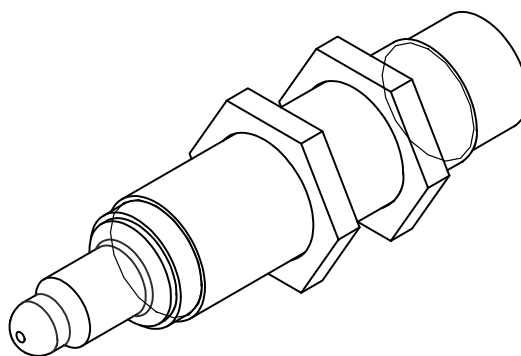


In-line solenoid valve 5/2 24V - 14003487

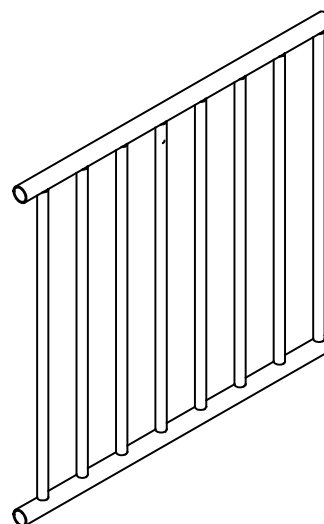


Water regulation ass'y - 14003677**Shock absorber Ø40x30 mm - 14004964****Shock absorber Ø30x20 mm - 14007100****Spring for exit gate - 14006118****Ball joint - 14006924****Bushing 16/12 - 14007044**

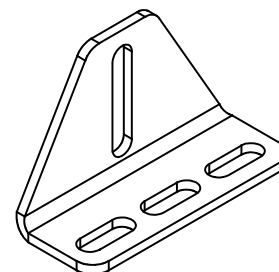
Sensor inductive PNP - 14007084



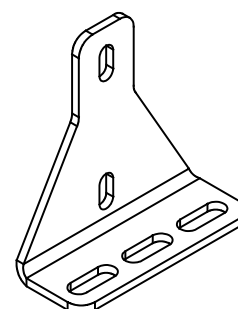
Fence 3 m - H 940 mm - 04008223



Floor mounting bracket - 04009096

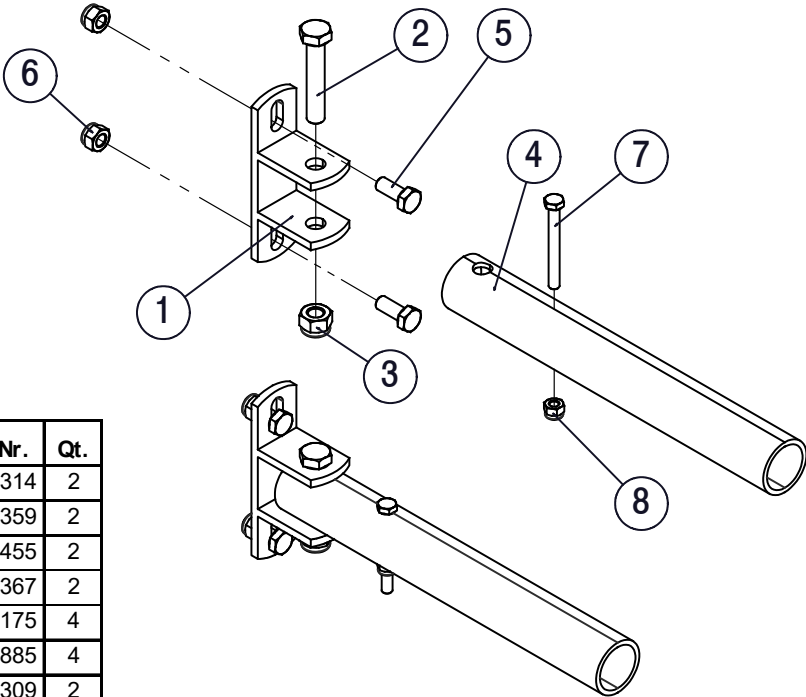


Floor mounting bracket long - 04009112



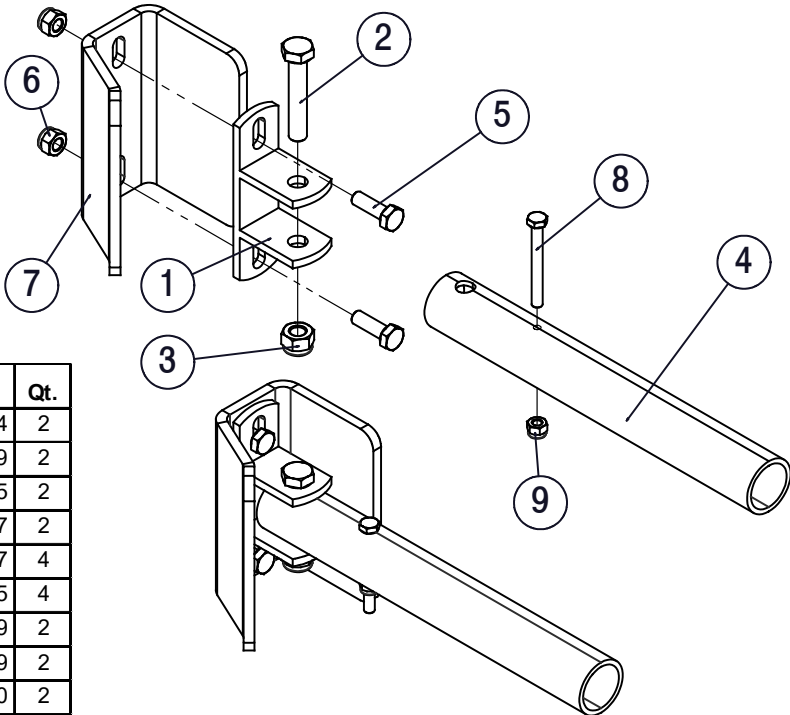
Hinge set - 04008207

Key	Name	Part Nr.	Qt.
1	HINGE WELDMENT	04010314	2
2	BOLT M10X55 DIN933 - A2	20110359	2
3	LOCKNUT M 10 - DIN 985 - A2	20102455	2
4	FENCE MOUNTING BAR	14005367	2
5	BOLT M8X20-DIN 933-A2	19909175	4
6	LOCKNUT M8 - DIN 985 - A2	20102885	4
7	BOLT M6X55 DIN 931-GALV.	20101309	2
8	LOCKNUT M6 - DIN 985	20100400	2

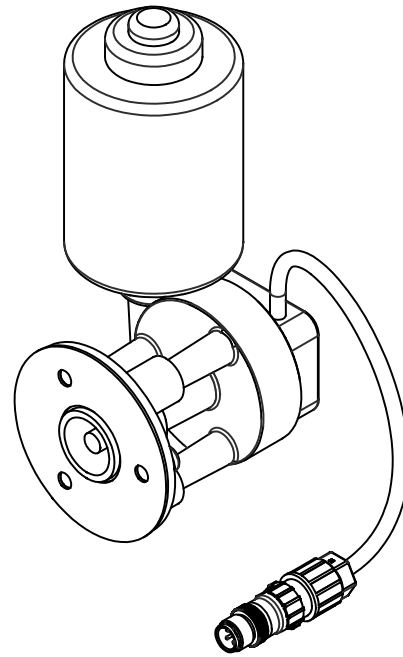


Hinge set 45° stop - 04008215

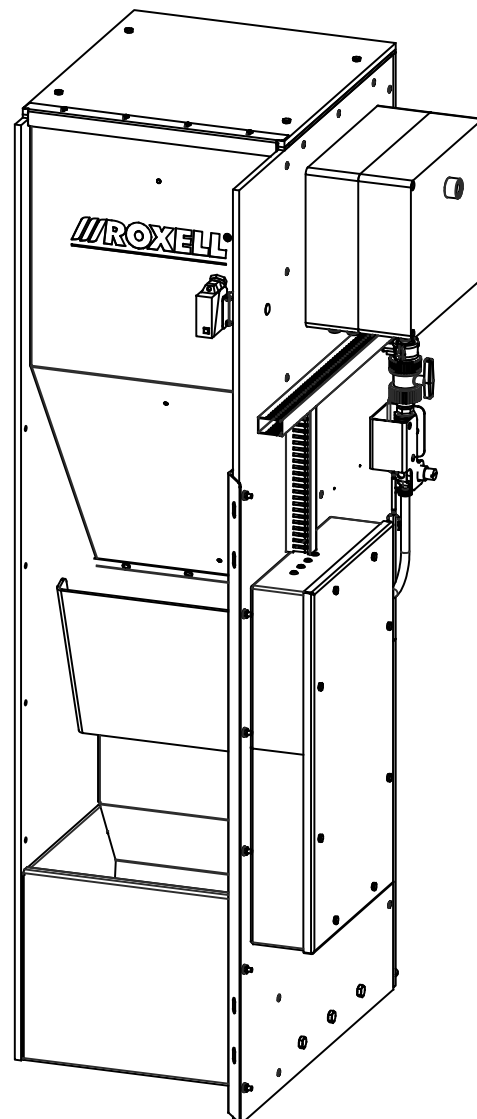
Key	Name	Part Nr.	Qt.
1	HINGE WELDMENT	04010314	2
2	BOLT M10X55 DIN933 - A2	20110359	2
3	LOCKNUT M 10 - DIN 985 - A2	20102455	2
4	FENCE MOUNTING BAR	14005367	2
5	BOLT M8x25 DIN 933 - A2	04901997	4
6	LOCKNUT M8 - DIN 985 - A2	20102885	4
8	CORNER STOP 45°	14005409	2
9	BOLT M6X55 DIN 931-GALV.	20101309	2
10	LOCKNUT M6 - DIN 985	20100400	2



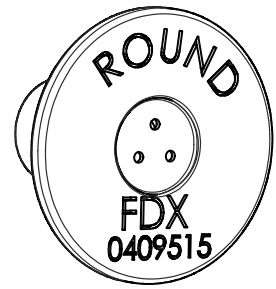
Motor ass'y - 04008116



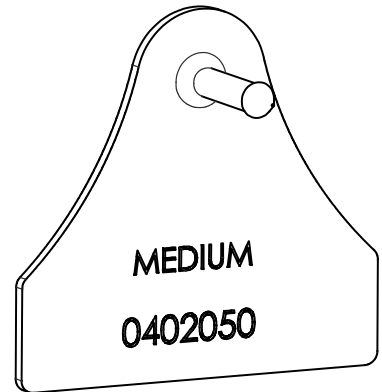
Feed trough - 2 feed types - 04010150



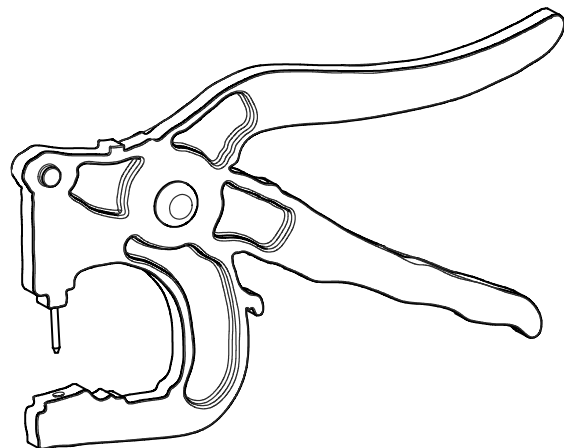
Eartag FDX yellow (kit 100 pcs) - 04010338



Eartag male yellow (kit 100 pcs) - 04010346

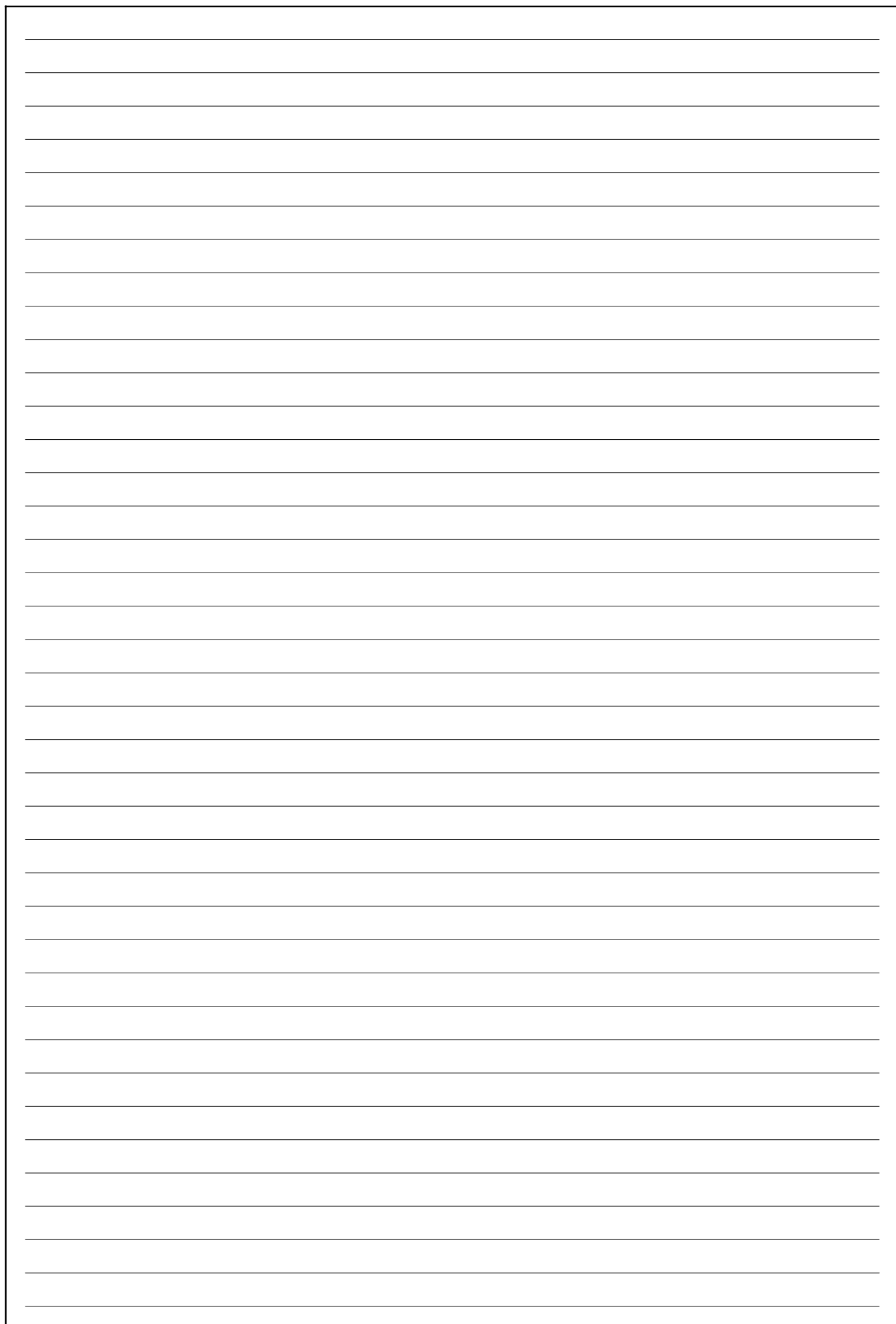


Eartag pliers - 04010354



PART III

INSTALLATION INSTRUCTIONS



FIDOS

General safety rules

Feeding station for sows



IMPORTANT
Carefully read the following instructions before
you **INSTALL** the system

- Before you do any repair, or maintenance works, always disconnect the electricity supply by switching off the main switch.
- Use personal protective equipment.
- Beware of all moving parts, like turning doors, gates and motors.
- The installation area must be free from any obstacles, including sows.
- When installing, carefully follow the instructions in this manual step by step.
- Never allow unauthorized persons enter the house during your absence.
- Don't wear loose clothing.



DANGER: Crushing of hands
Pay attention to serious injuries to the hand.



DANGER: AUTOMATIC START-UP



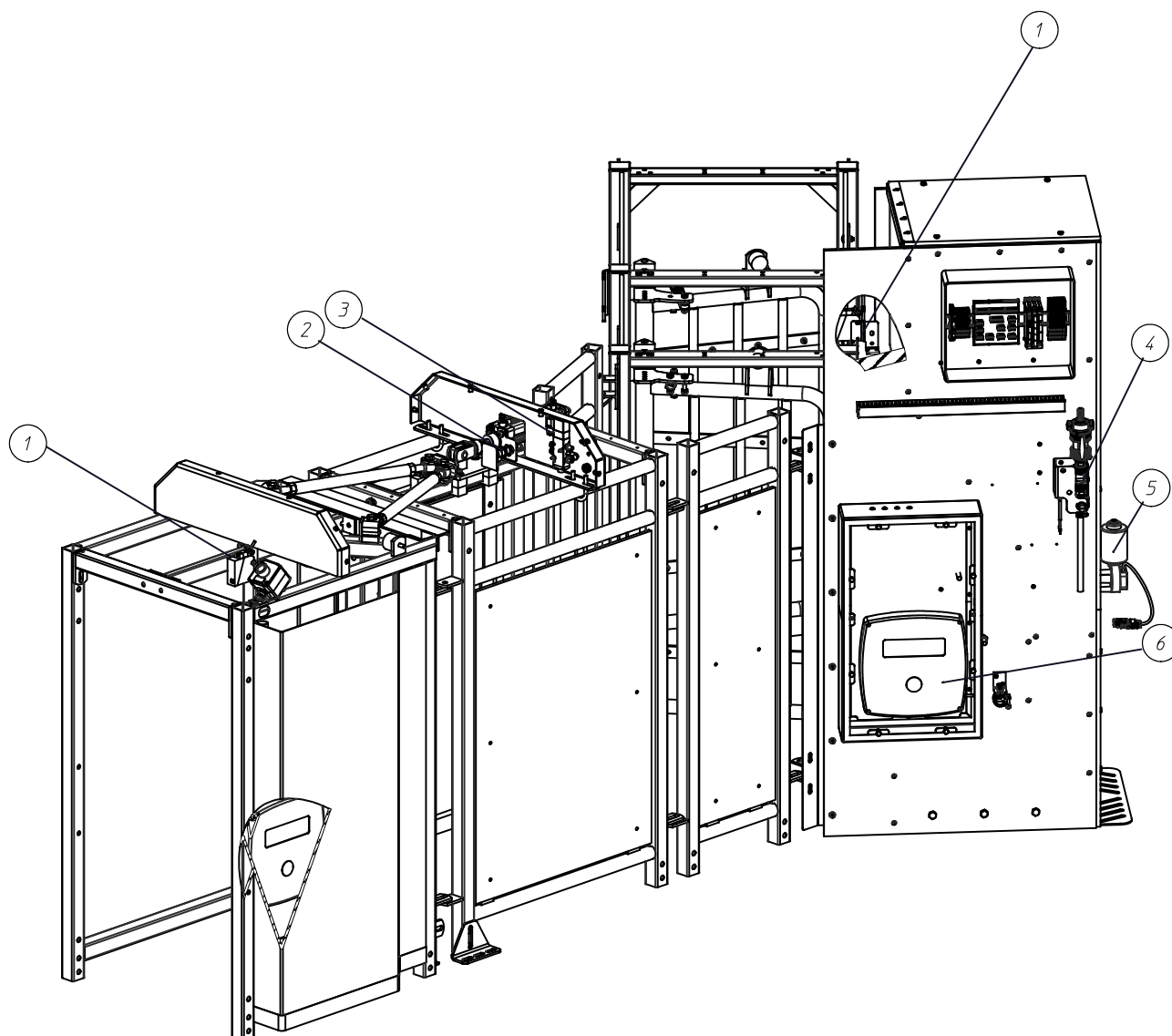
DANGER: Getting jammed
Getting jammed may cause serious injuries.



DANGER: Magnetic fields.
People with pacemakers, metallic implants or hearing aids may experience complications.
They should consult their doctor before entering a site with inverters.

Fidos feeding station

General view



Key	Name	Part Nr.
1	PHOTOELECTRIC SWITCH ASS'Y	04009128
2	SENSOR INDUCTIVE PNP	14007084
3	IN-LINE SOLENOID VALVE 5/2 24V	14003487
4	WATER REGULATION ASS'Y	14003677
5	MOTOR ASS'Y	04008116
6	ANTENNA F/ ENTRANCE	14006892
	ANTENNA F/ TROUGH	14006896

Tools

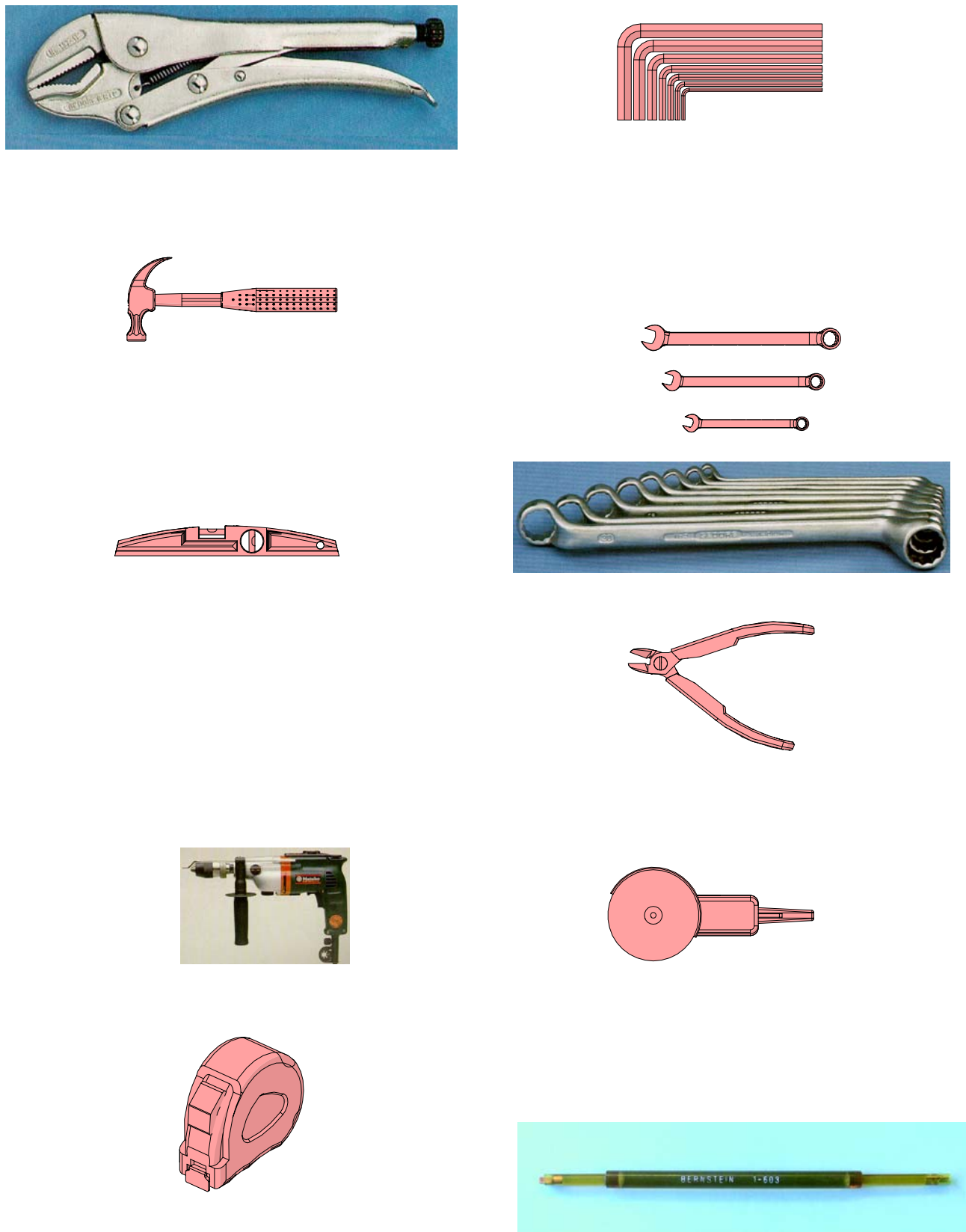
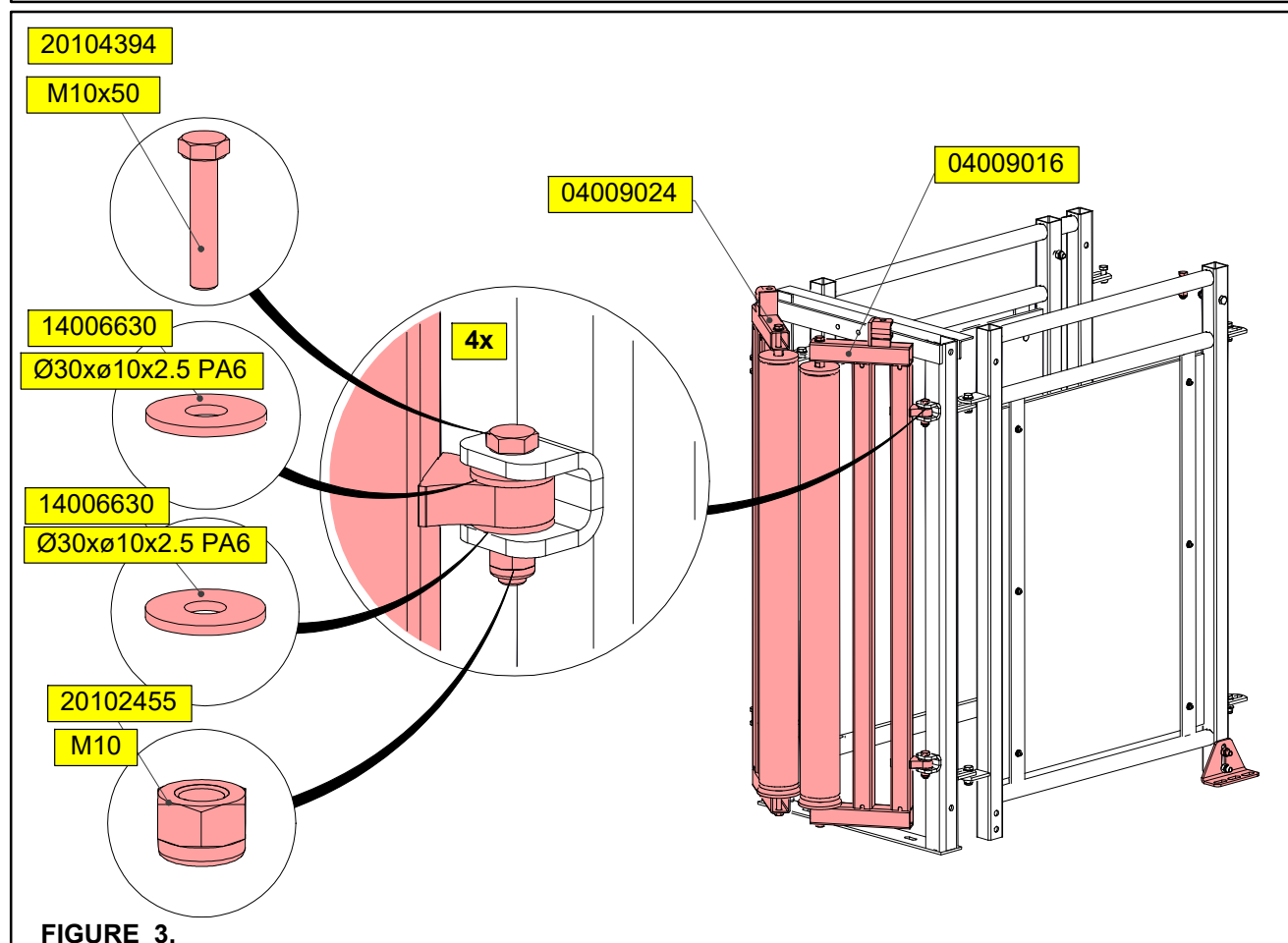
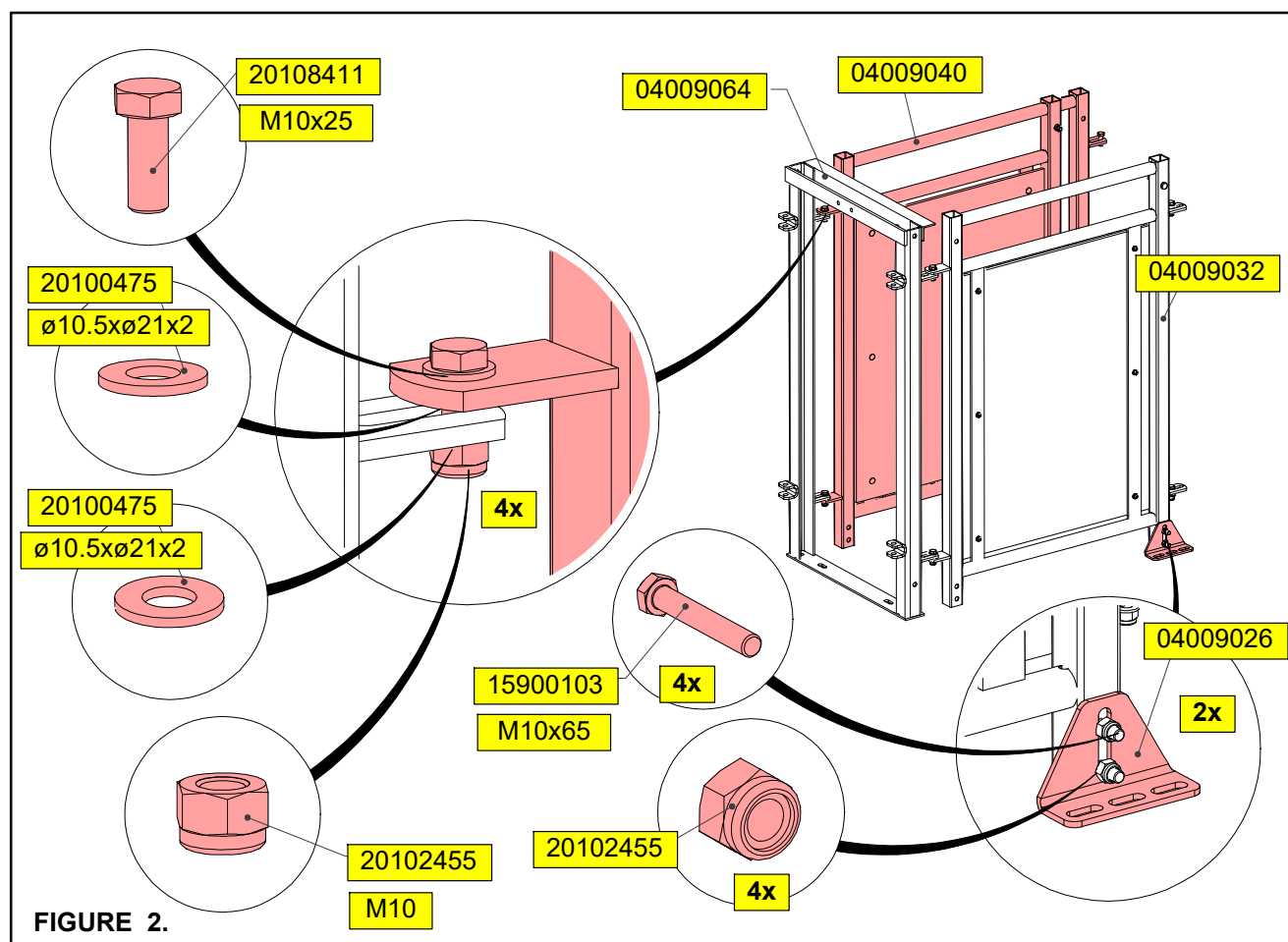
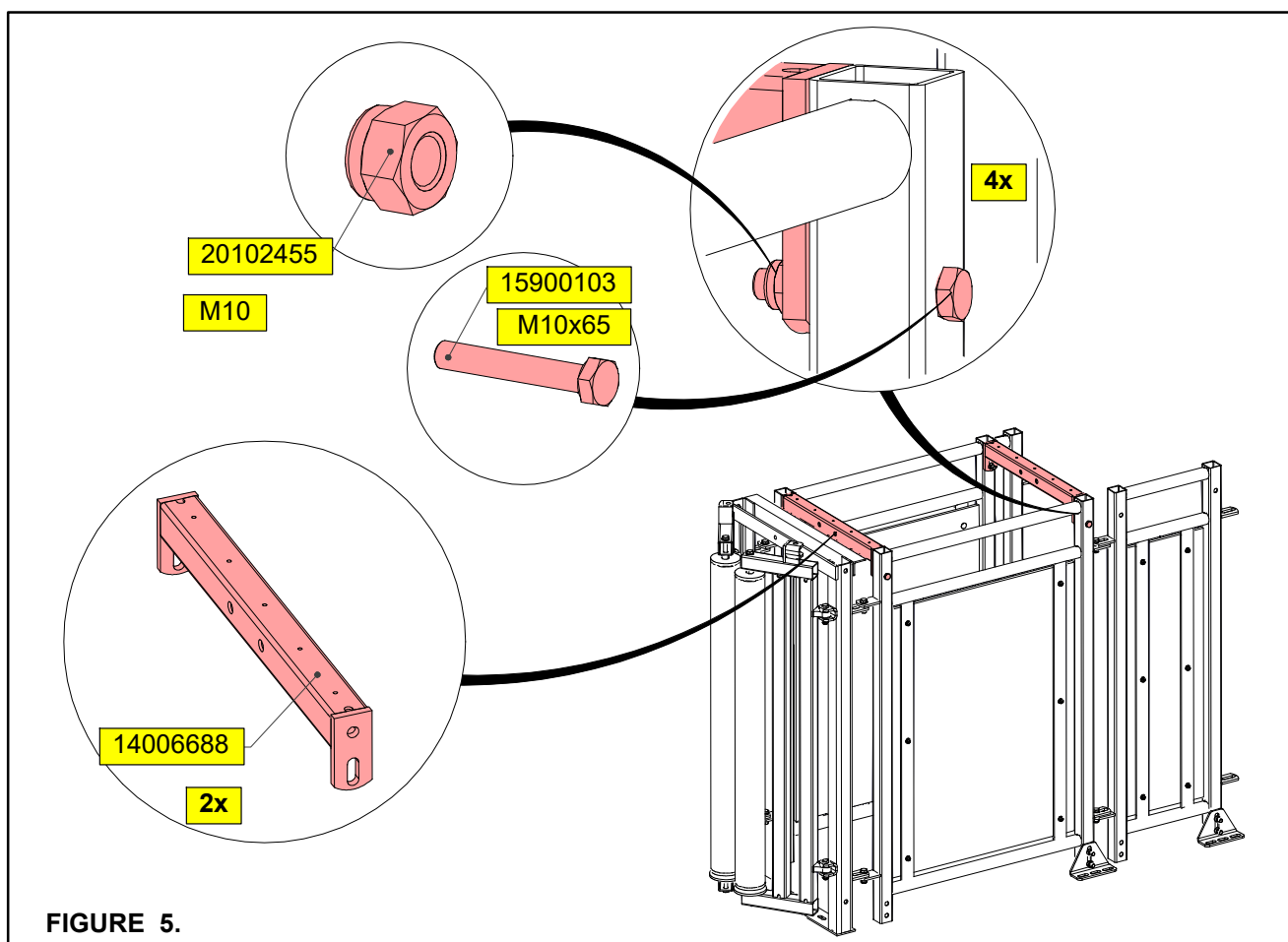
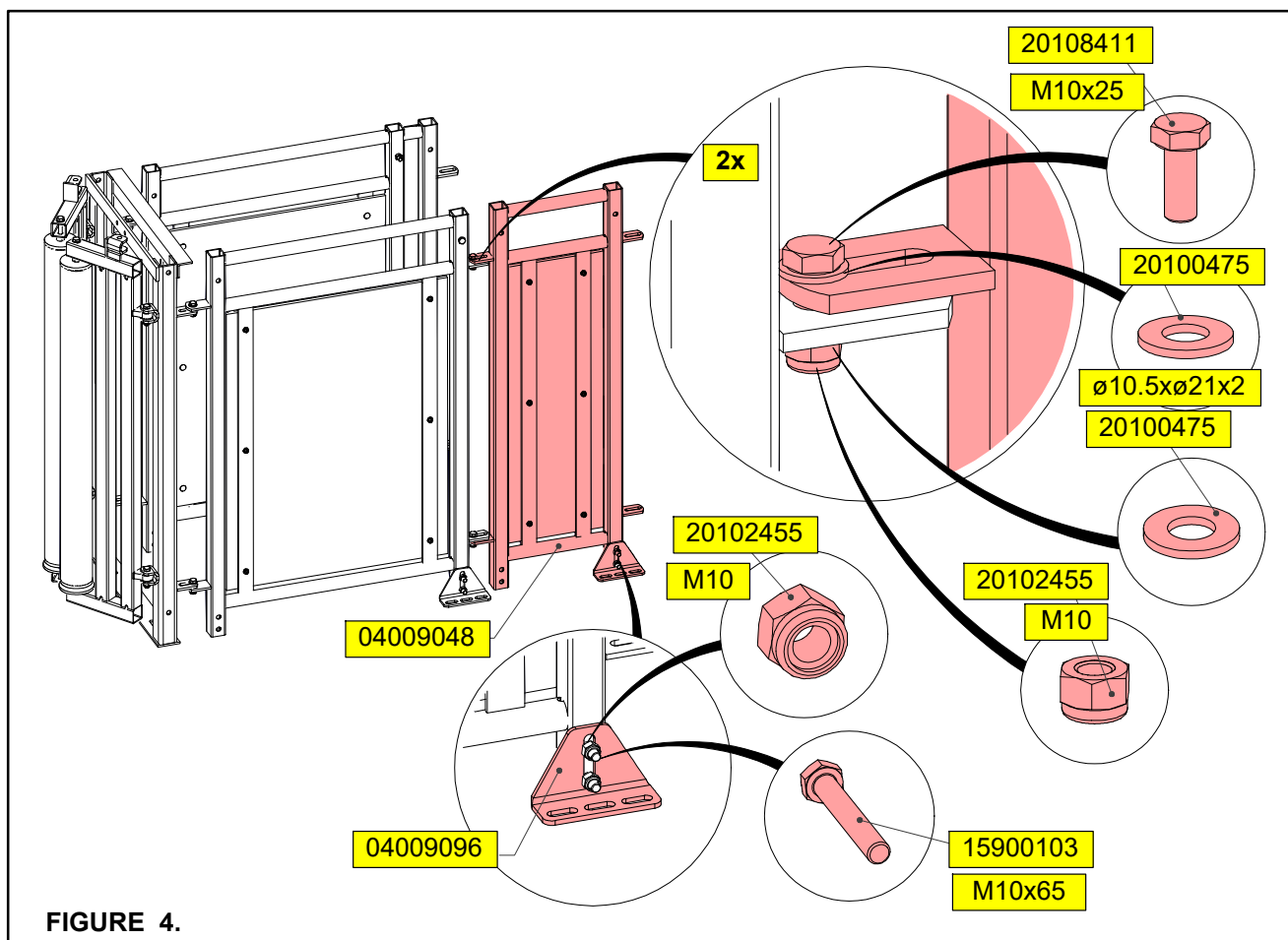
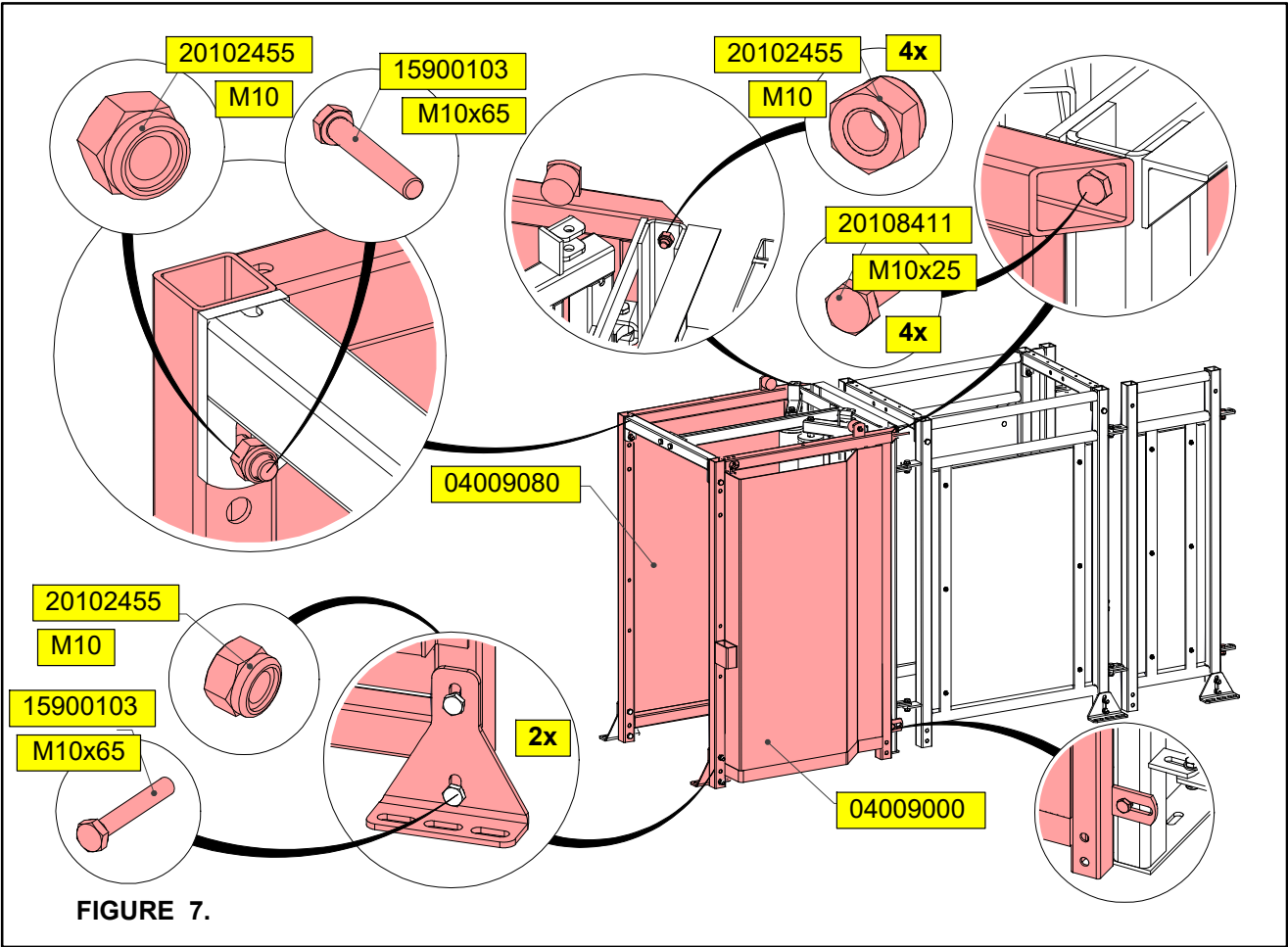
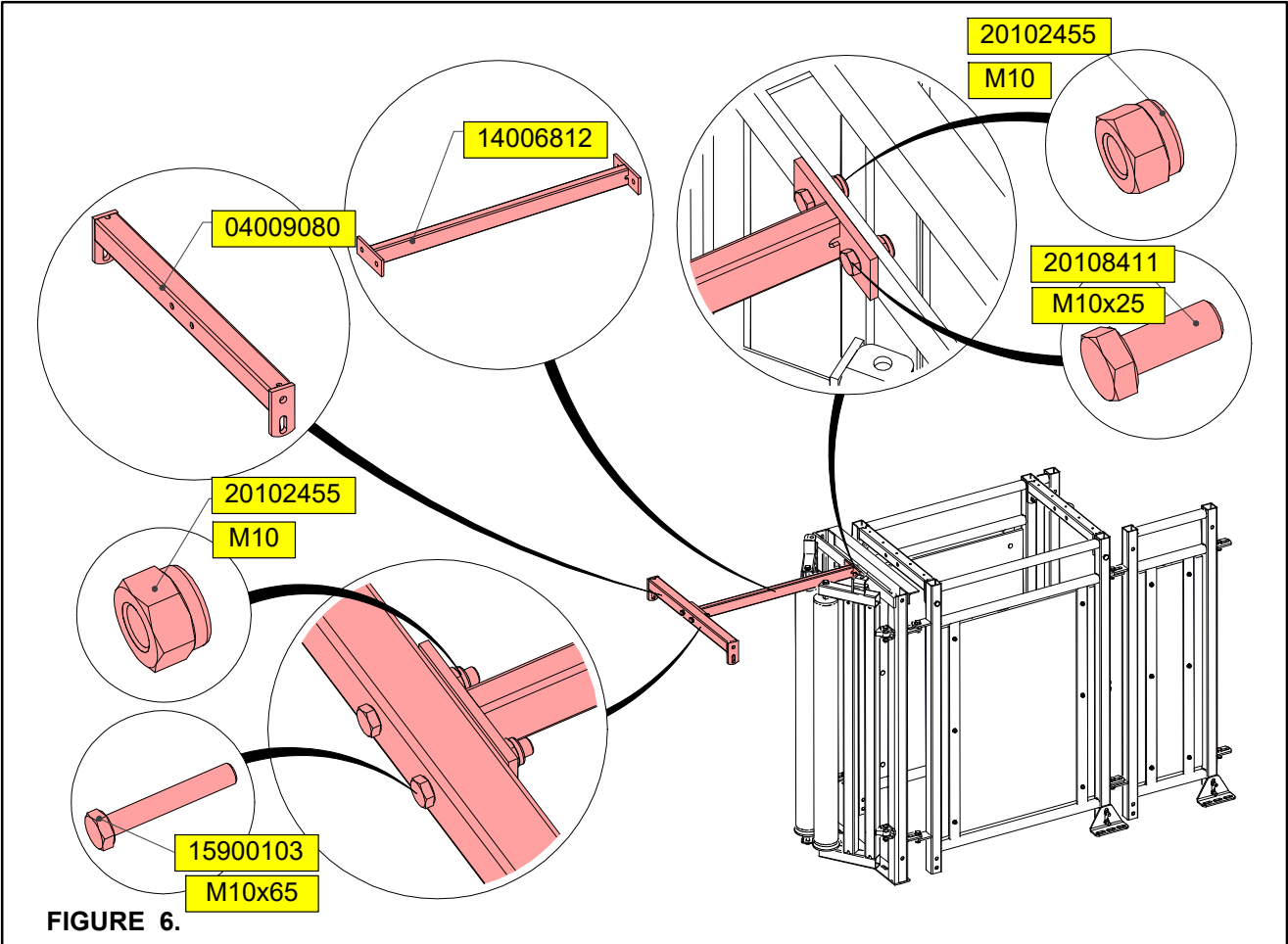


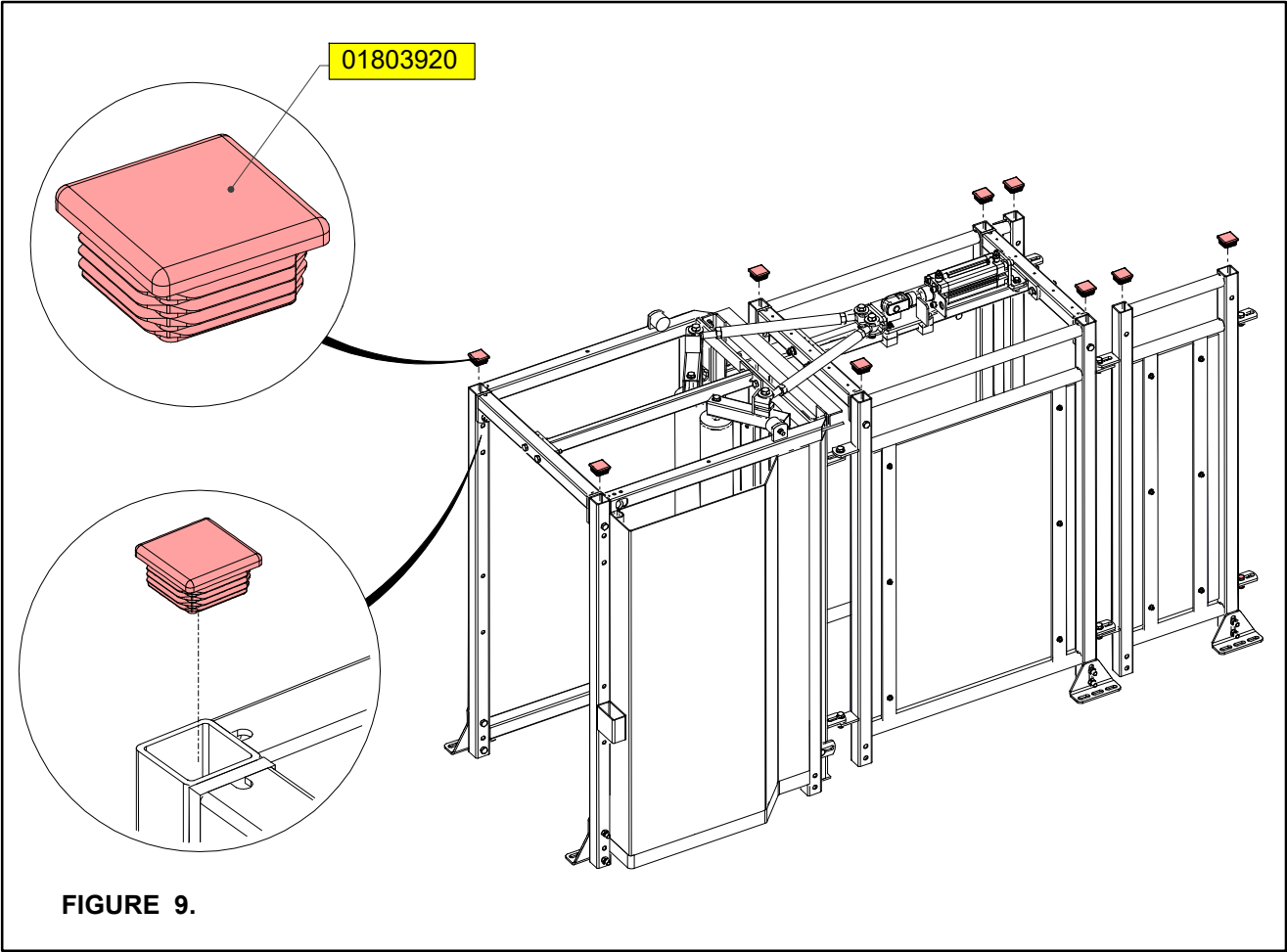
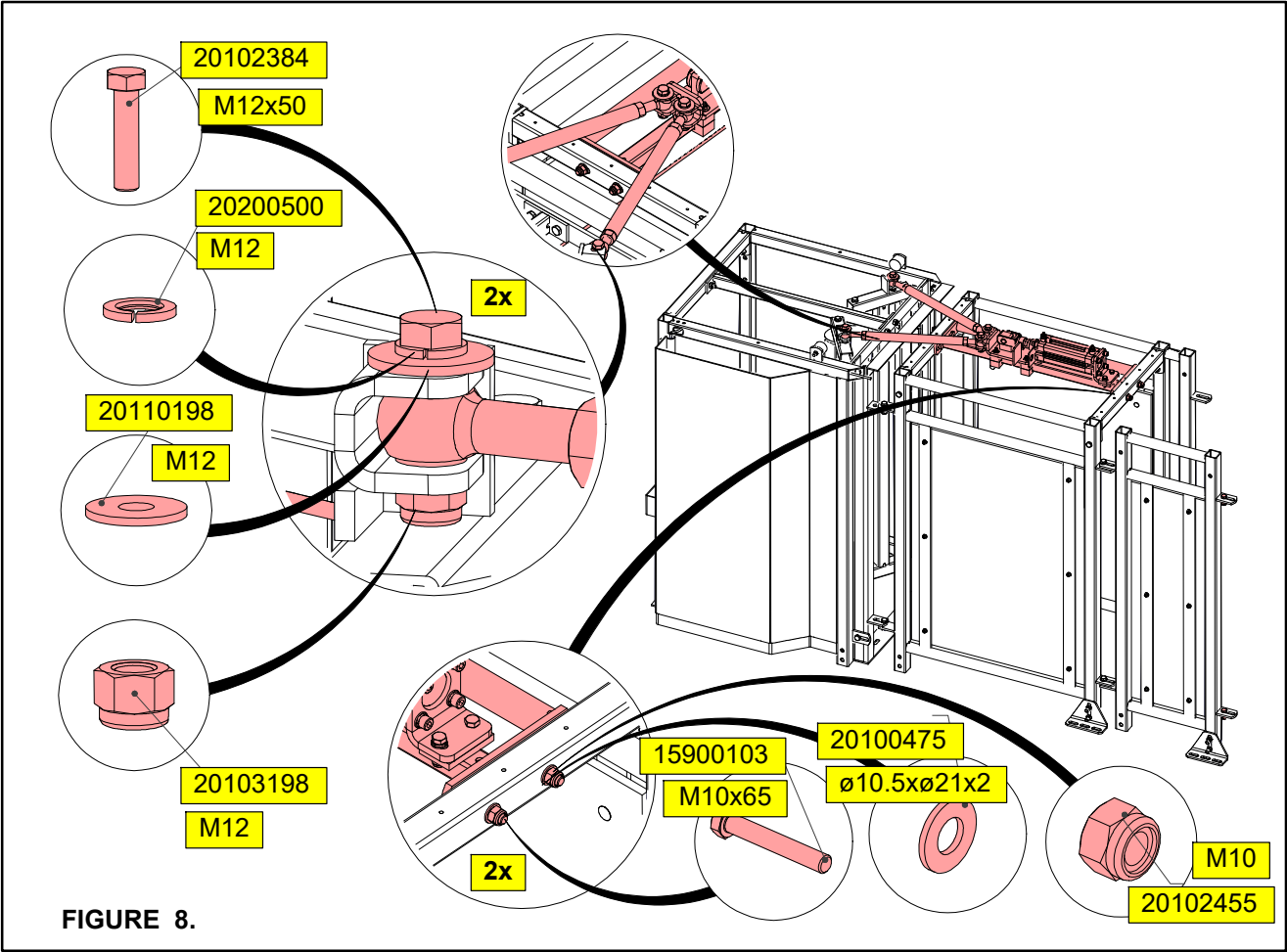
FIGURE 1.

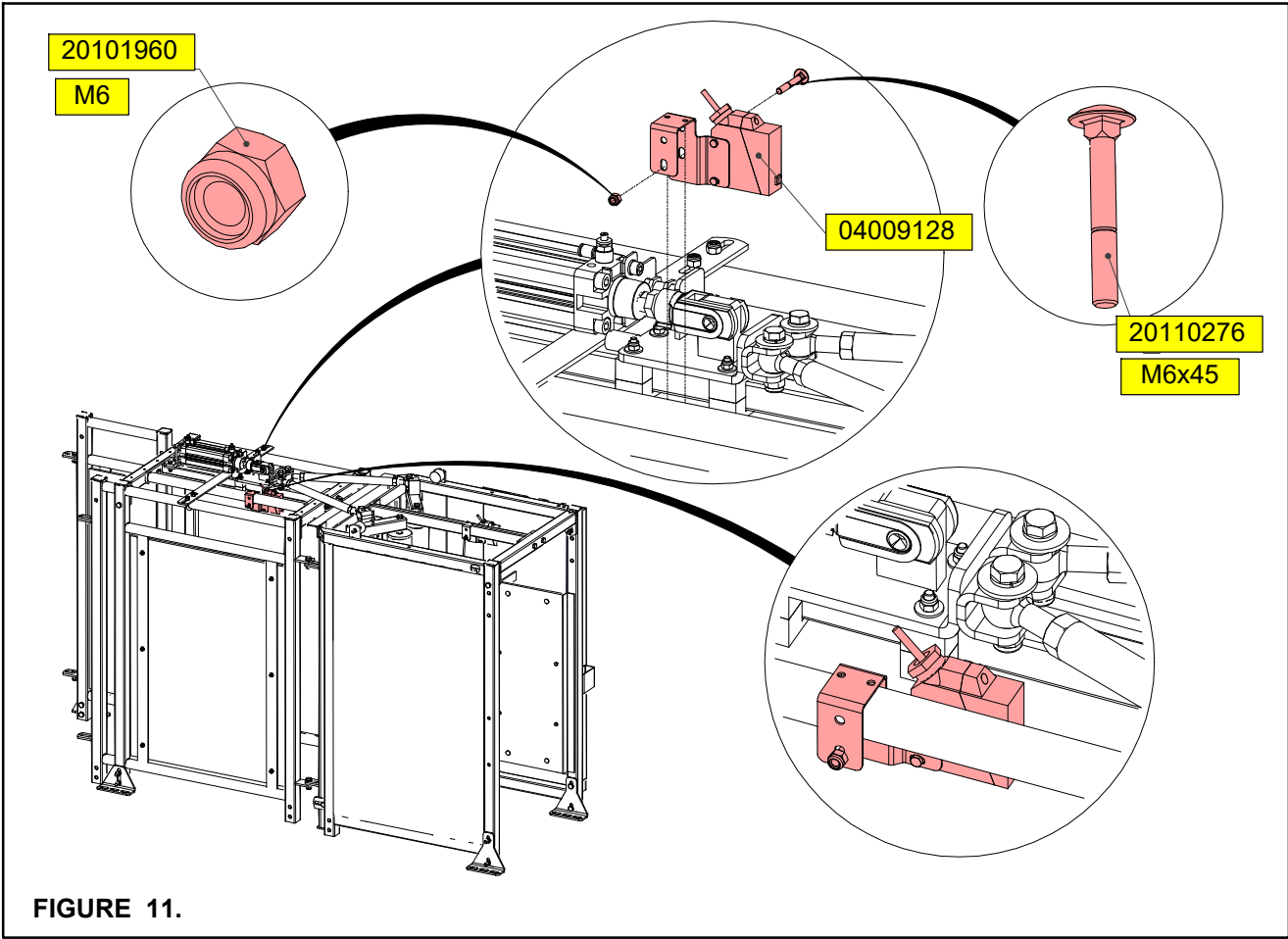
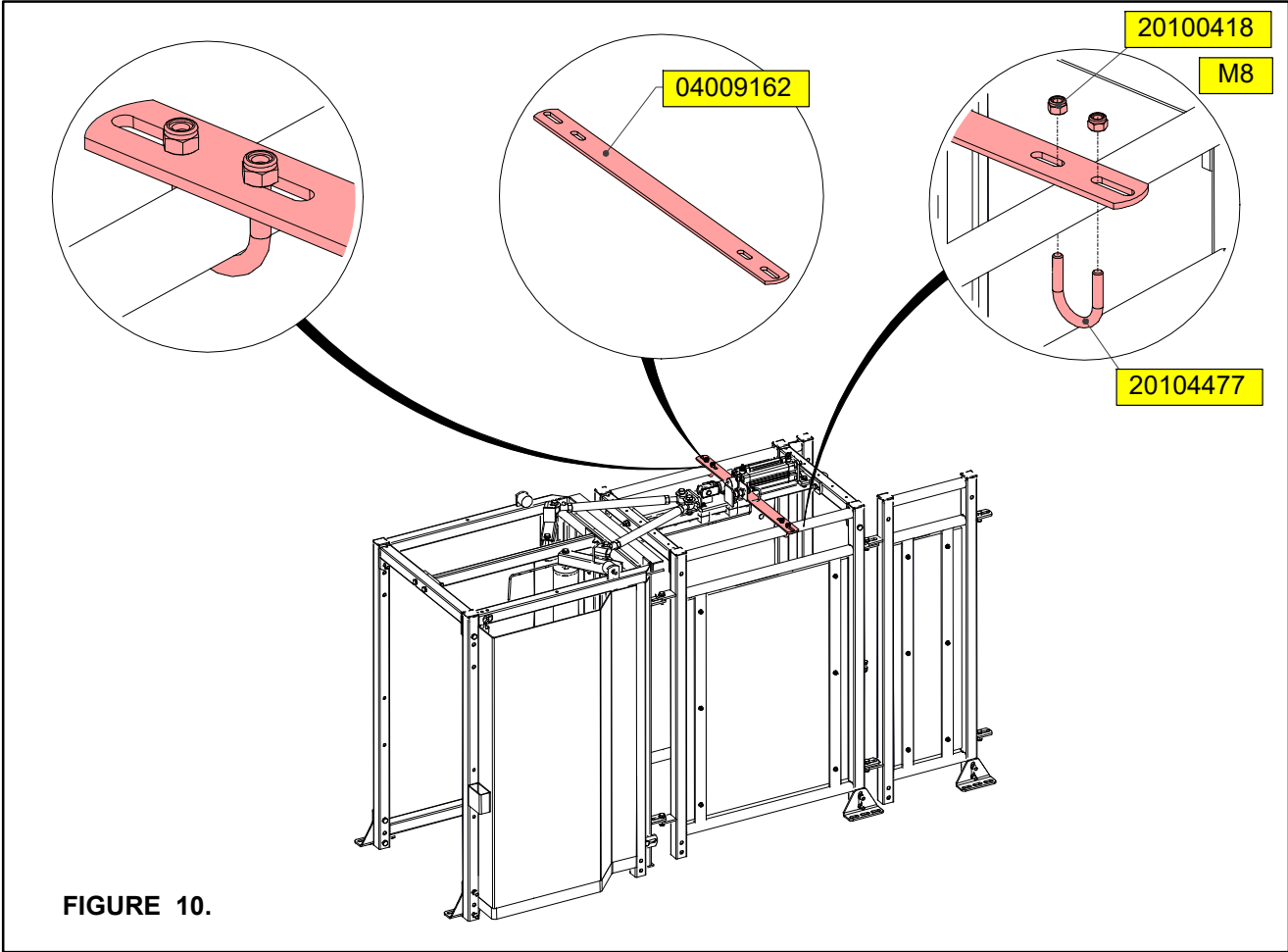
To install the Fidos station

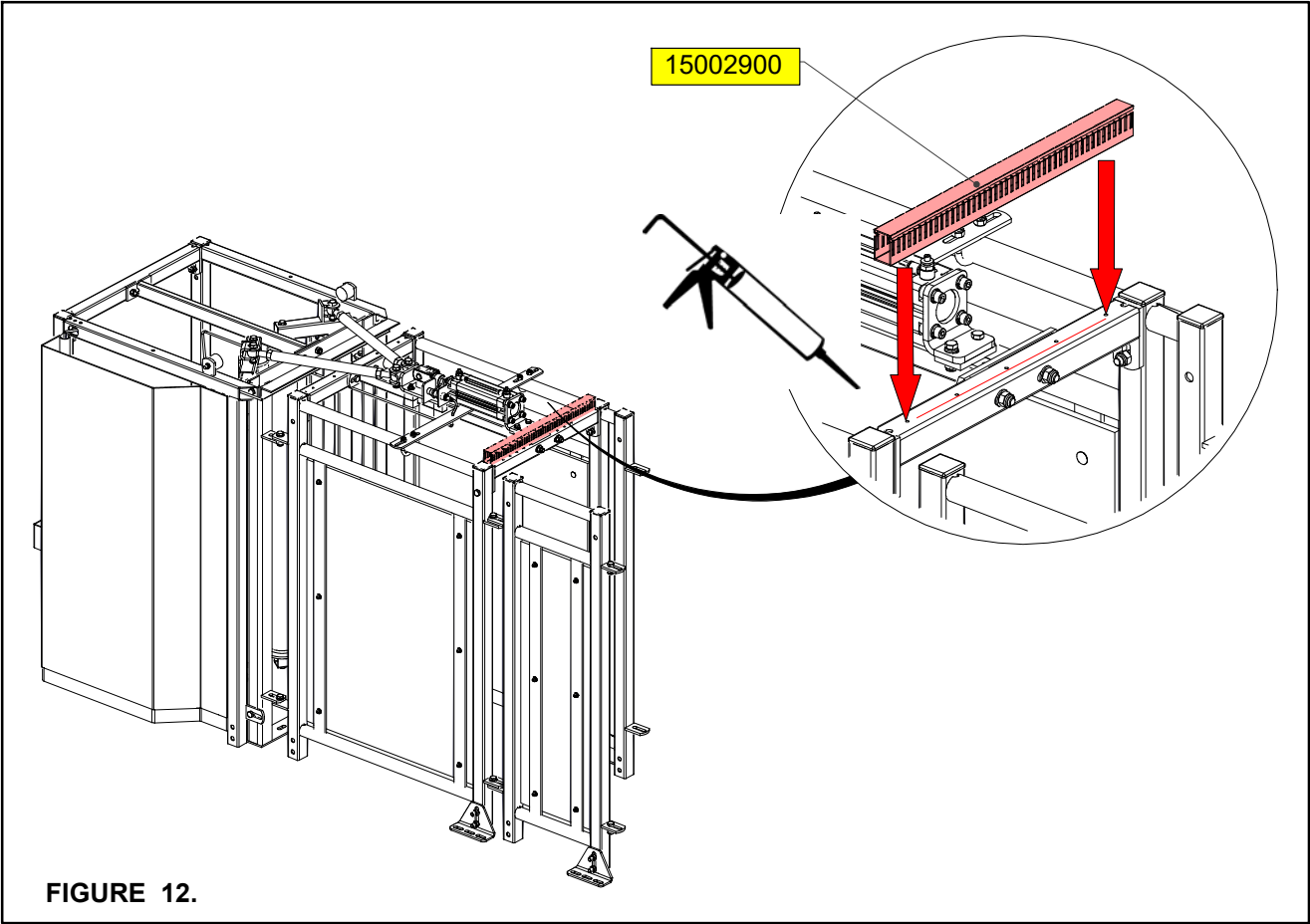




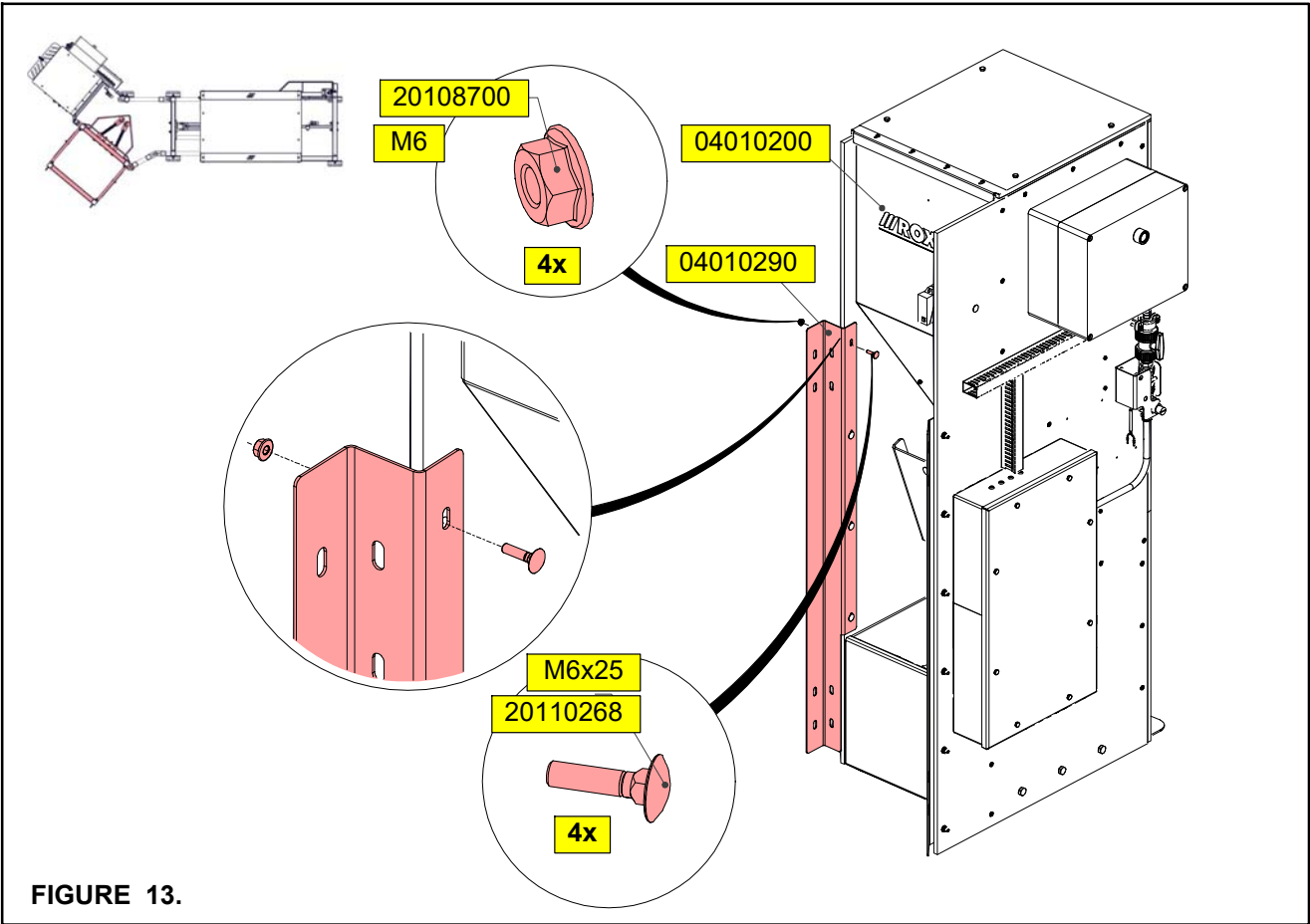




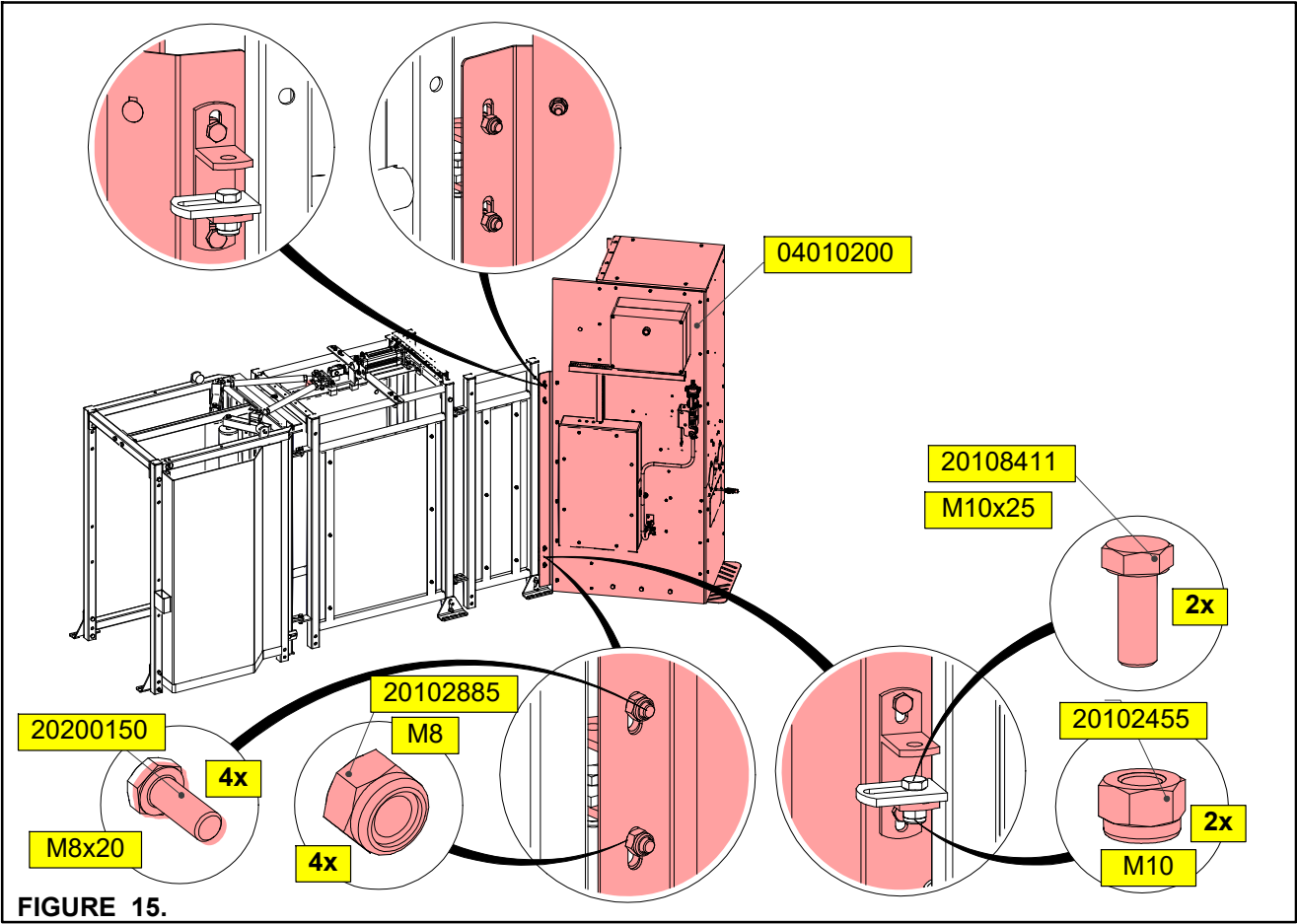
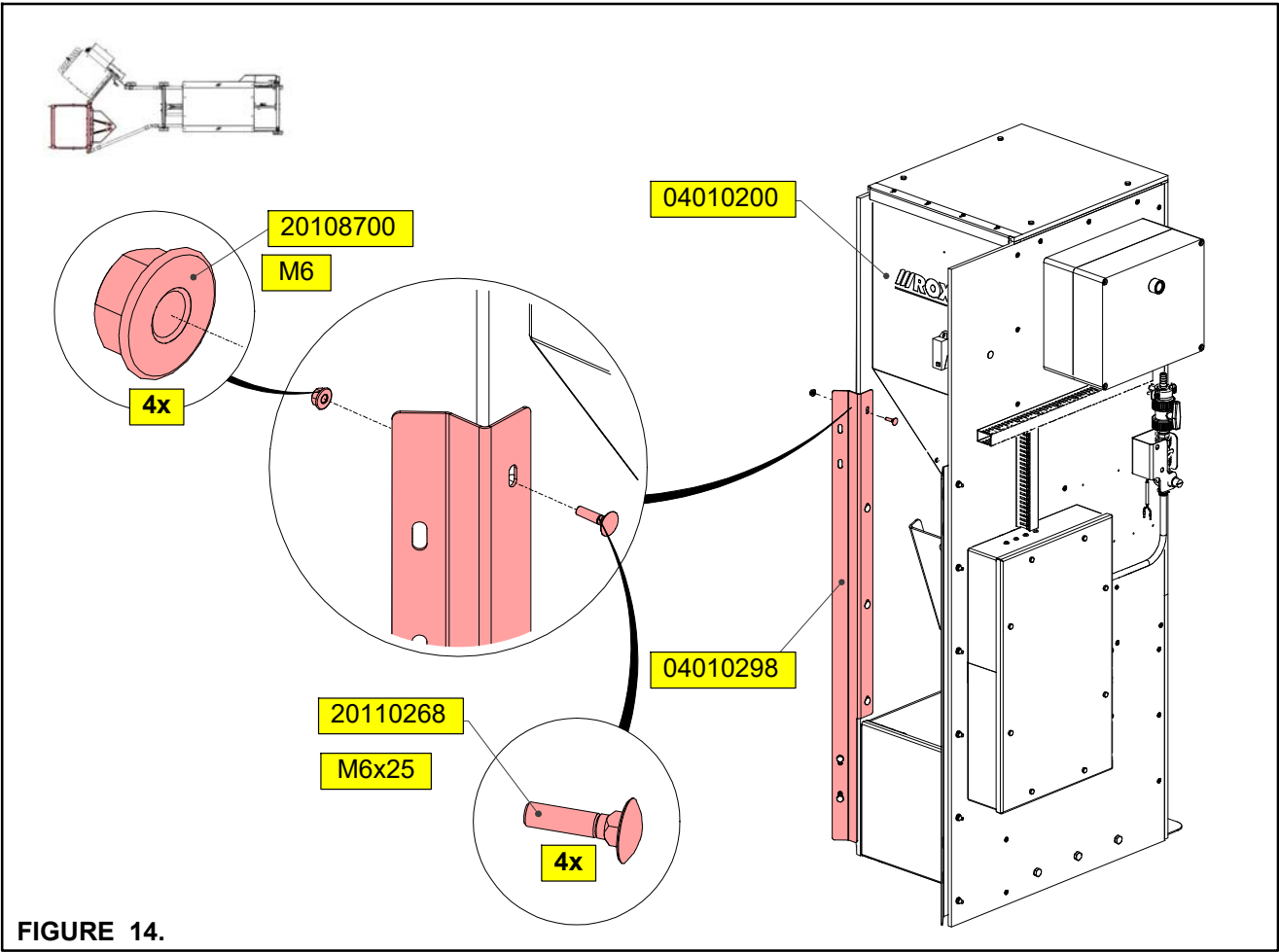




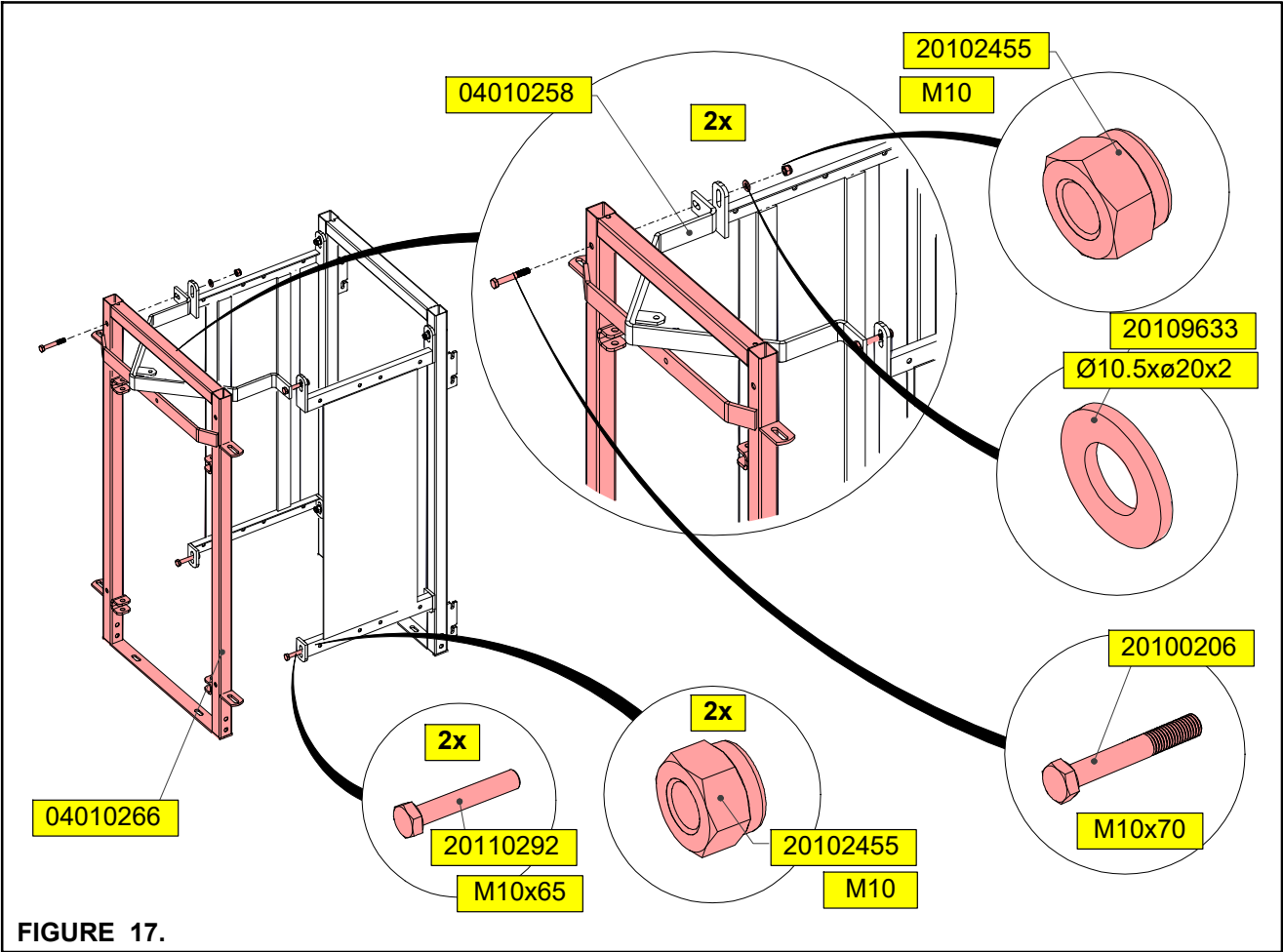
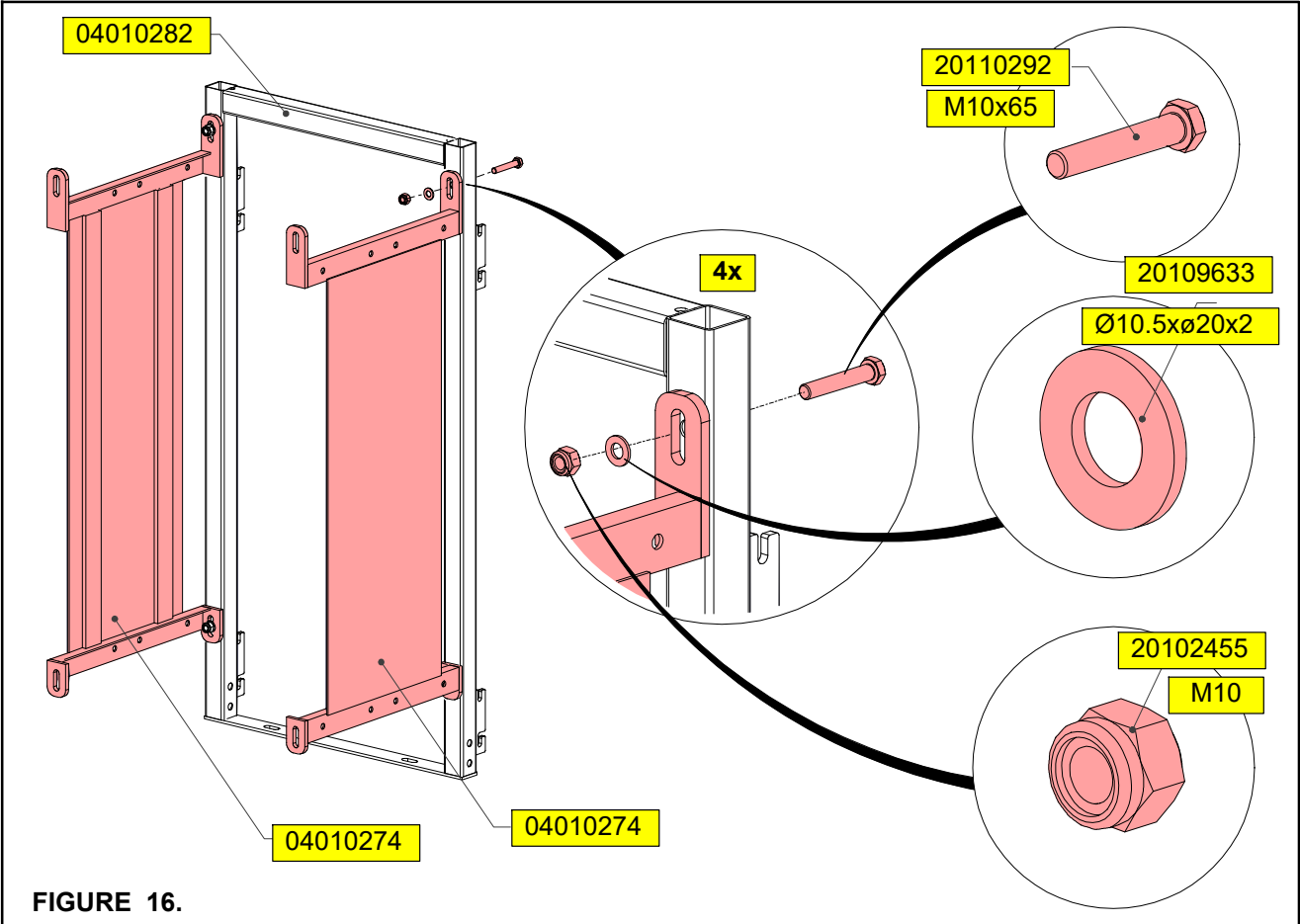
To install the profile for the exit 45°

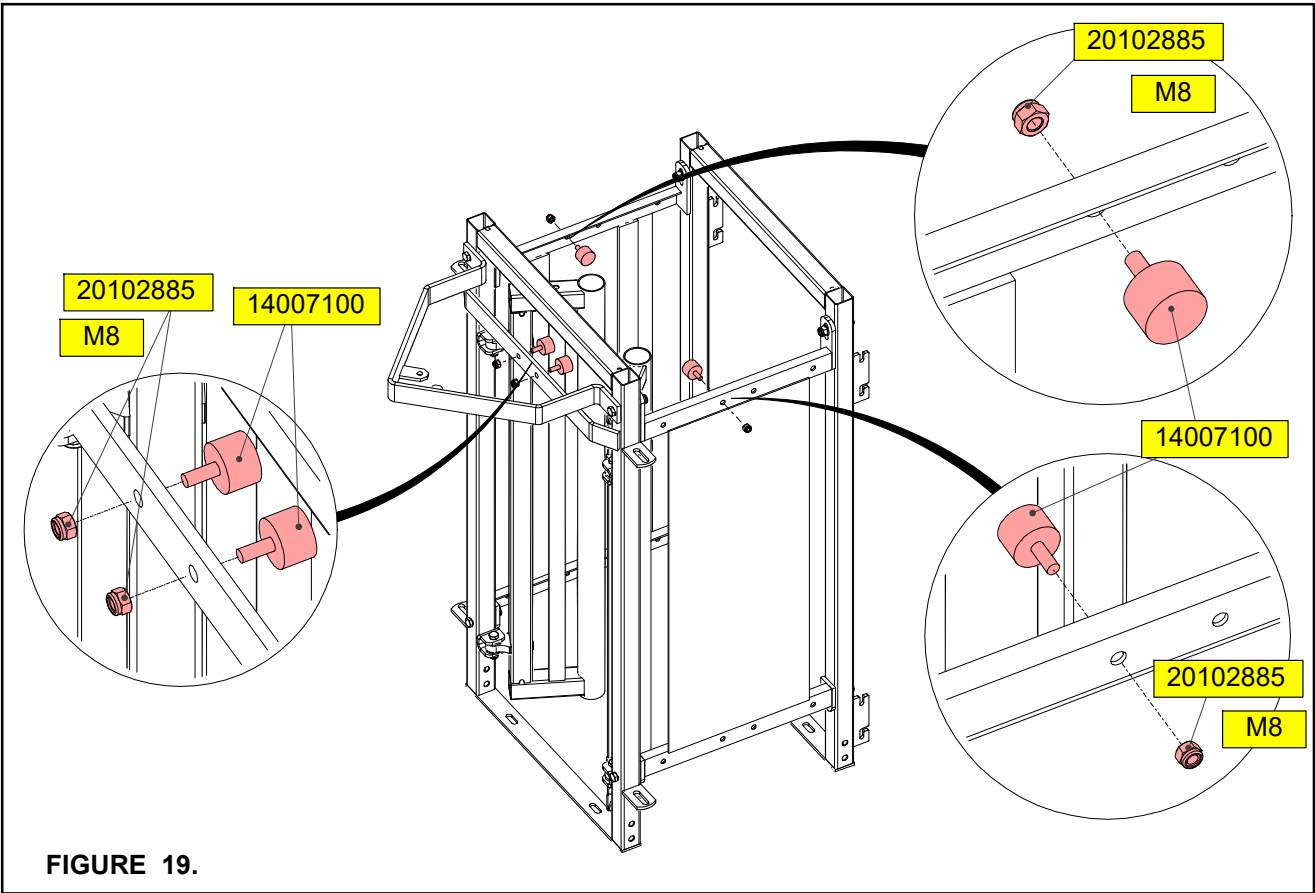
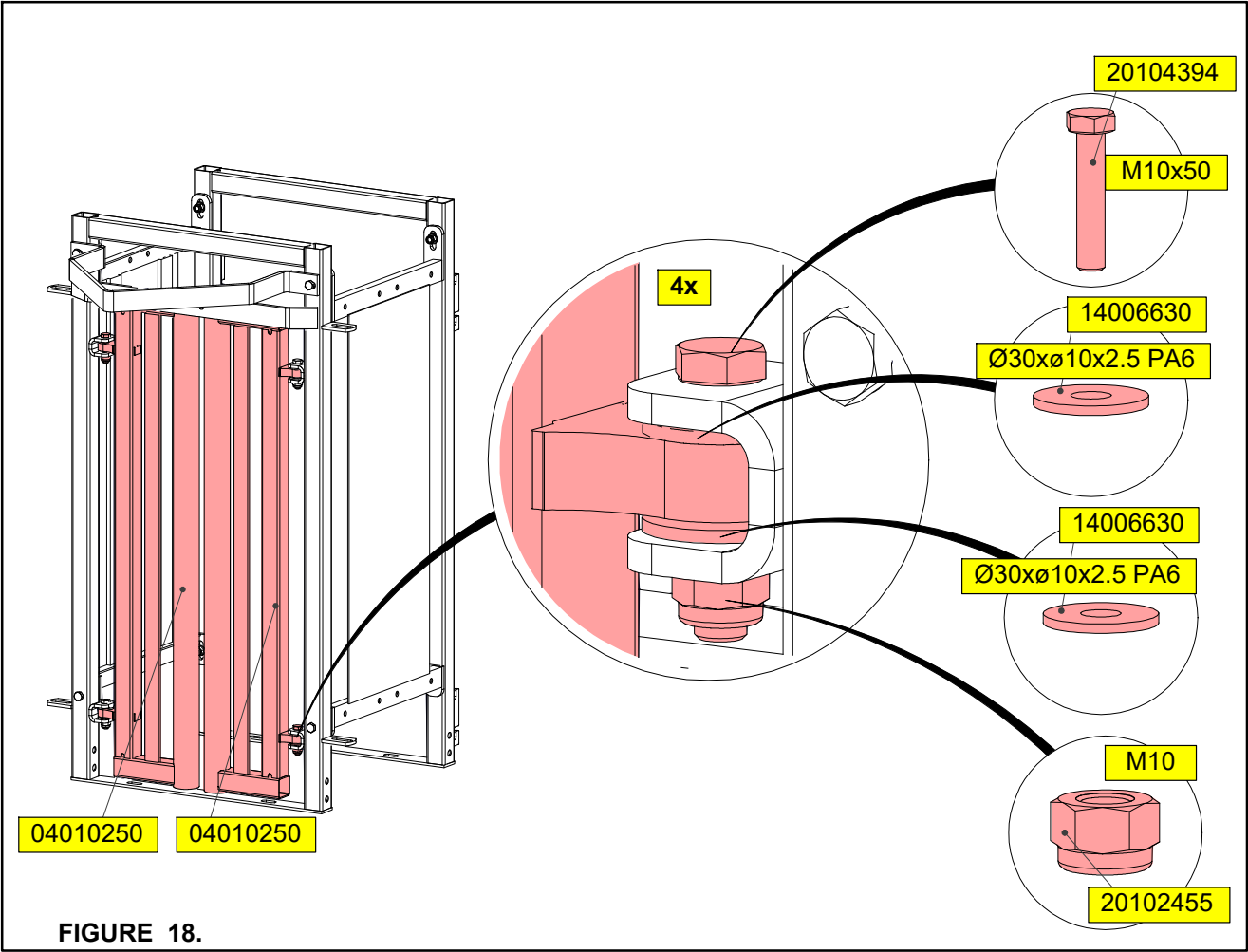


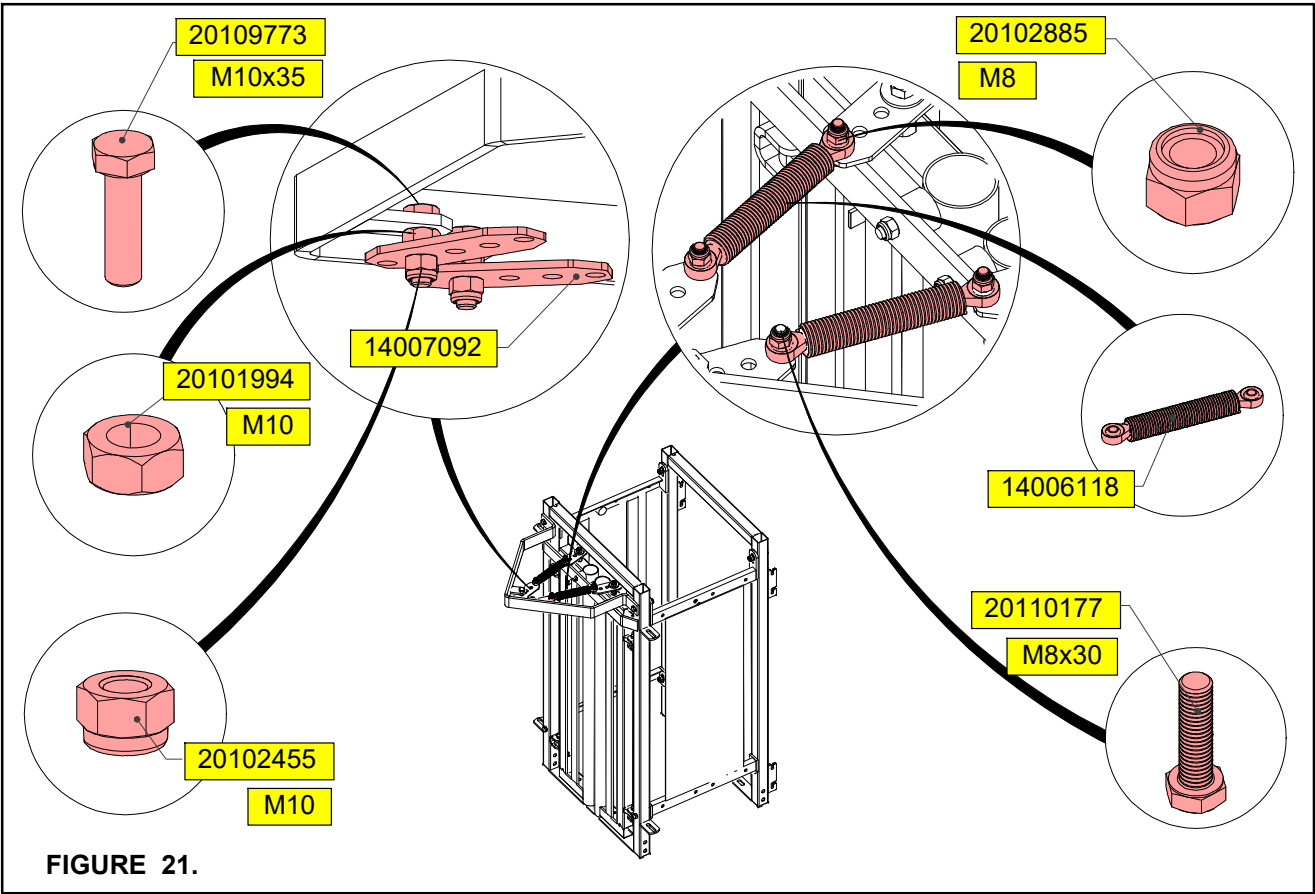
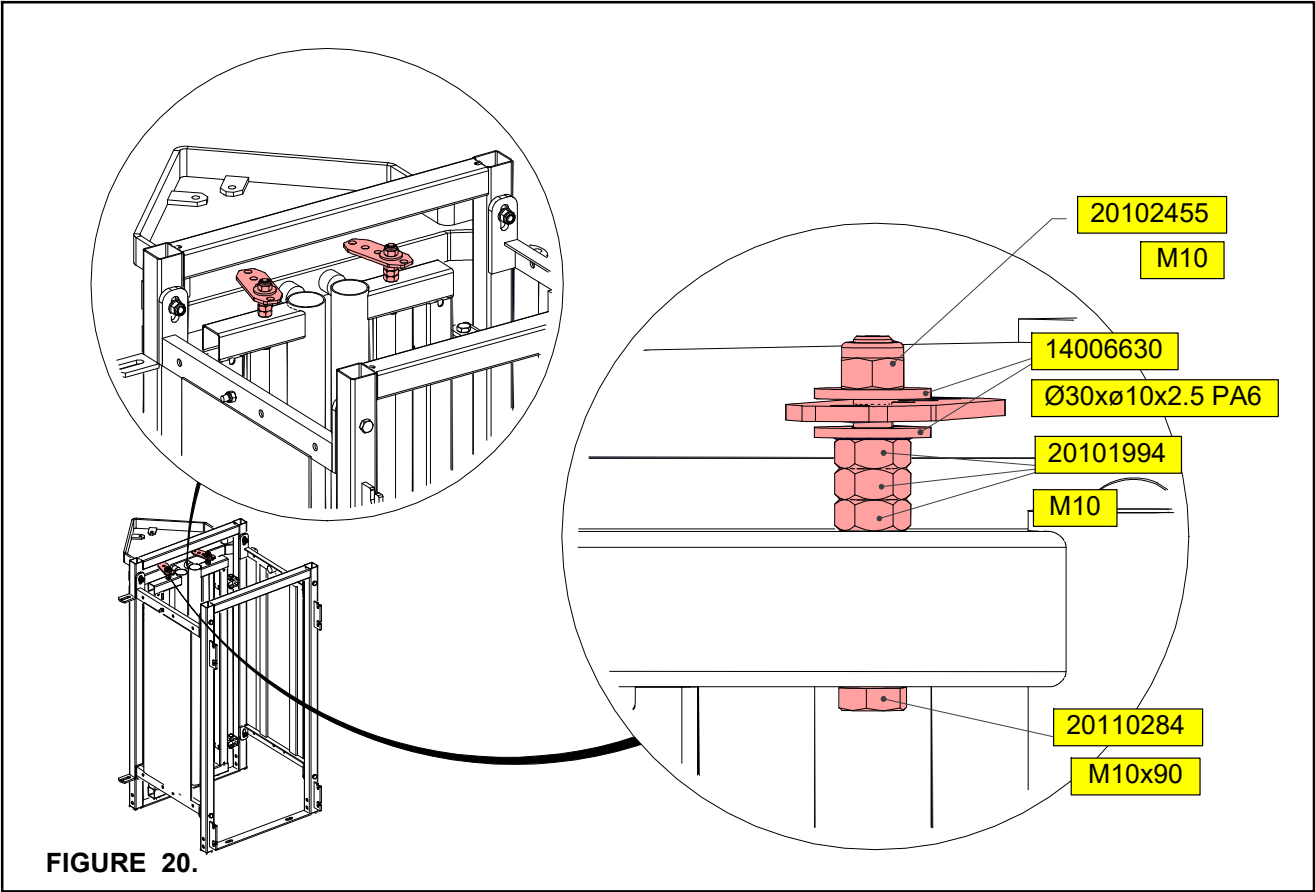
To install the profile for the straight exit



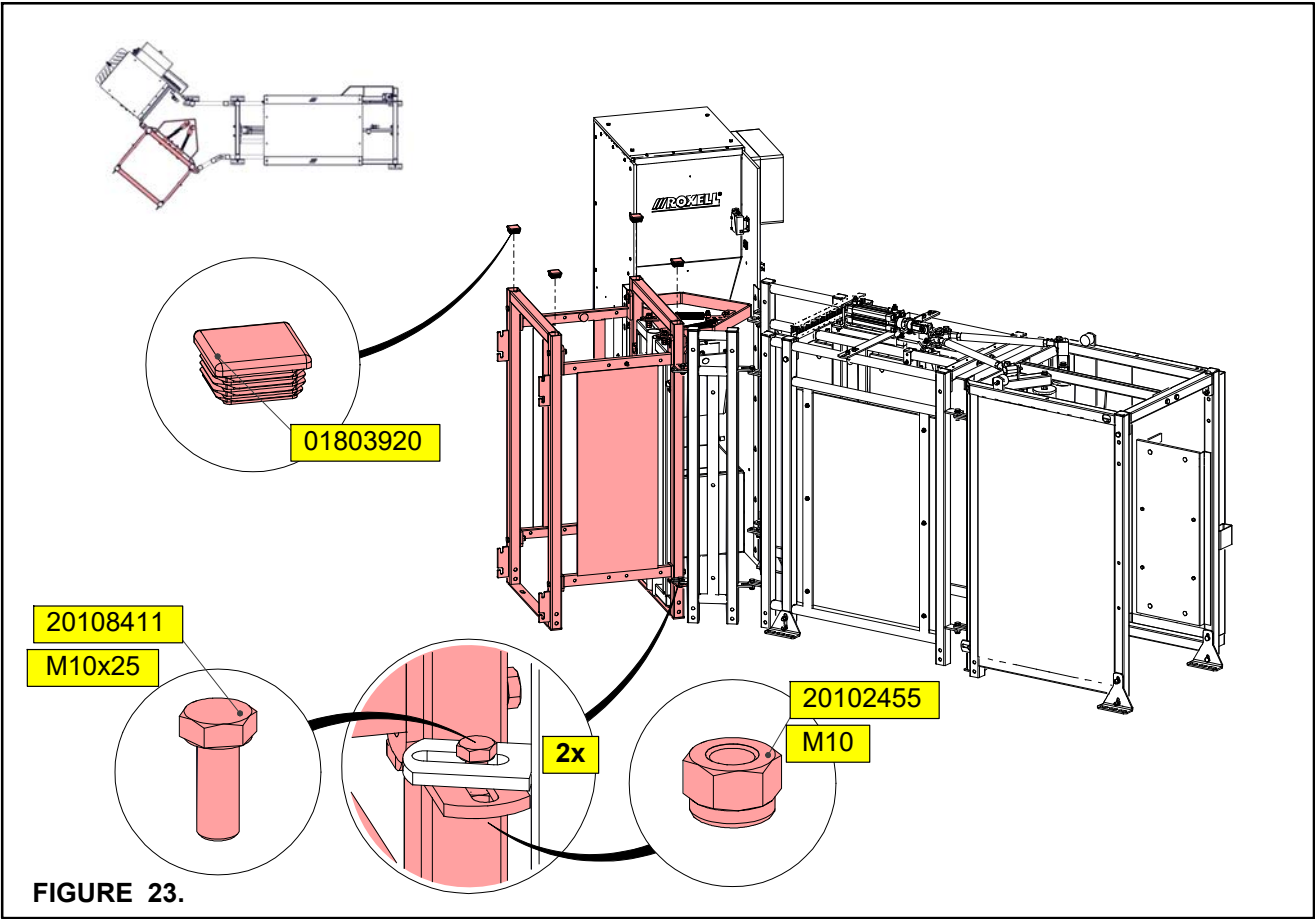
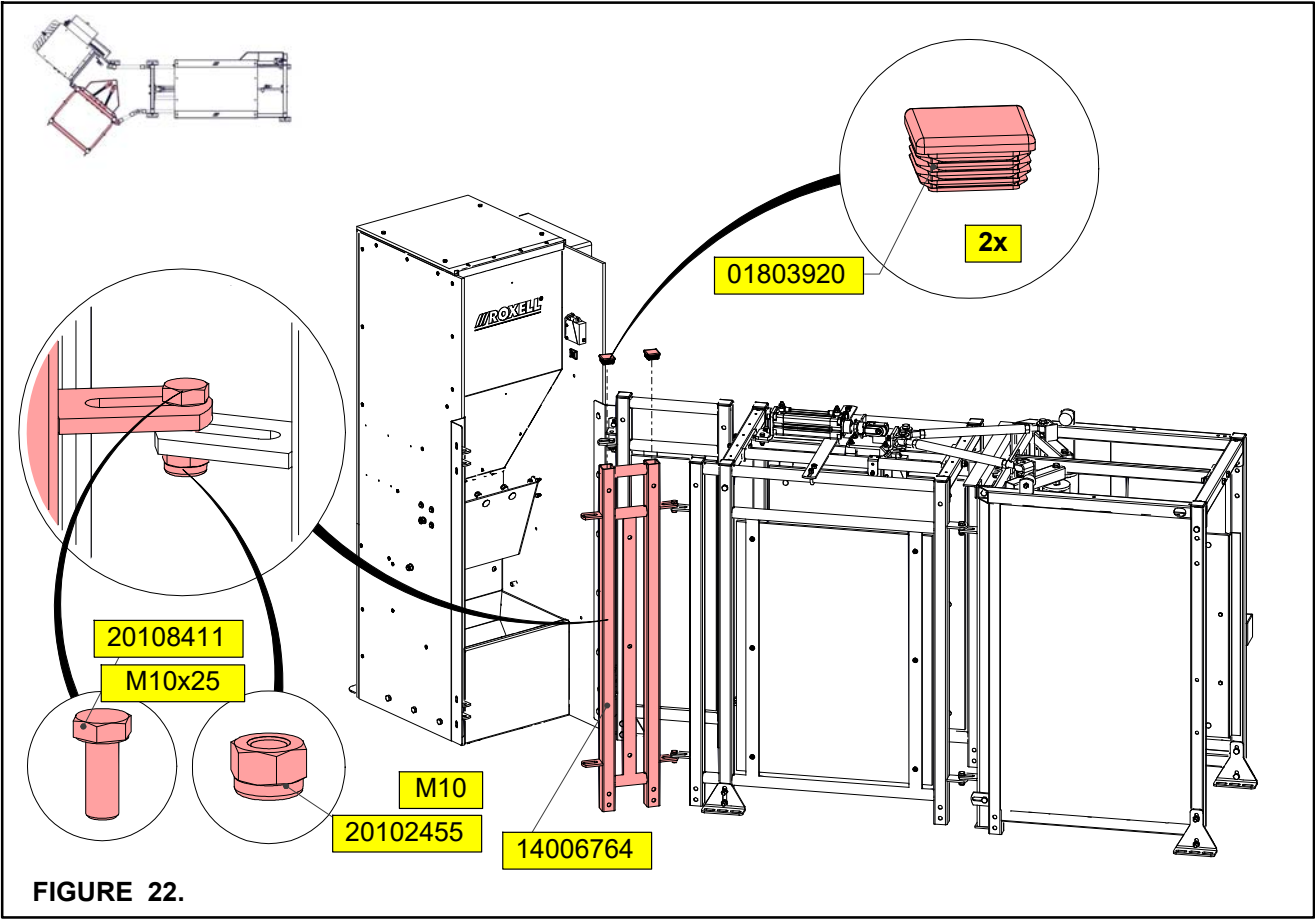
To assemble the exit gate

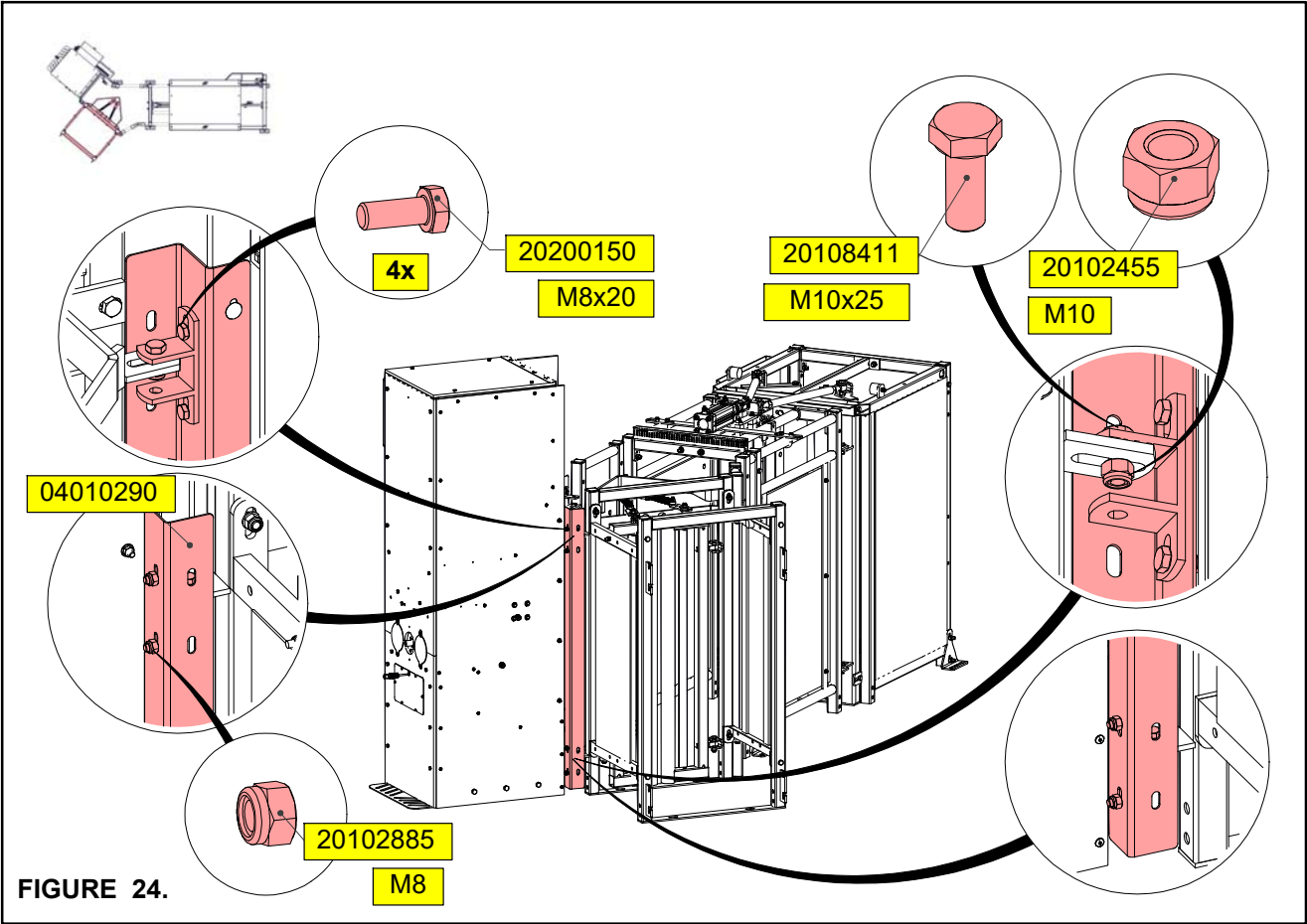




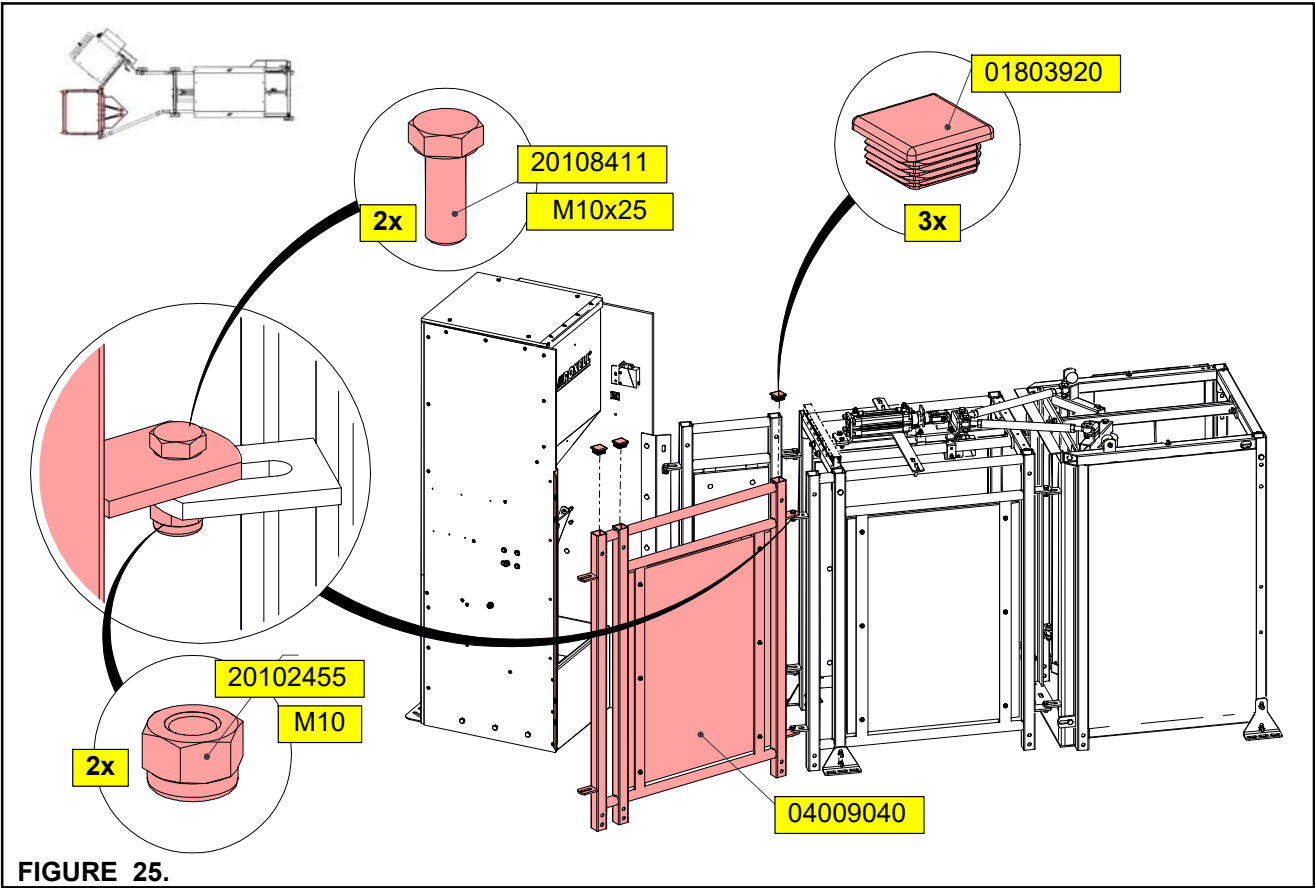


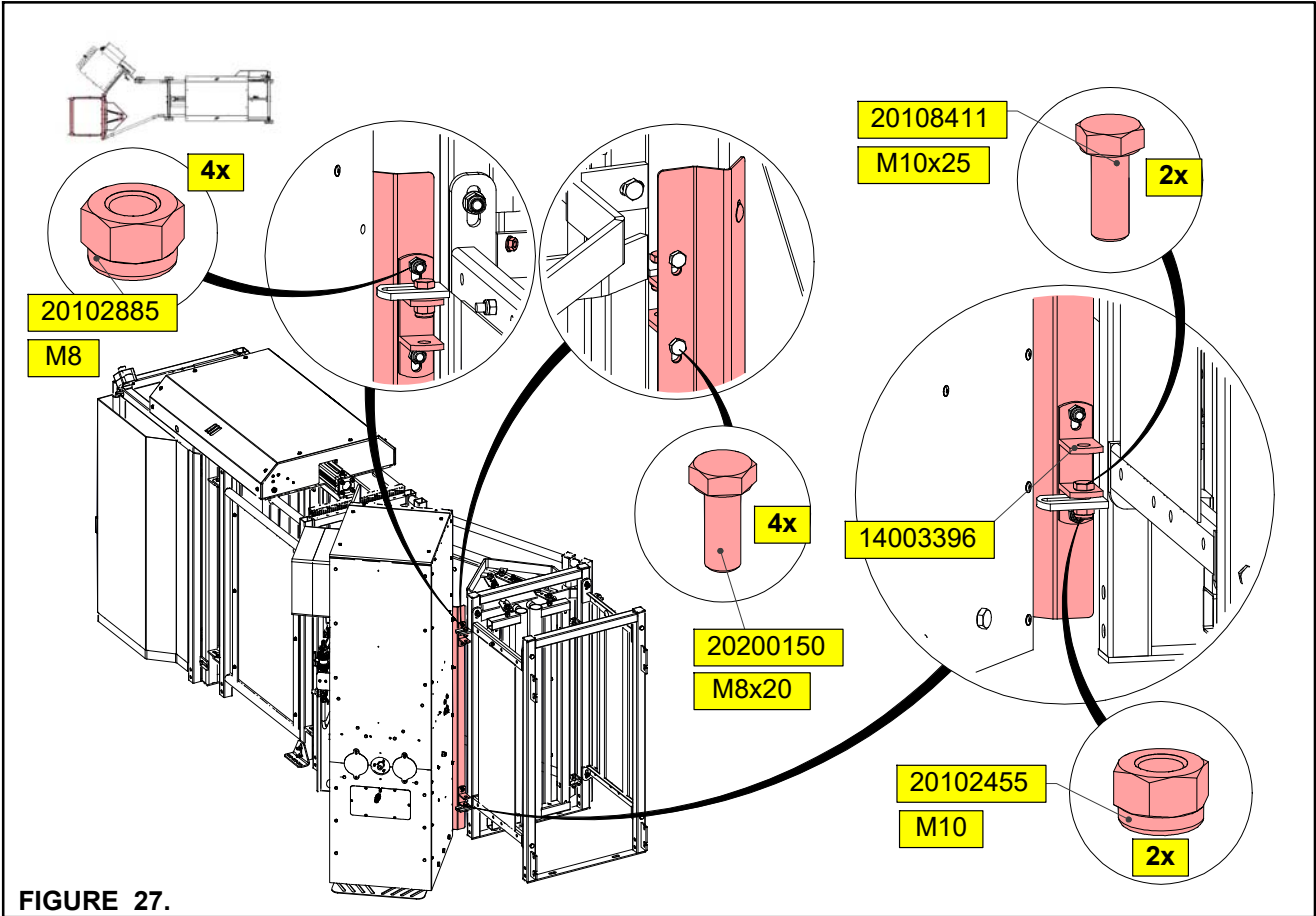
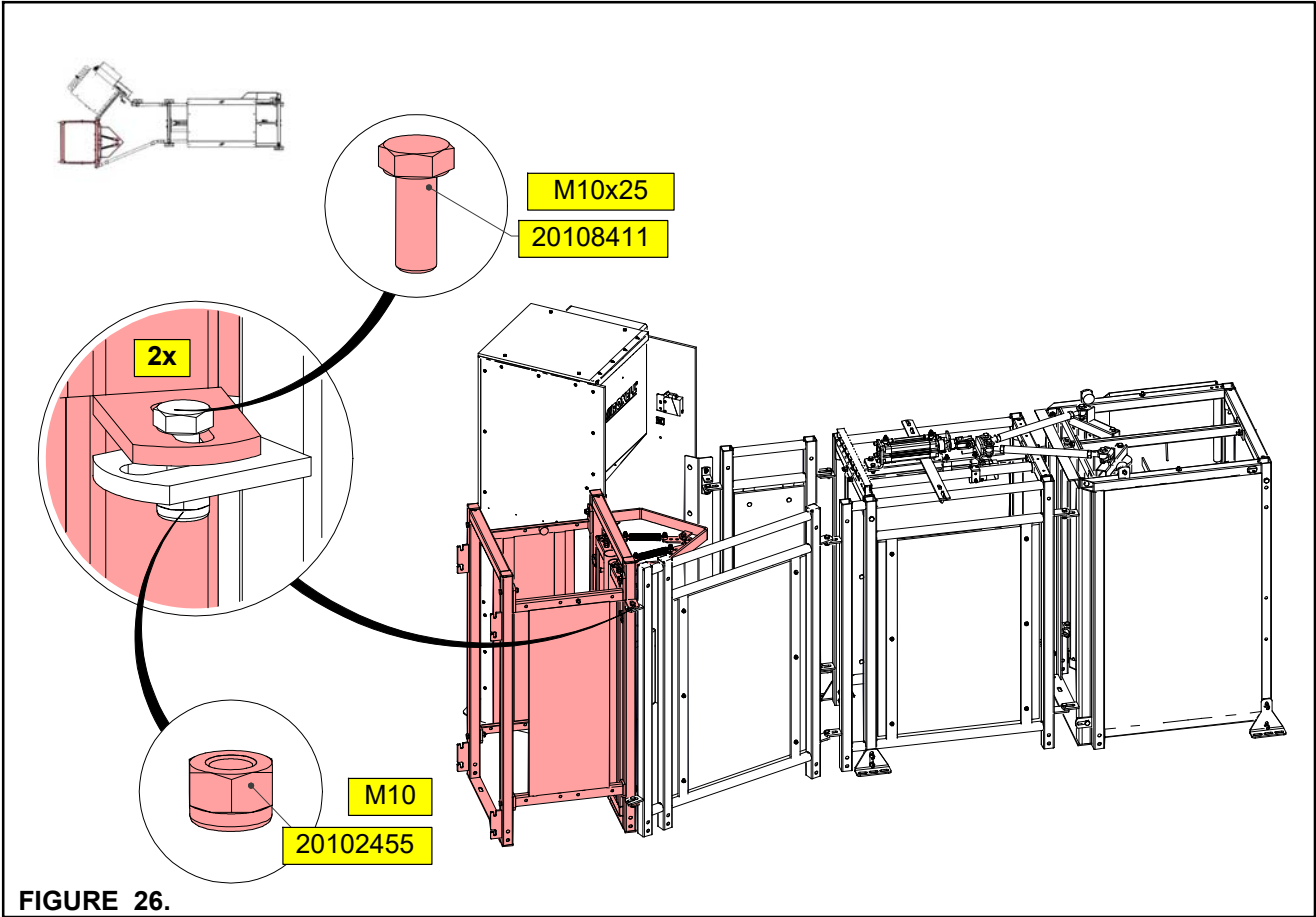
To install the exit 45°

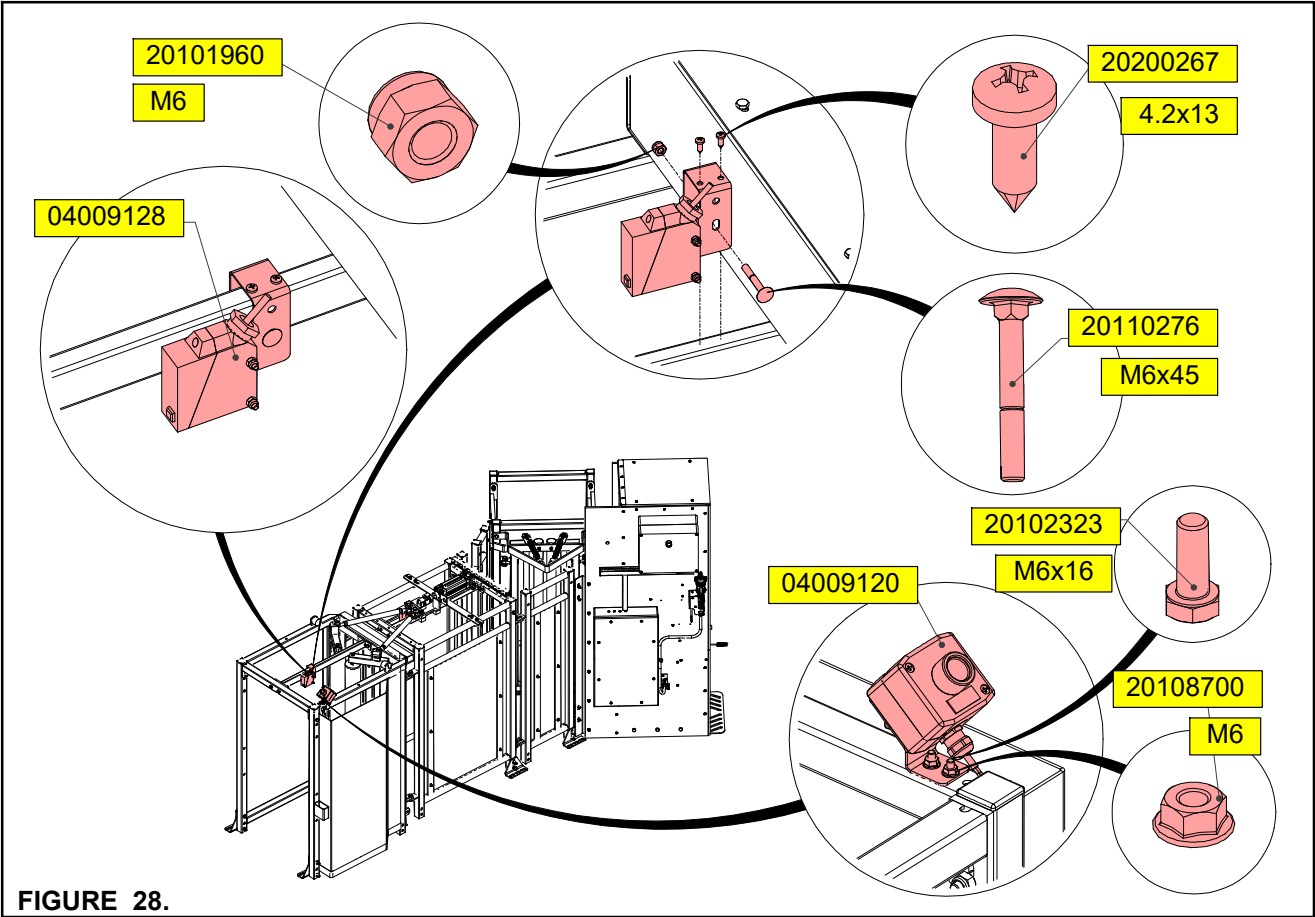




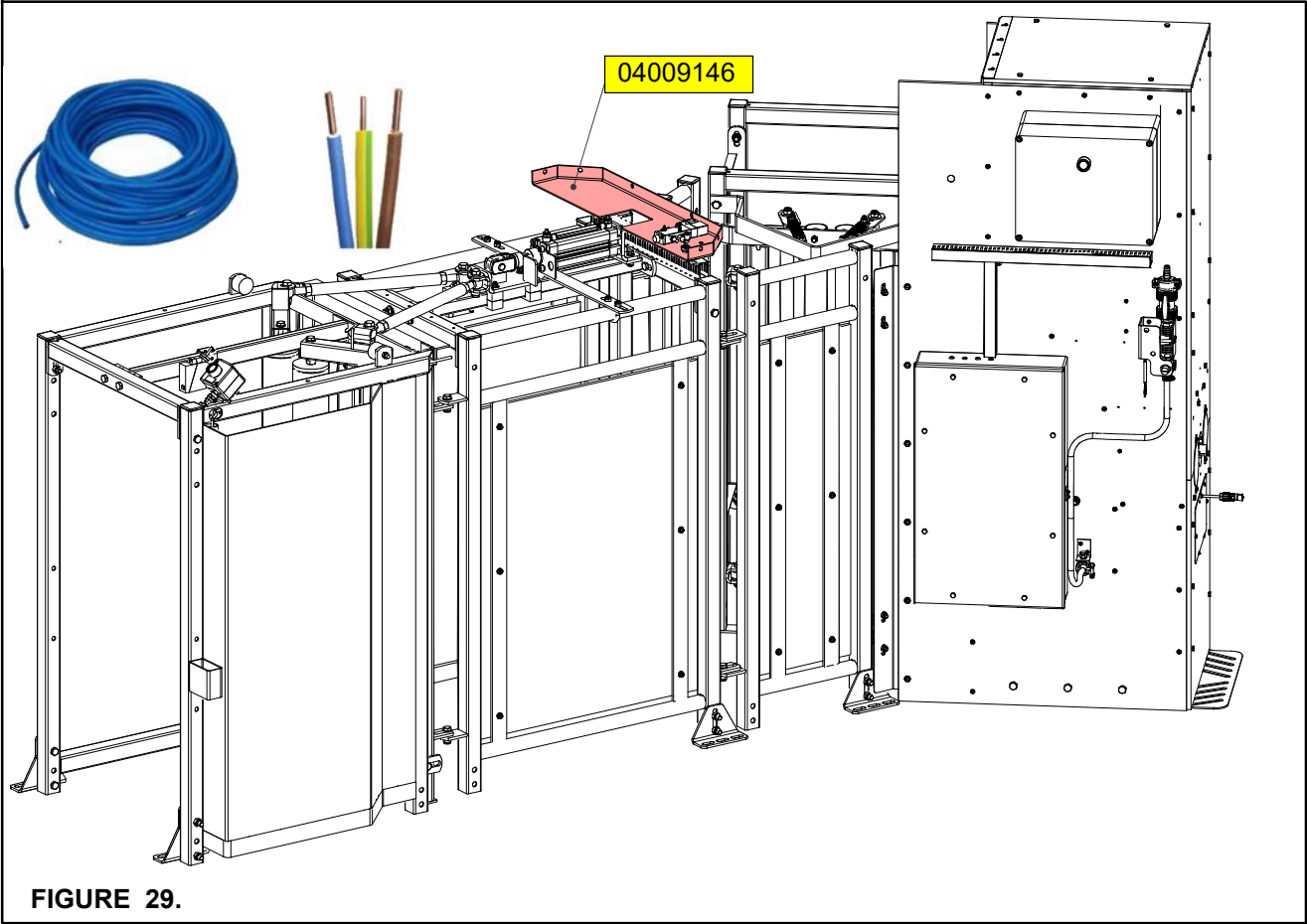
To install the straight exit







To connect the Fidos station



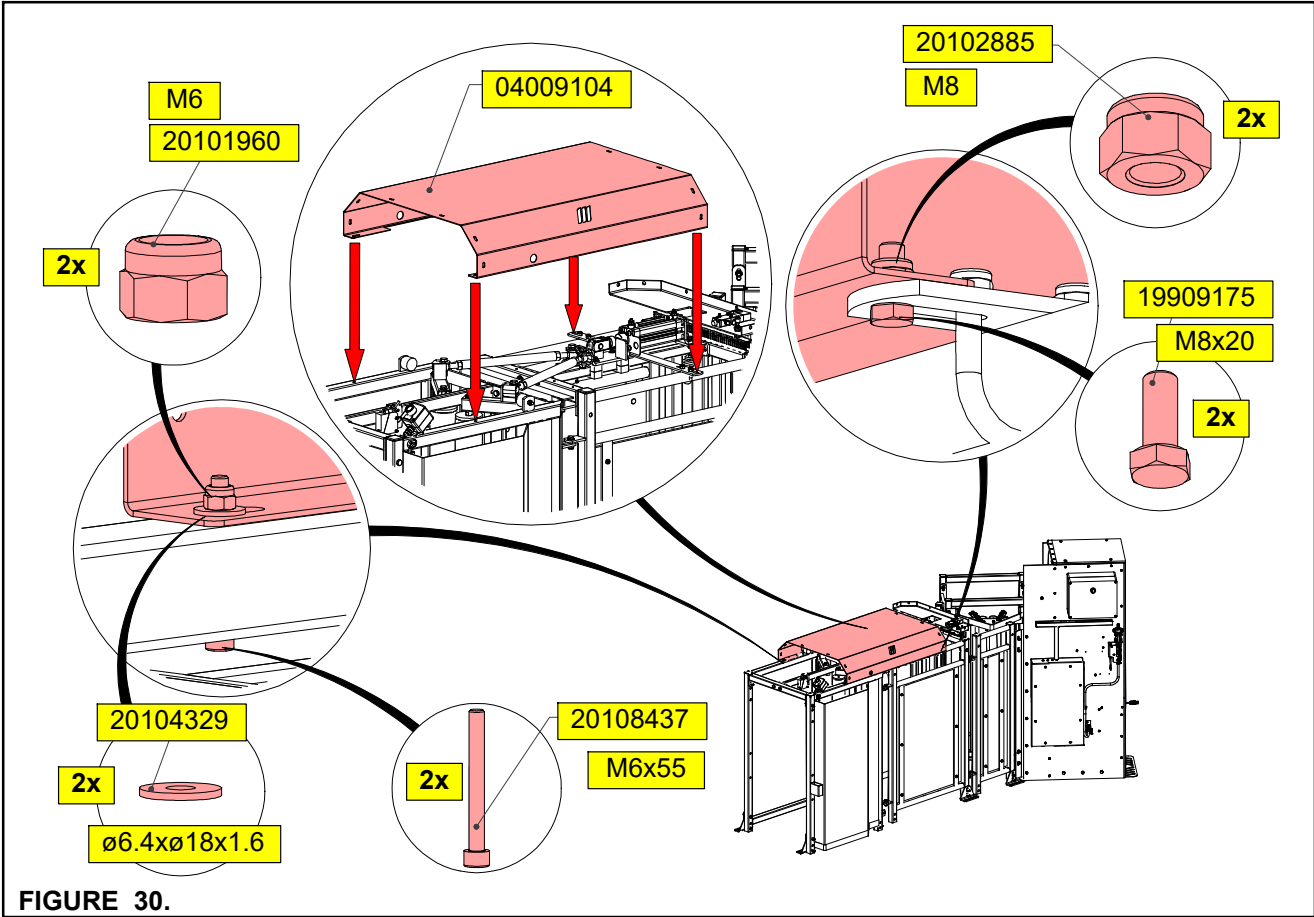


FIGURE 30.

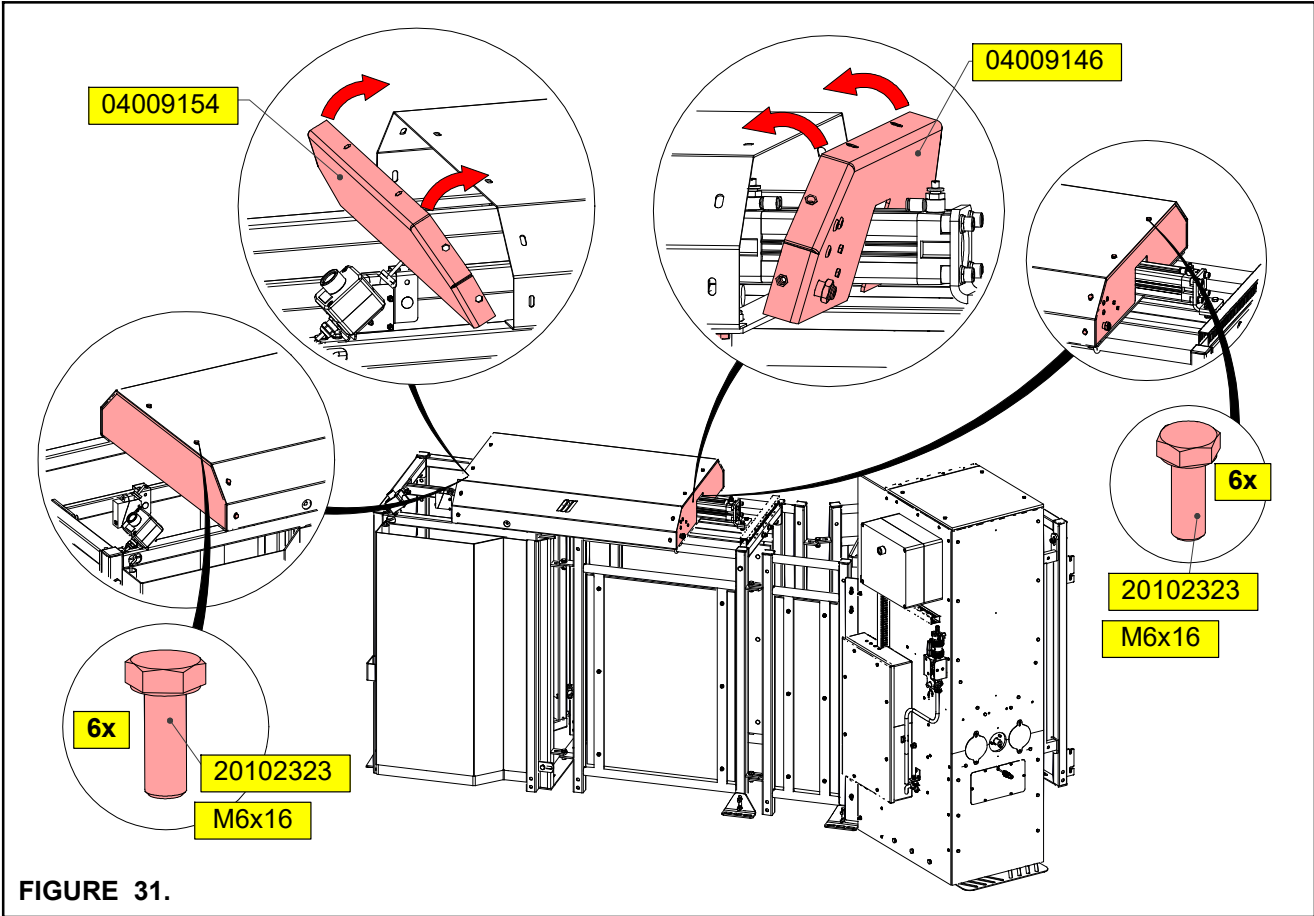
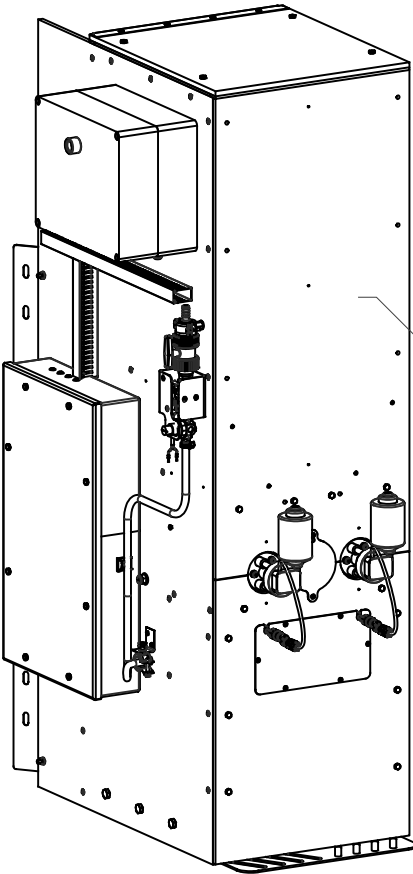
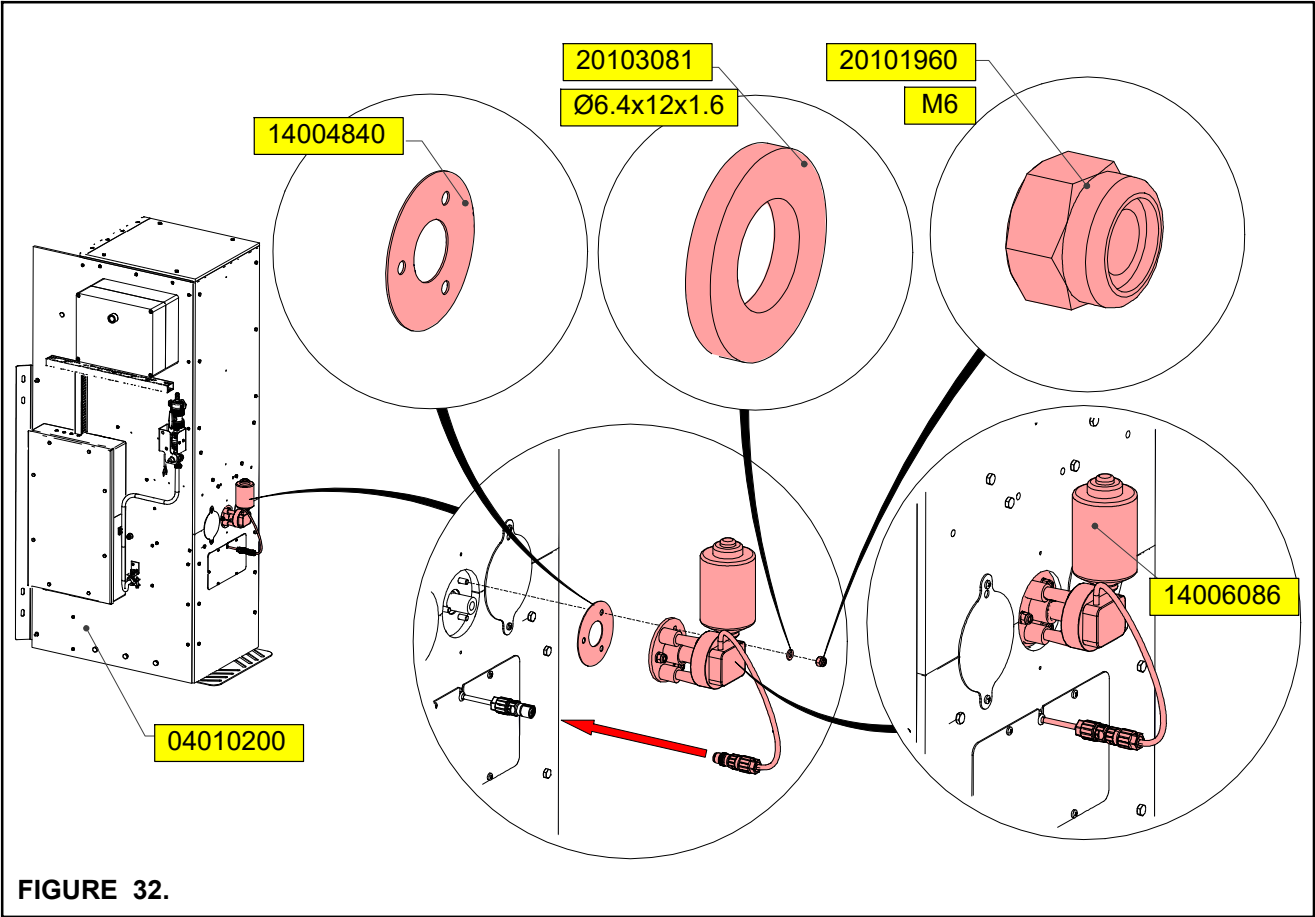


FIGURE 31.



To install the feed trough - 2 feed types

Follow the installation instructions of the 1 feed type trough.

04010150

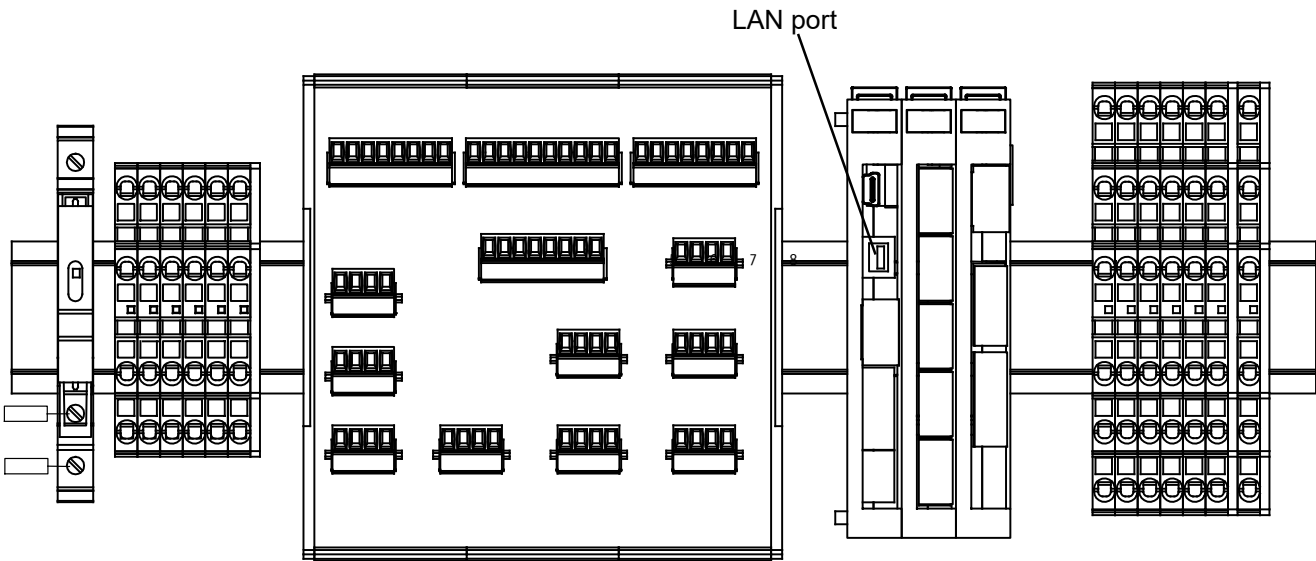
Calibration feed portions

See Software Guide Fidos.

Fidos - Electronic sow feeding concept

LAN Ethernet wiring

For the LAN (Local Area Network) from VPU to PC (or PC network) standard network cables and connectors can be applied (type cat5). Distance between VPU and PC is depending on the network equipment used.



Category	Type	Max length
LAN	Utp cat5	Depends on equipment used

Calculation power consumption

With Roxell feeding motors	3.0 A	Available per CAN channel
No Roxell feeding motors	3.5 A	Available per CAN channel

Example calculation

Ejemplo de cálculo

Feeding station with back gate

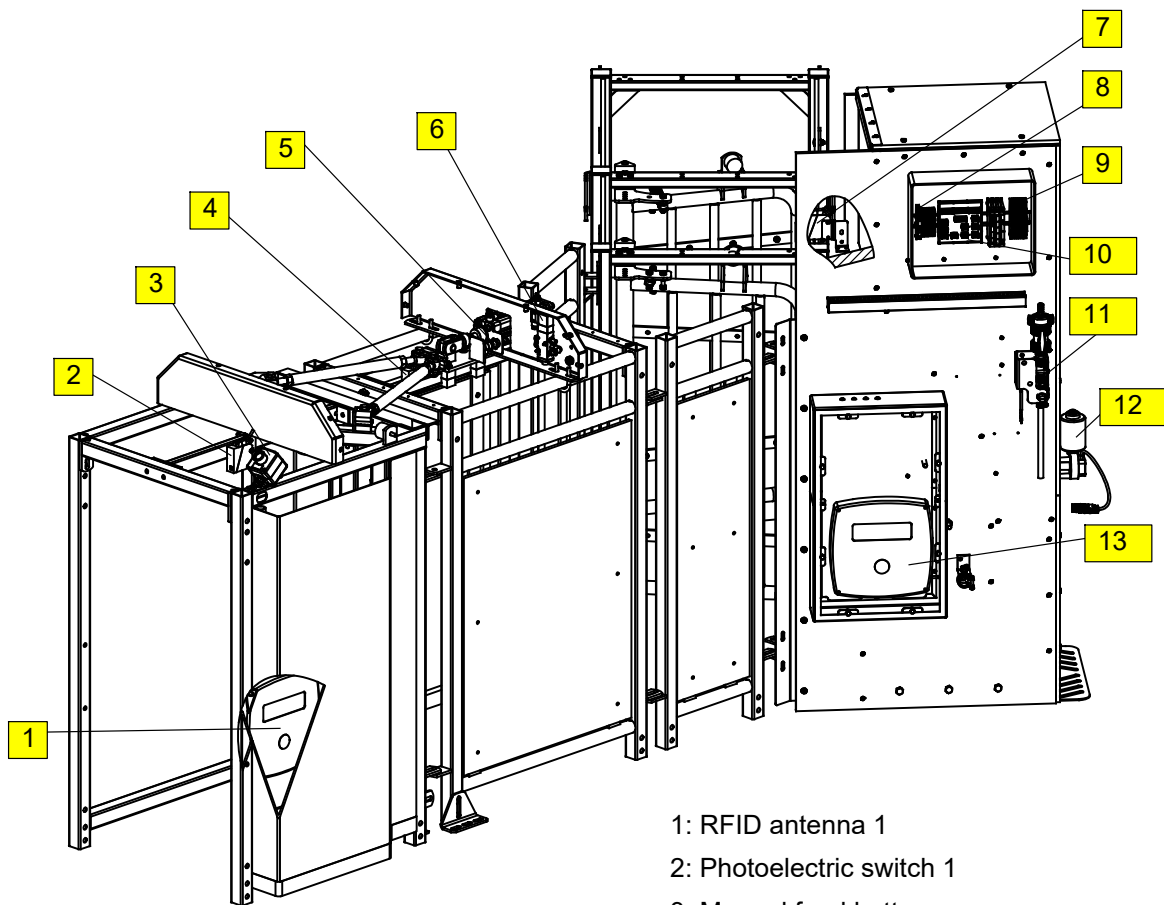
- Roxell feeding motors
- Back gate valve 0.1 A

Available is 3.0 A per CAN channel

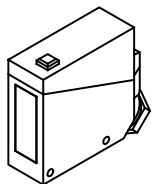
Power consumption: 0.4 A
(0.3 A + 0.1 A = 0.4 A)

The maximum number of feeding stations per CAN channel is 7
(3.0 : 0.4 = 7.5)

Connection Fidos station

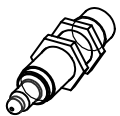


- 1: RFID antenna 1
- 2: Photoelectric switch 1
- 3: Manual feed button
- 4: Photoelectric switch 2
- 5: Inductive sensor
- 6: 5/2 valve
- 7: Photoelectric switch 3
- 8: Supply connection
- 9: Input terminal block
- 10: Output PCB
- 11: Water valve
- 12: Feeding motor
- 13: RFID antenna 2



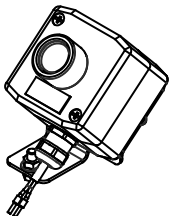
Photoelectric switch connections:

Brown: 24 VDC or wire no. 1
 Blue: GND or wire no. 2
 Black: signal output or wire no. 3



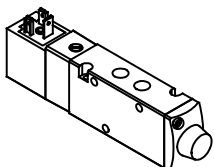
Inductive sensor connections:

Brown: 24 VDC or wire no. 1
 Blue: GND or wire no. 2
 Black: signal output or wire no. 3



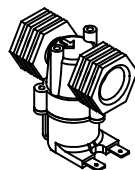
Manual feed button connections:

Contact NO: wire no. 1
 Contact NO wire no. 2



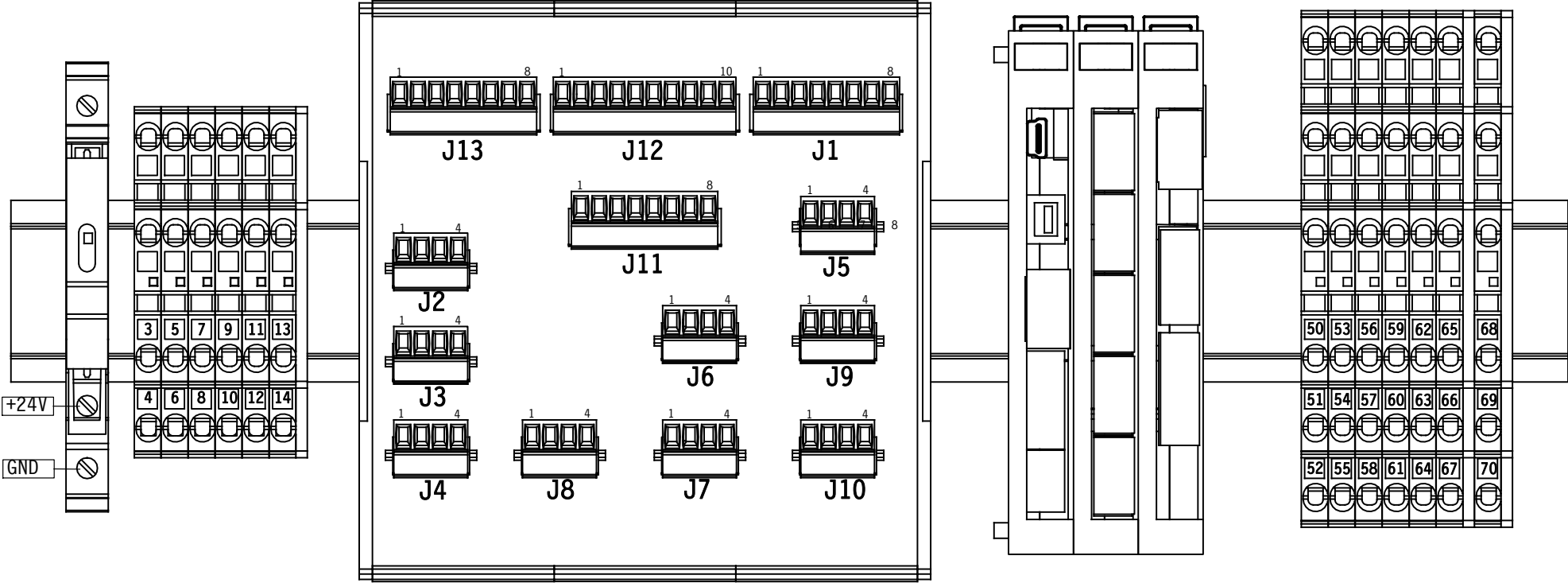
5/2 Valve connections:

Contact: wire no.1
 Contact: wire no. 2

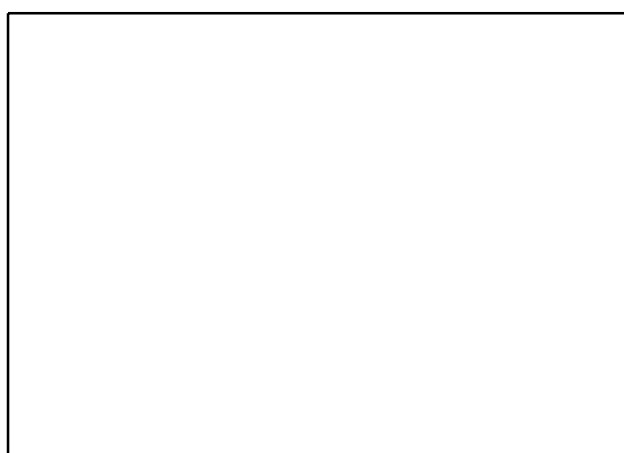


Water valve connections:

Contact: wire no.1
 Contact: wire no. 2



Component	Connection wire	Wire color or name	Terminal block / J	Pin n°
Photoelectric switch 2	supply GND	blue / 2	supply GND	50
Photoelectric switch 2	signal	black / 3		51
Photoelectric switch 2	supply +24VDC	brown / 1	supply +24VDC	52
Inductive sensor	supply GND	blue	supply GND	53
Inductive sensor	signal out	black		54
Inductive sensor	supply +24VDC	brown	supply +24VDC	55
Seperation sensor NC			supply GND	56
Seperation sensor NC				57
Seperation sensor NC	supply +24VDC		supply +24VDC	58
NC			supply GND	59
Manual feed button	contact NO	1		60
Manual feed button	contact NO	2	supply +24VDC	61
Photoelectric switch 1	Supply GND	blue / 2	supply GND	62
Photoelectric switch 1	signal out	black / 3		63
Photoelectric switch 1	supply +24VDC	brown / 1	supply +24VDC	64
Photoelectric switch 3	supply GND	white	supply GND	65
NC				66
Photoelectric switch 3	supply +24VDC	brown	supply +24VDC	67
				68
Photoelectric switch 3	contact NO	green		69
Photoelectric switch 3	contact NO	yellow		70
Antenna entrance		red	J3	1
Antenna entrance		yellow	J3	2
Antenna entrance		green	J3	3
Antenna entrance		black	J3	4
Antenna trough		red	J2	1
Antenna trough		yellow	J2	2
Antenna trough		green	J2	3
Antenna trough		black	J2	4
5/2 valve		solenoid NO	J11	7
5/2 valve		solenoid NO	J11	8
Feed type 1 feeding motor		grey	J6	1
Feed type 1 feeding motor		green	J6	2
Feed type 1 feeding motor		brown	J6	3
Feed type 1 feeding motor		white	J6	4
Feed type 2 feeding motor		grey	J7	1
Feed type 2 feeding motor		green	J7	2
Feed type 2 feeding motor		brown	J7	3
Feed type 2 feeding motor		white	J7	4
Entrance gate valve		solenoid NO	J11	7
Entrance gate valve		solenoid NO	J11	8
Regumate		solenoid NO	J8	1
Regumate		solenoid NO	J8	2
Water valve		solenoid NO	J8	3
Water valve		solenoid NO	J8	4



ROXELL bvba - Industrielaan 13, 9990 Maldegem (Belgium)
Tel. +32 50 72 91 72 - info@roxell.com - www.roxell.com

ROXELL USA Inc. - 720 Industrial Park Road, Anderson MO 64831 (USA)
Tel. +1 417 845 6065 - info.usa@roxell.com - www.roxell.com

ROXELL Malaysia - No. 49, Jalan Permata 2/KS9, Taman Perindustrian Air Hitam, 41200 Klang, Selangor (Malaysia)
Tel. +60 3 3123 1767 - info.malaysia@roxell.com - www.roxell.com

ROXELL Россия - ООО «Рокселл» ОГРН 1157746055026
125167, Россия, город Москва, Ленинградский проспект, дом 37, корпус 9, помещение 653
Телефон: +7 495 983 30 15 - Адрес электронной почты: info.russia@roxell.com - www.roxell.com