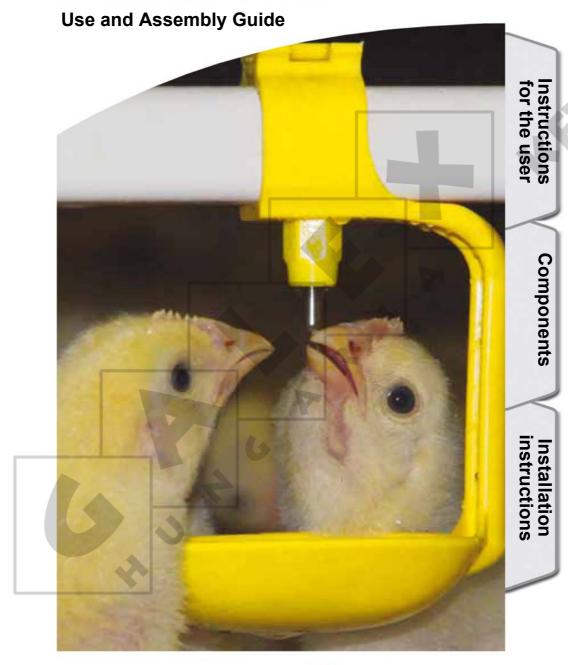
# SwiiFlom





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**ENGLISH** 

Original use and assembly guide

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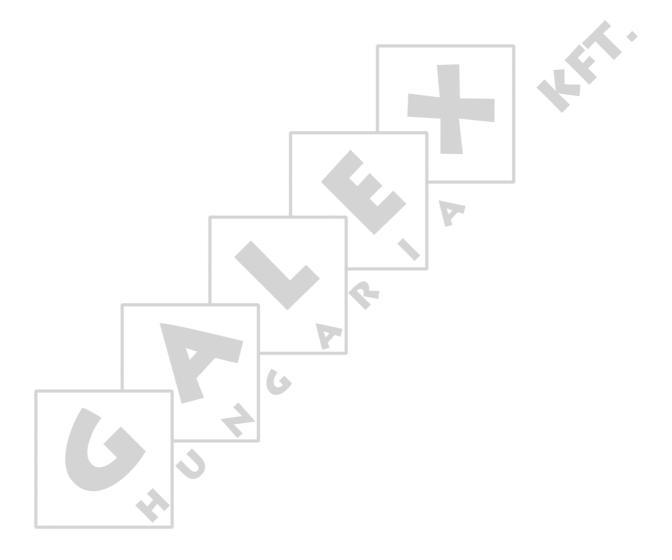
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### **GENERAL INFORMATION**

THESE INSTRUCTIONS MUST BE READ, UNDERSTOOD AND ALL POINTS OBSERVED BY THE USER, THE RESPONSIBLE AND OPERATING PERSONNEL.

### 1. OBEY THE LEGAL REGULATIONS AND THE APPLICABLE RULES!

This concerns, among other things, the European 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.

### 2. 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.

### 3. NOT-INTENDED USE

All use different than described in point 2" intended use" is at the responsibility of the end user.

### 4. 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 donein 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.

### 5. 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.

### 6. 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!

DANGER	<b>DANGER</b> indicates a direct imminent danger that can result in a serious or even fatal accident if the safety measures are not respected.
WARNING	<b>WARNING</b> 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	<b>CAUTION</b> indicates possible, dangerous situations that can result in minor physical injury or material damage if the safety measures are not respected.
i	This symbol refers to supporting information.
allowed  not allowed	

### 7. 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.

### 8. 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.

### 9. 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**



European directive 2002/96/EC amended by the Directive 2008/34/EC requires that equipment that bears this symbol on the product or packaging must not be disposed of with unsorted household waste. This symbol indicates that the product must be disposed of separately. Your are yourself responsible for the destruction of this and other electrical and electronic equipment via the disposal channels designated for that purpose by the national or local government. The correct destruction and recycling of this equipment prevents any negative consequences for the environment and health. For more information about destroying your old equipment, contact your local authorities or waste disposal service.

### 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.

### 10. THE LEVEL OF NOISE EMISSION

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

### 11. LOCK OUT TAG OUT - LOCK METHOD GENERAL

- Everyone needs his own lock and tag (label), which can't be removed by other persons.
- Inform all persons who are influenced by the procedure.
- Localize all sources of energy (electric, hydraulic, pneumatic).
- Switch off.
- Lock out and tag out.
- Check if the source of energy is switched off.
- Remove any remaining energy.

### 12. USE PERSONAL PROTECTIVE EQUIPMENT.

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

### 13. SUFFICIENT LIGHTING - ILLUMINANCE

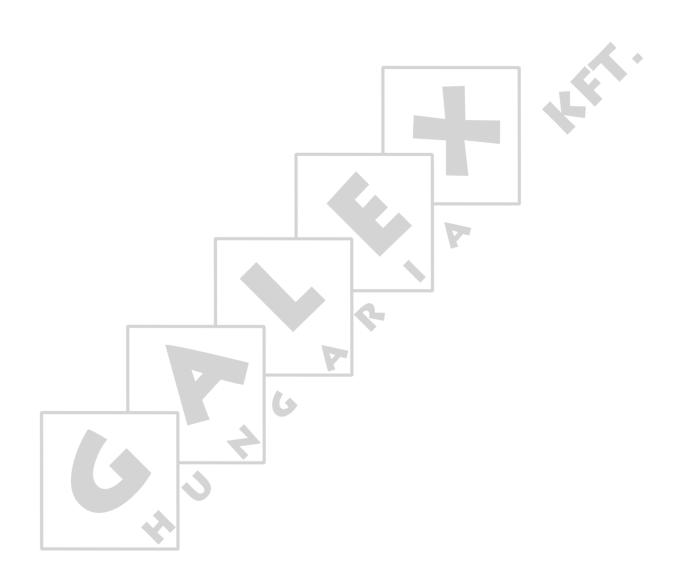
- A minimum illuminance of 200 lux is necessary during usage, maintenance and installation.
- Provide at the installation (portable) emergency lighting in case of power failure.

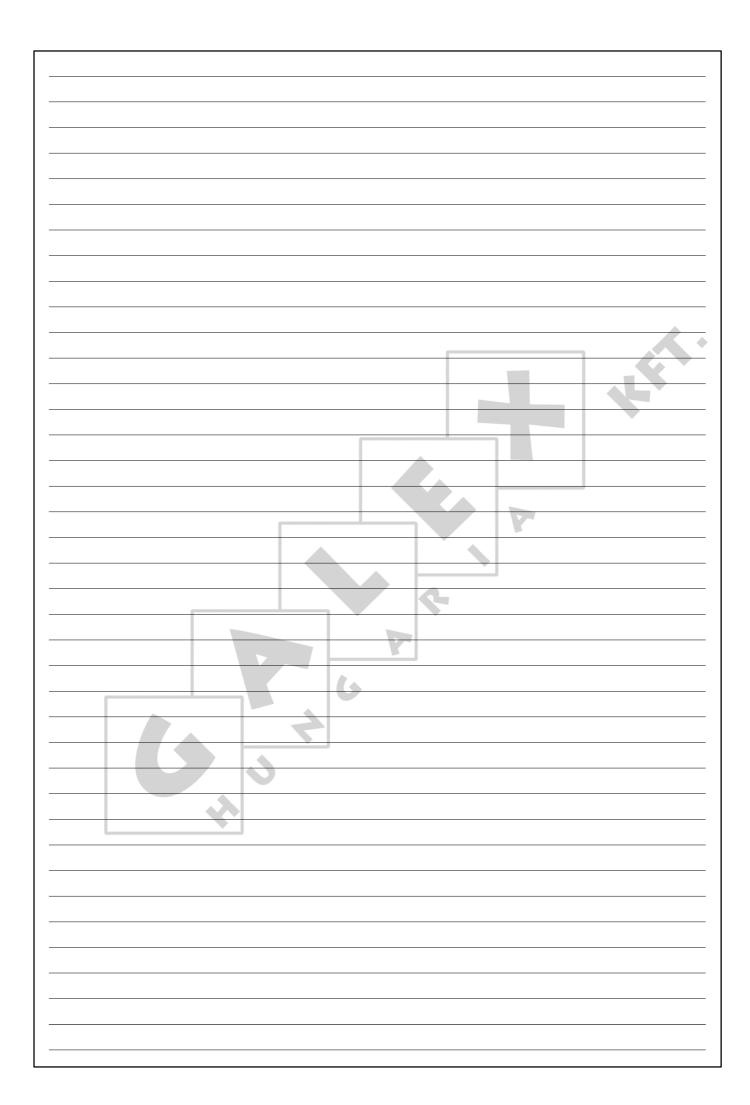
## 14. ELECTRICAL EQUIPMENT, CONTROL PANELS, COMPONENTS AND DRIVE UNITS

- 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.

### **PART I**

## **INSTRUCTIONS FOR THE USER**





# HAND WINCH GENERAL SAFETY RULES

Handlier voor drinklijnen voor pluimvee Hand winch for drinking lines for poultry



# IMPORTANT Carefully read the following instructions before USING the system

- 1. PAY ATTENTION when WINCHING UP or WINCHING DOWN the drinking lines:
  - STOP the handling in case of any malfunctioning.
  - NEVER stand UNDERNEATH the load when winching up or putting down the drinking lines.
- NEVER ALLOW UNAUTHORIZED PERSONS ENTER the house during your absence.
- 3. DON'T wear loose clothing.
- **4.** Only **adults** may handle the hand winch.
- 5. Only use the hand winch for suspension of a ROXELL drinking line.
- **6.** Only use the hand winch with the **supplied handle**.
- 7. ALWAYS check the condition of the hand winch and the cable before operating. A ravelled, kinked or damaged cable must be replaced IMMEDIATELY. A loose or damaged hand winch must be replaced IMMEDIATELY.
- 8. ALWAYS check before use, if the cable tie on the drum weldment is ok.
- 9. ALWAYS check before use, if the cable is not damaged.
- 10. ALWAYS check that there are at least 4 cable windings on the drum weldment.
- 11. **NEVER** touch the **cable** and the **rotating parts** of the hand winch when in use.
- 12. Only use the hand winch when NOBODY is standing underneath the load.
- 13. ALWAYS look at the load while using the hand winch.
- 14. Always turn the handle fluently.
- 15. PREVENT that the load makes a shocking movement.
- 16. Don't use water to clean the hand winch.



**FORBIDDEN**: **NEVER** use the hand winch to lift persons.



**DANGER**: Getting jammed by the handle may cause **SERIOUS INJURIES**.

### 1. GENERAL DESCRIPTION OF SWII'FLO™

SWII'FLO<sup>TM</sup> IS A NIPPLE DRINKING SYSTEM FOR THE SUPPLY OF DRINKING WATER TO POULTRY. DIFFERENT NIPPLE TYPES ARE AVAILABLE. INGOING WATER PRESSURE IS 3 BAR. THE OUTOING PRESSURE IS CONTROLLED BY A PRESSURE REGULATOR. IN THIS SYSTEM THE NIPPLE LINES ARE WINCHABLE TO ADJUST THEIR HEIGHT ACCORDING TO THE AGE OF THE FLOCK.

### 2. WATER SUPPLY

### 2.1. WATER QUALITY



### THE HEALTH OF THE ANIMALS DEPENDS ON THE QUALITY OF THEIR DAILY DRINKING WATER.

The water quality depends on:

- The phosphate, nitride, nitrite, chloride, iron, calcium and other concentrations.
- The deposits in the lines.
- The administration of medication.
- Cleaning and disinfection.

### HAVE THE WATER CHECKED AT REGULAR INTERVALS!

### **MAXIMUM ALLOWABLE CONCENTRATION:**

Ammonia	< 1 mg/l	(3.78mg/GAL)	Sulfates	< 100 mg/l	(378mg/GAL)
Chlorides	< 200 mg/l	(757mg/GAL)	Iron	< 0,2 mg/l	(0.76mg/GAL)
Phosphates	< 0,01 mg/l	(0.038mg/GAL)	Salt	< 1 mg/l	(3.78mg/GAL)
Manganese	< 0,1 mg/l	(0.38mg/GAL)	pH-value	5-8	
Nitrate	< 0,25 mg/l	(0.95mg/GAL)	Hardness (°DH)	<15	
Nitrite	< 0,1 mg/l	(0.38mg/GAL)			

### SOURCE: EUROPEAN DIRECTIVE 2000/60/EC WATER POLICY

http://eur-lex.europa.eu/legal-content/nl/TXT/?uri=CELEX%3A52007PC0871

### PHOSPHATES/NITROGENS:

### ALGAL GROWTH:

Algae are organisms that use carbon dioxide as source of carbon for the production of new cell material. The required energy is provided by sunlight.

Algae blooms occur in standing or slowly moving water, usually having a high phosphate and nitrogen load (ammonia and nitrate).

Optimal growth temperature for algae:

18-45°C, pH value: 5-8.

Algae death due to lack of light and/or nutrients leads to mineralization by bacteria with oxygen consumption.

IMPACT ON WATER	<b>pH increase</b> due to large amounts of carbon dioxide that are extracted from the water.
IMPACT ON SYSTEM	Cause: Loosened micro culture substances.  Effect: Valve/nipples leakages.
ACTION	Remove deposits using <b>stabilized hydrogen peroxide</b> (H <sub>2</sub> O <sub>2</sub> ) based products.

### **NITRATE / NITRITE:**

Nitrate concentration > 0.25 mg/l: sandy soils with intensive livestock farming.

Ammonia concentration > 1 mg/l: in peaty soils.

Water from these soils usually has higher nitrite content. Unfit for consumption!

IMPACT ON HEALTH	Direct consumption of nitrite is <b>deadly!</b> Nitrate is converted to ammonia in the body. One of the intermediate compounds is nitrite.
$\triangle$	When the chemical reaction is not completed (for some time), death ensues.
DANGER	
ACTION	Nitrate concentration ≤ 0.25 mg/l / Nitrite concentration ≤ 0.1 mg/l !

Iron: When water is pumped to the surface, iron occurs in its soluble ferrous form. The insoluble ferrous ions oxidize upon exposure to air or dissolved oxygen. These and other chemical reactions cause insoluble gelatinous deposits.		
Impact on the water	Hardly any impact on health.  Neutralizes the effectiveness of medication.  Alters the taste, resulting in decreased water consumption.	
Impact on system	Cause: Gelatinous compounds. Effect: Harmful to nipples, electric water valves if used.	
Action	Eliminate the iron from the system if iron content > 0.2 mg/l!	

### Calcium:

### Hardness:

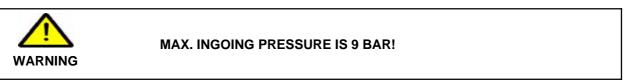
- Any deposits in the lines will usually remain there.
- If a chemical reaction takes place between mineral substances present, some inorganic compounds can serve as energy and nutrient source for the **micro-organisms** living in the water.

Impact on health	Not harmful. Alters the taste, resulting in decreased wate	r consumption.	4
Impact on system	Cause: Water becomes more conductive. Effect: Corrosion and calcium deposits.		
Action	Soften the water.		

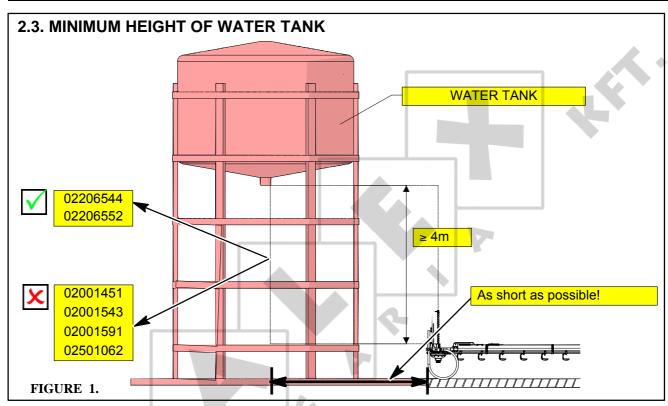
Medication			
Harmful effects of medication	<ul> <li>A. Some substances in the medication may loosen the organic deposits in the lines.</li> <li>B. Antibiotics: high risk of strong and rapid growth of moulds that use the sugar of some medicines as nutrient, resulting in gelatinous deposits.</li> </ul>		
Impact on health	Products lose their effectiveness.		
Impact on system	A. Cause: Some substances in the medication loosen the organic deposits in the lines.     Effect: Nipple leakages.     B. Cause: Gelatinous deposits.     Effect: Obstructions		
Action  Make sure lines are clean before administering medication.  Clean the drinking system at regular intervals.  Disinfect and flush properly after each medication.  Residues of cleaning agents may reduce the effectiveness of the medicines.			

Cleaning and disinfe	ection
Keep in mind the stre	ength of the solutions and follow the supplier's instructions for use!
Always read the instr	ructions of cleaning agents and disinfectants!
Check whether the pr	oduct may be used in an occupied house!
Be aware of the impl	ications of the combined use of different types of cleaning agents and disinfectants!
Calcium and iron deposits (inorganic)	Remove using acid agents.
Bacteria and moulds	Remove using a chlorine-based disinfectant.
Organic deposits	Remove using an alkaline cleaning agent.
Clean and disinfect the lines at regular intervals. Most agents only work properly with regular cleaning. Disinfect and flush properly after each medication.	

### 2.2. MINIMUM PRESSURE AND FLOW

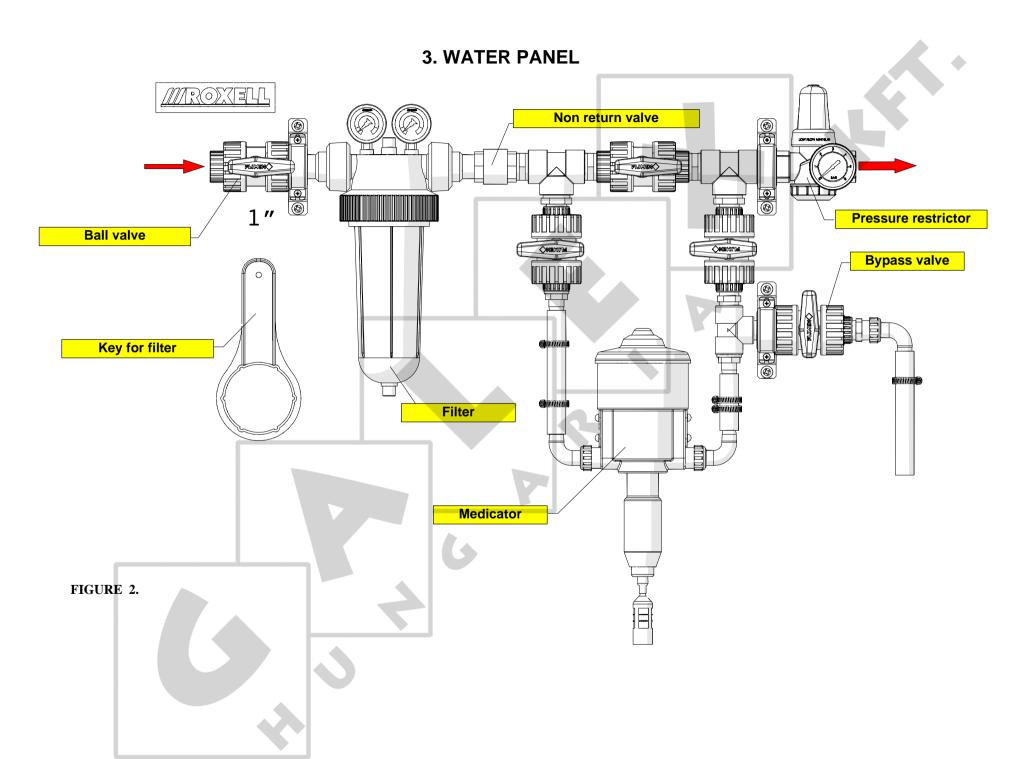


Pressure range:			Roxell Water panel & pump suitable for:	
	Water tank	Pump		
Regular operation:	≥ 0,4 Bar	2 - 3 Bar	Restriction /	No restriction /
Automatic flushing:	-	2 - 3 Bar	Light programme	no light programme
Flow:	≥ 10 l/min/line		5 regulators	8 regulators

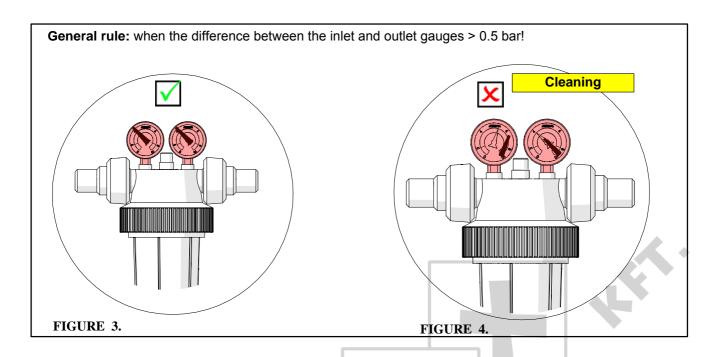


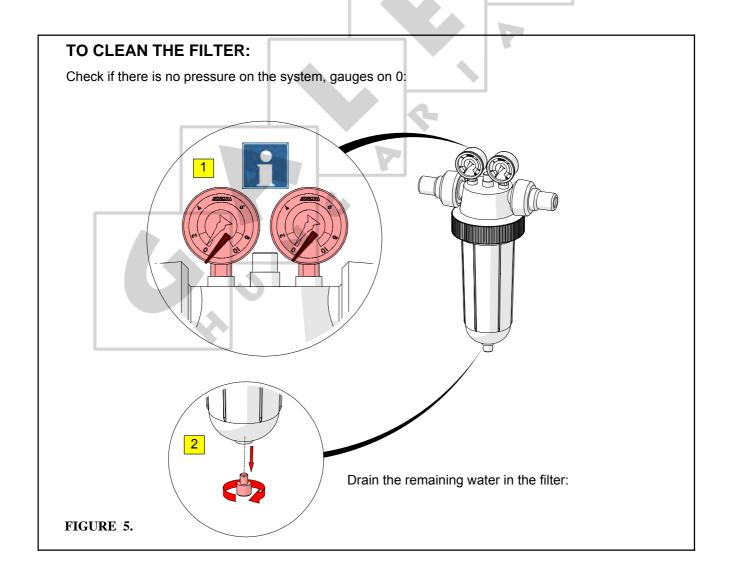
### 2.4. DIAMETER OF SUPPLYING TUBES

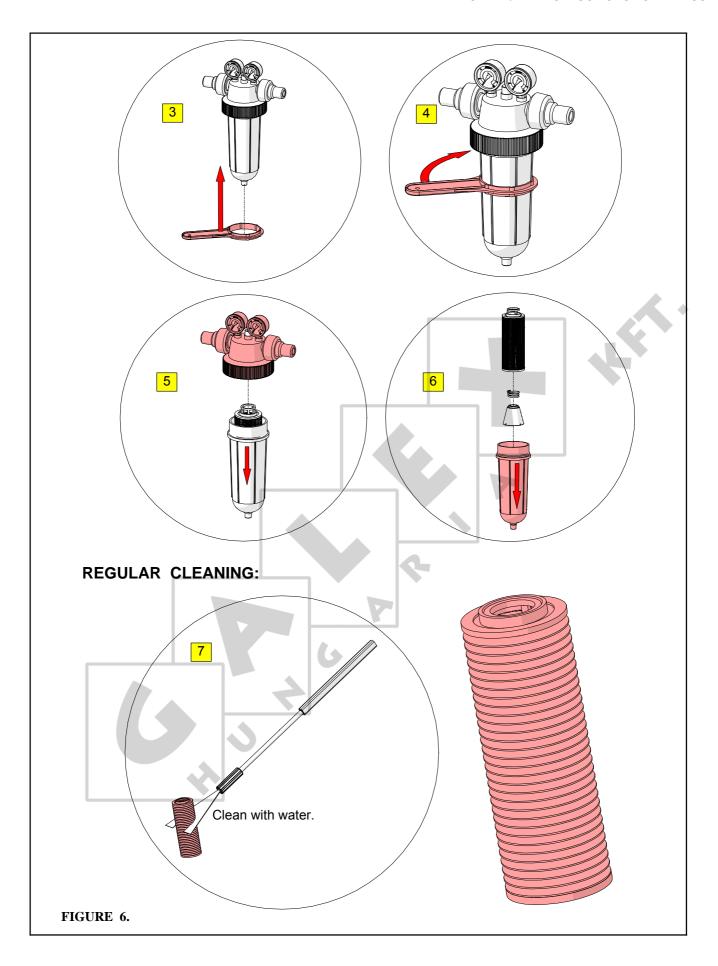
Water supply specification after filter						
	Inside diameter inch					
*	Pressure regulator in front 2-3 lines / house:	Pressure regulator central	Pump capacity			
2-3 lines / house:	1"	1"	3 Bar - 50 l/min			
4-5 lines / house:	1"	1 1/2 "	3 Bar - 50 l/min			
6-7 lines / house:	1 1/2 "	1 1/2 "	3 Bar - 80 I/min			
Dn	Fe (")	PVC ( " )	PVC ( mm )			
	D	Dxd	Dxs			
1"	1"	1 " x 3/4 "	Ø 32 x 2.4 mm			
1 1/2"	1 1/2 "	1 1/2 " x 1 1/4"	Ø 50 x 3.7 mm			

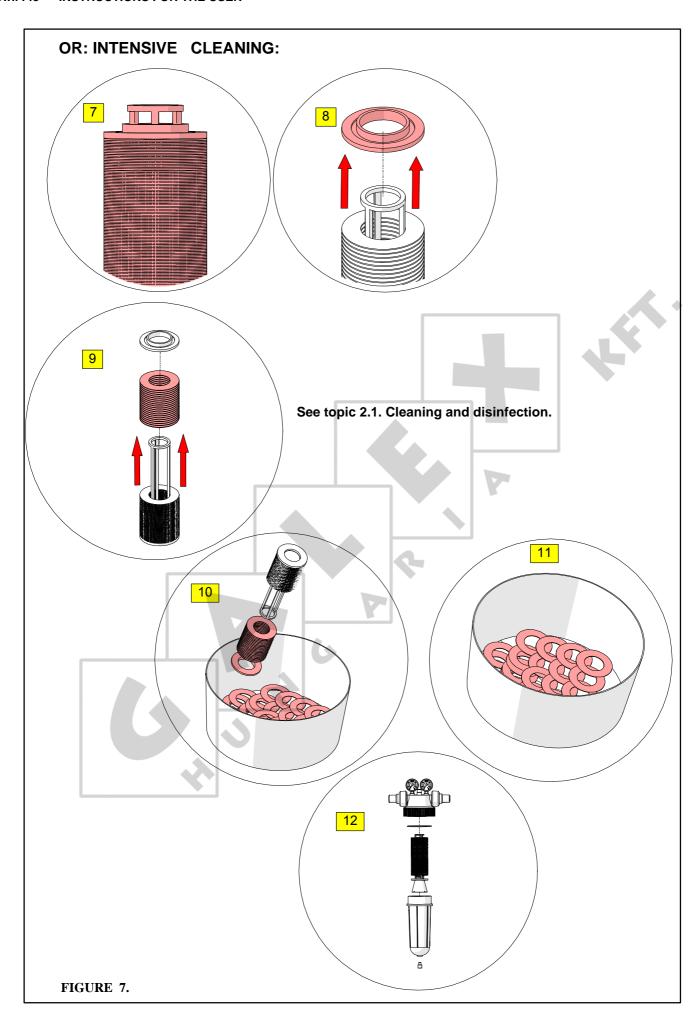


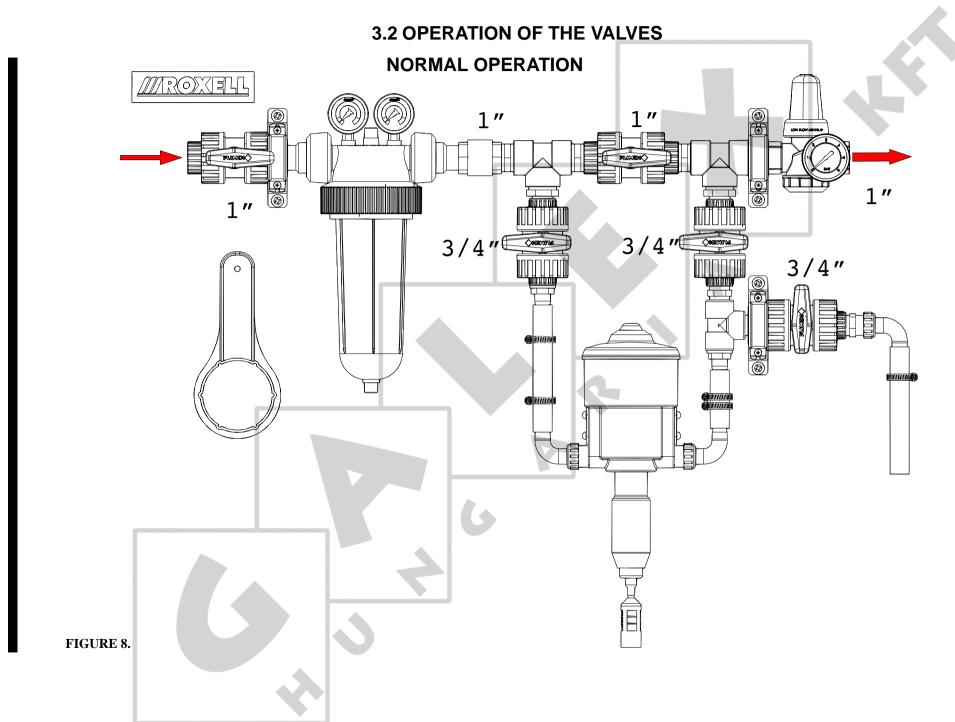
### 3.1. FILTER CLEANING, WHEN, HOW?

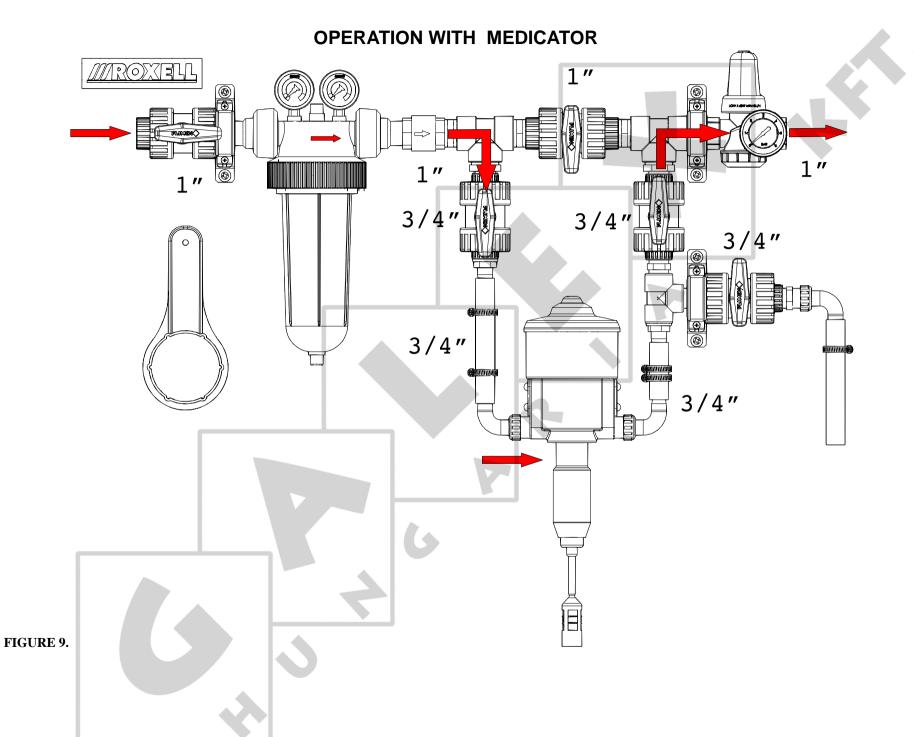


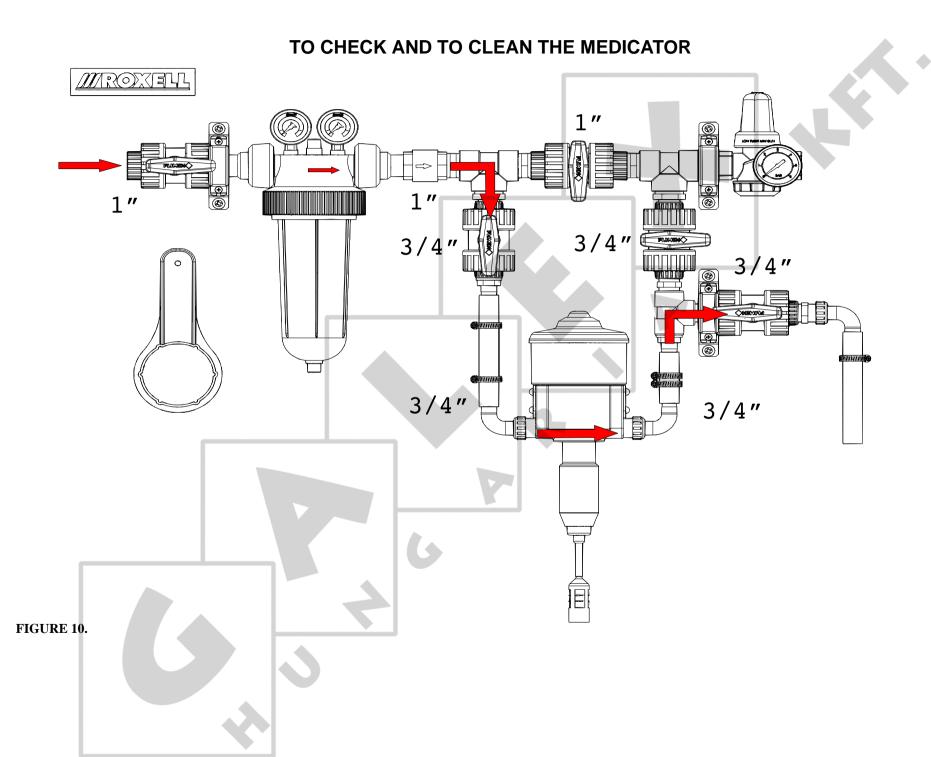






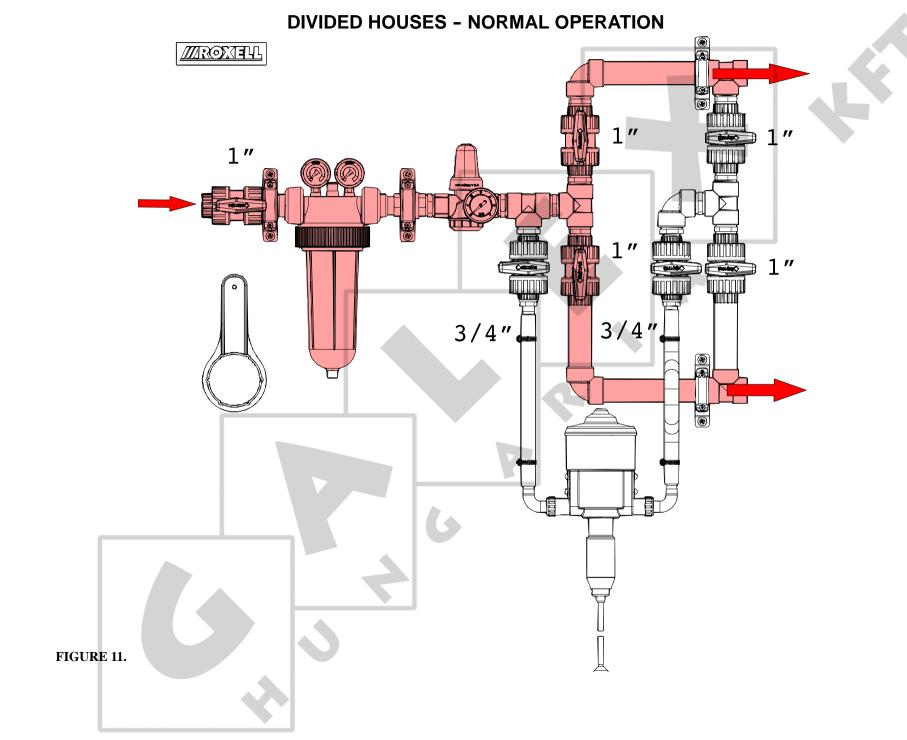


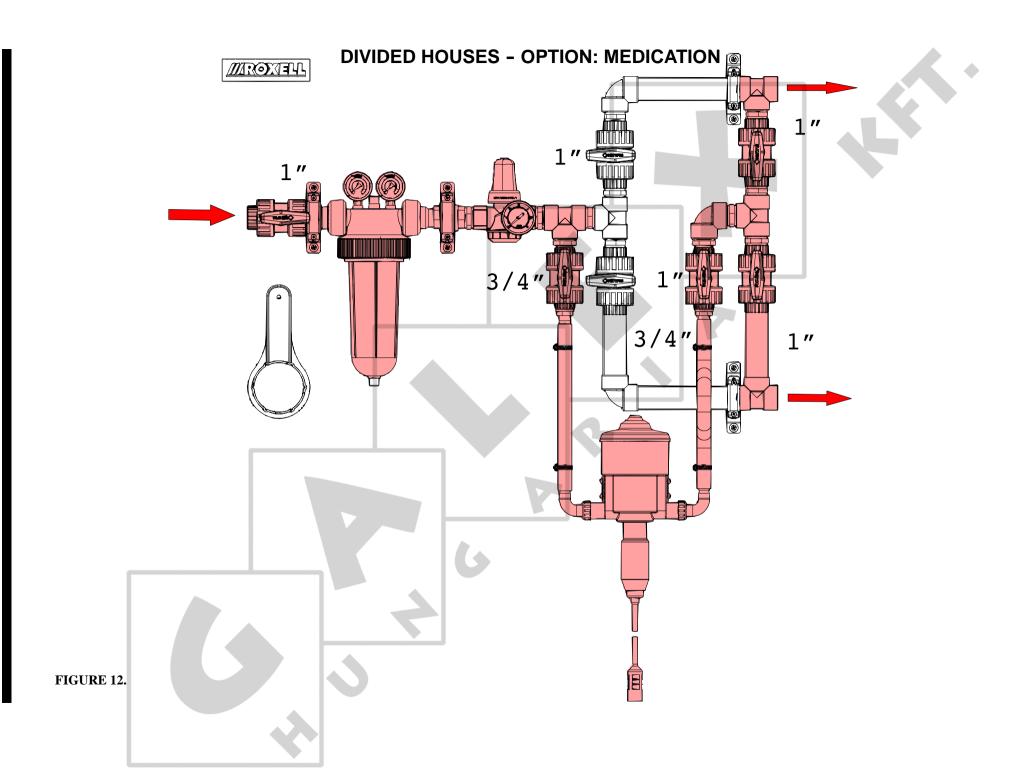




Swii'Flo™

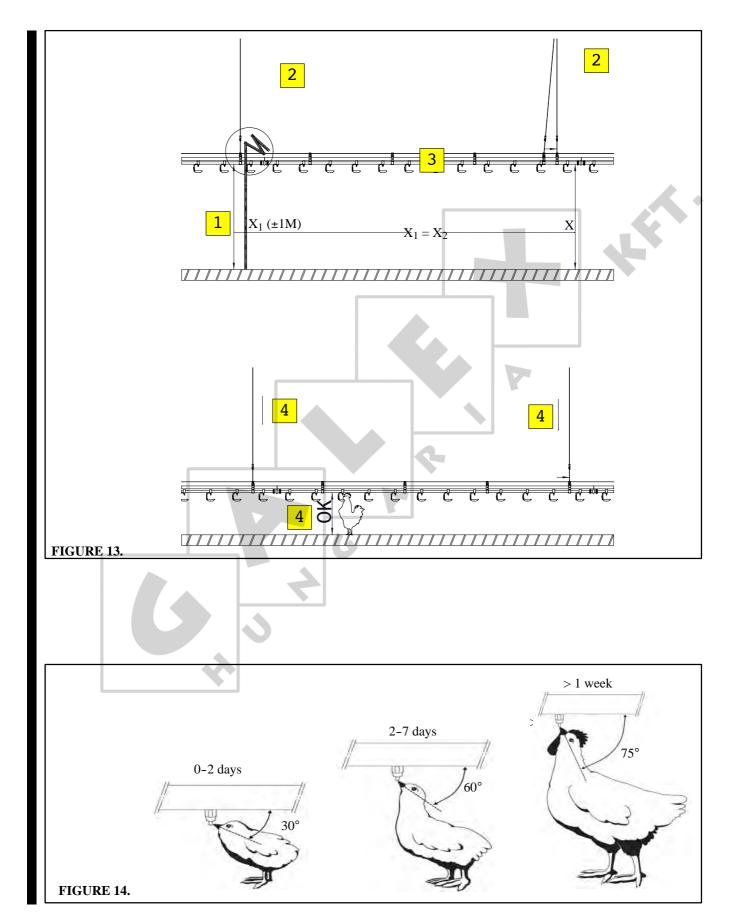
- INSTRUCTIONS FOR THE USER

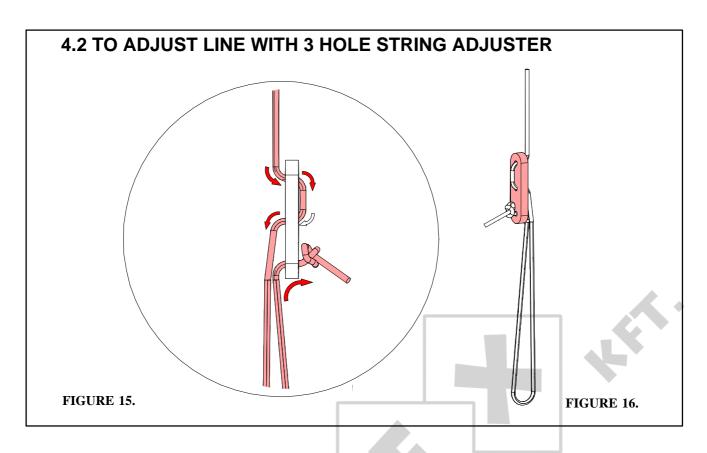


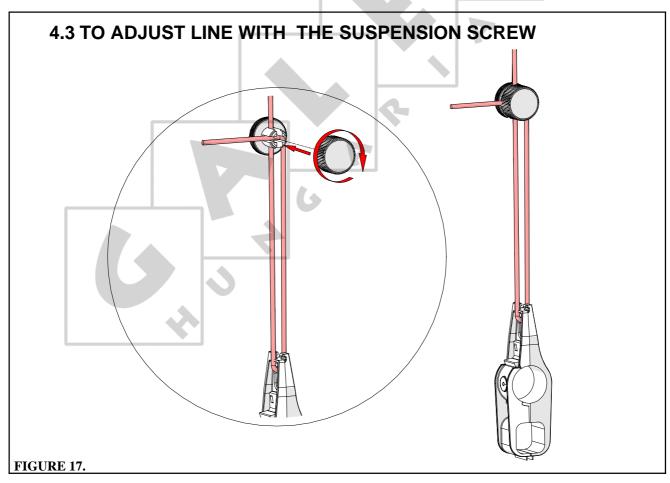


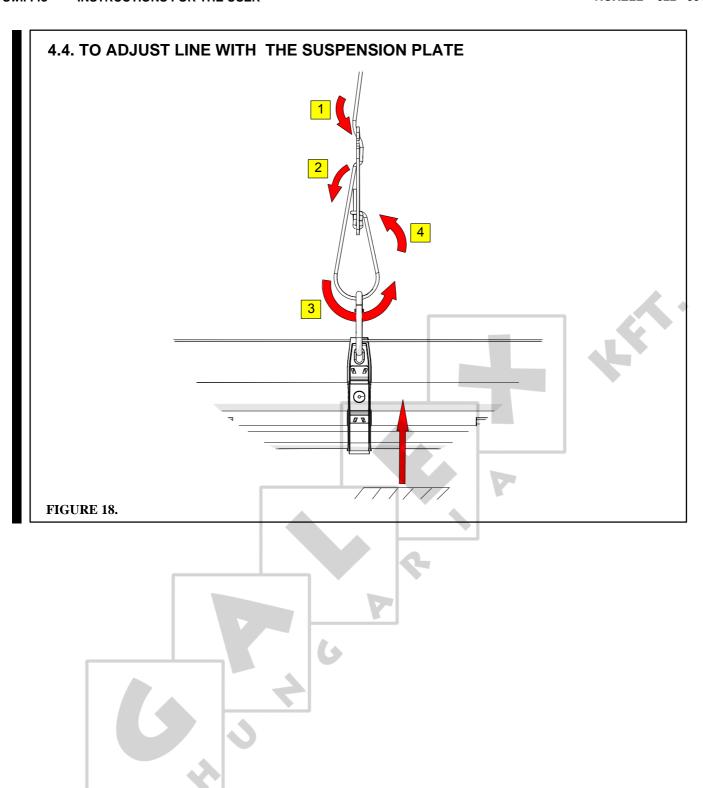
### 4. TO ADJUST THE LINE HEIGHT

### 4.1. TO ADJUST HEIGHT OF COMPLETE LINE

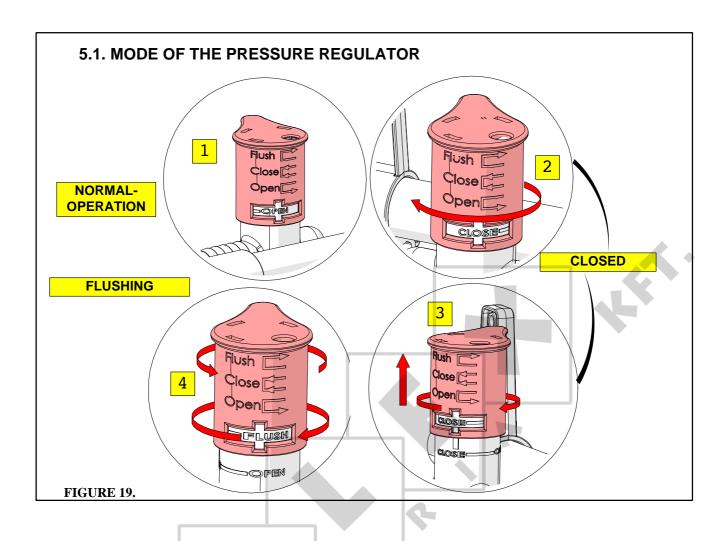


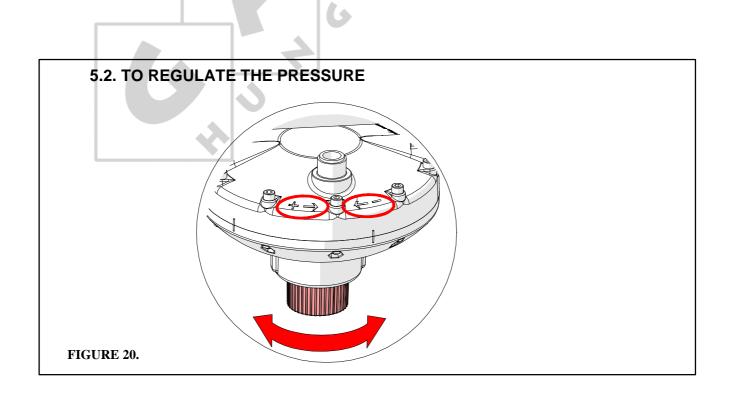


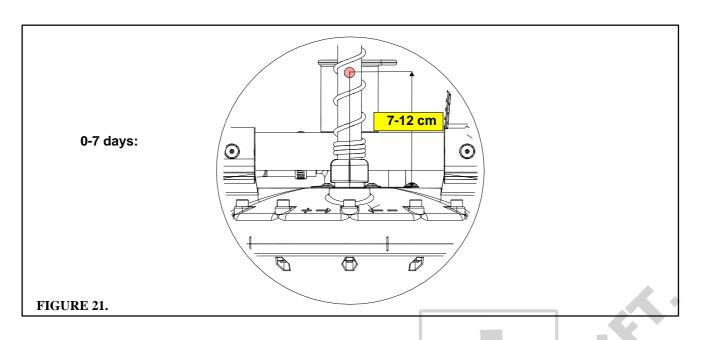


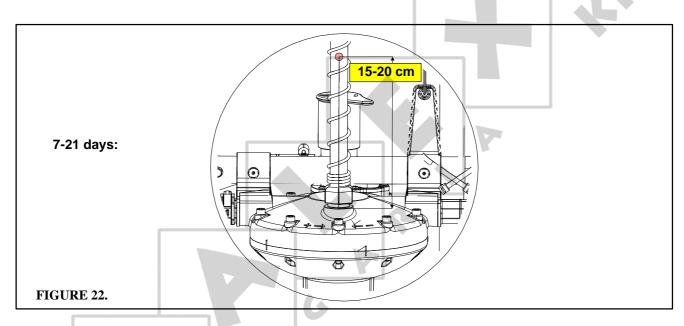


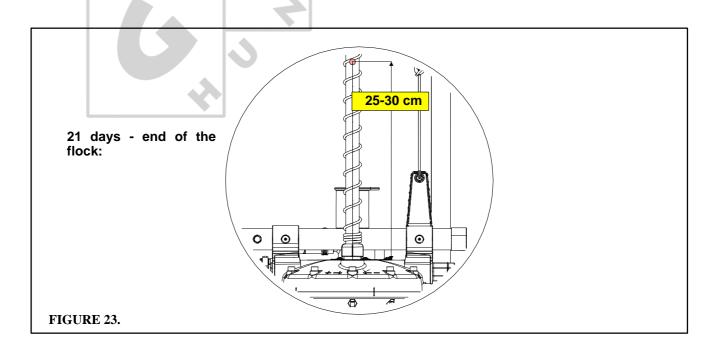
### 5. OPERATION OF THE SYSTEM

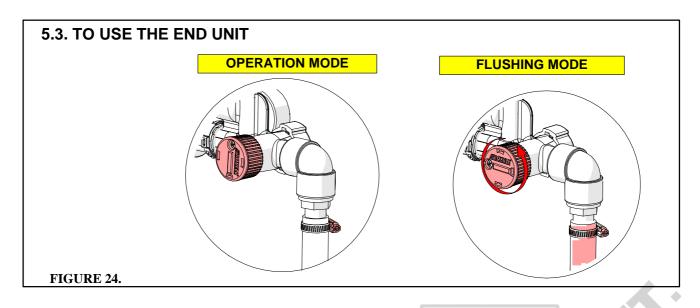


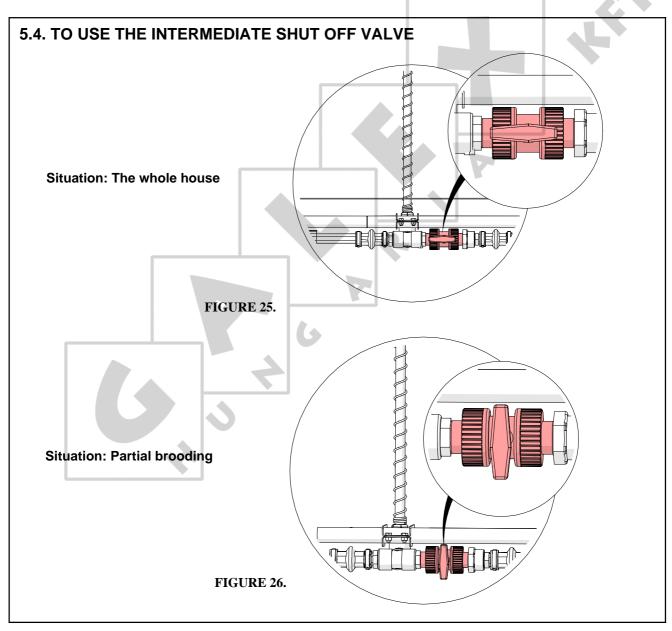




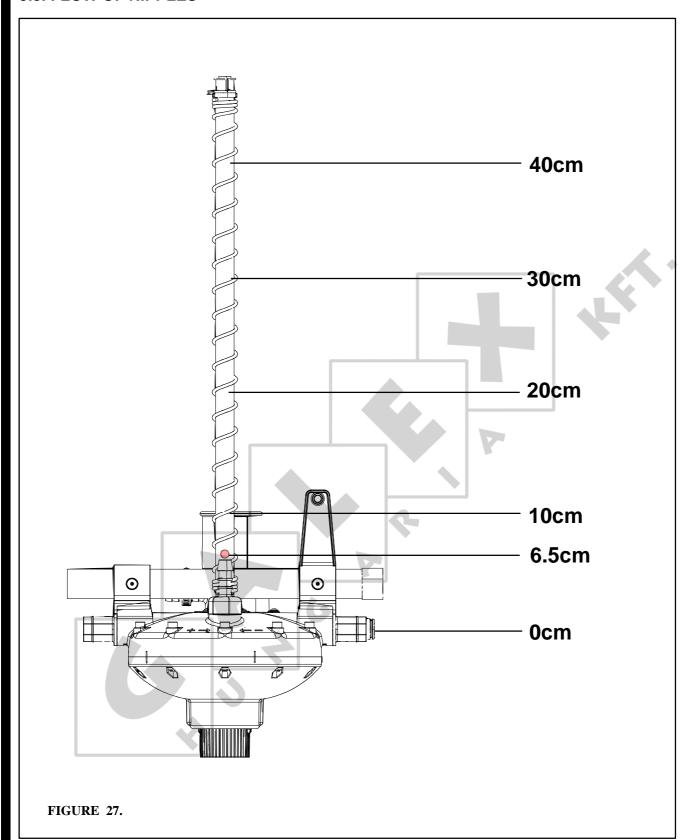


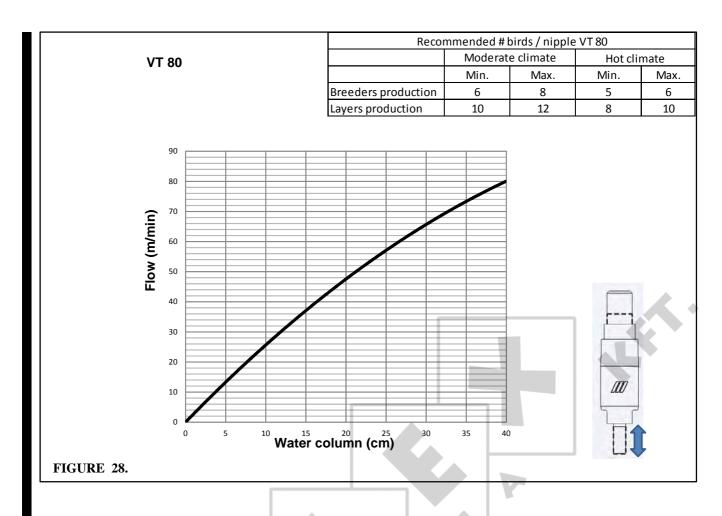


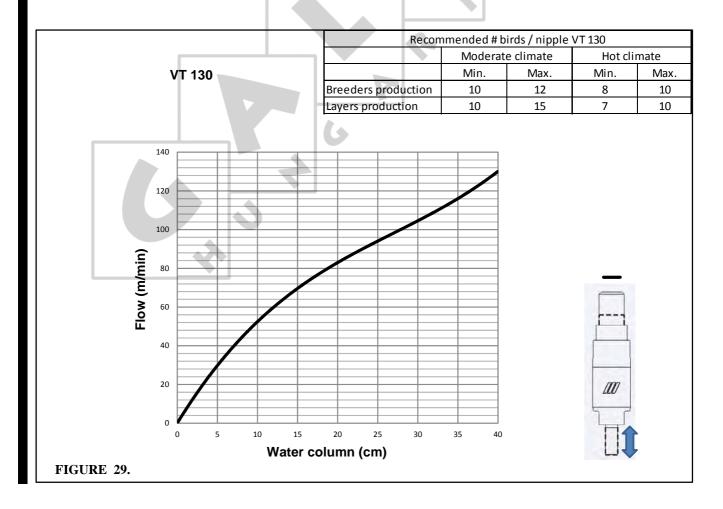


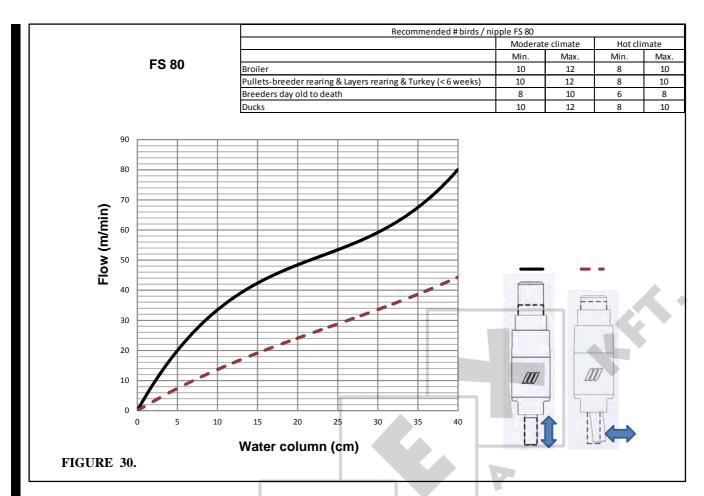


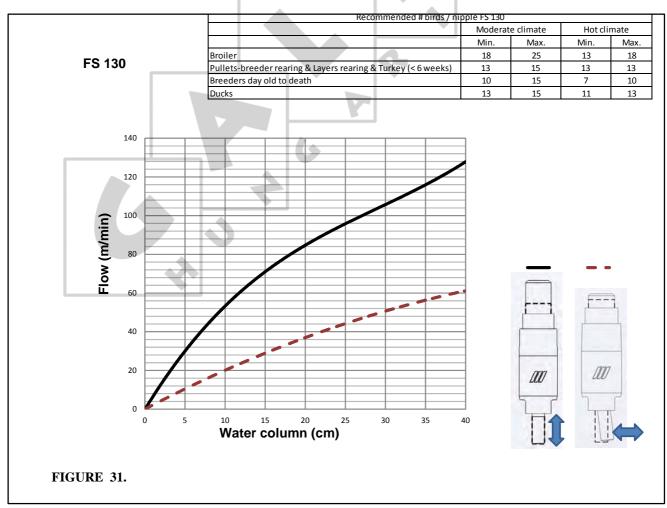
### **5.5. FLOW OF NIPPLES**







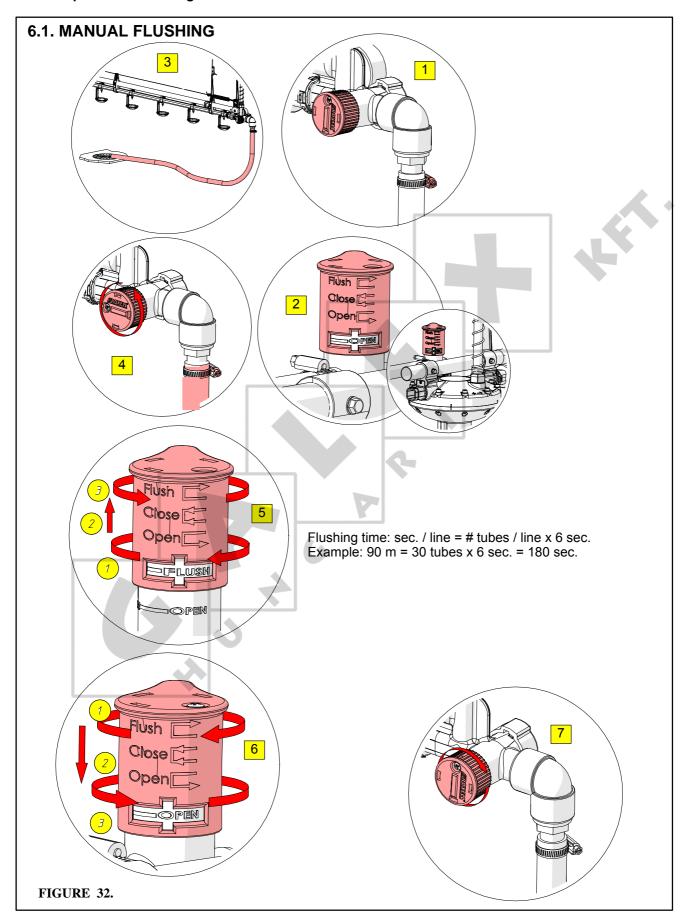


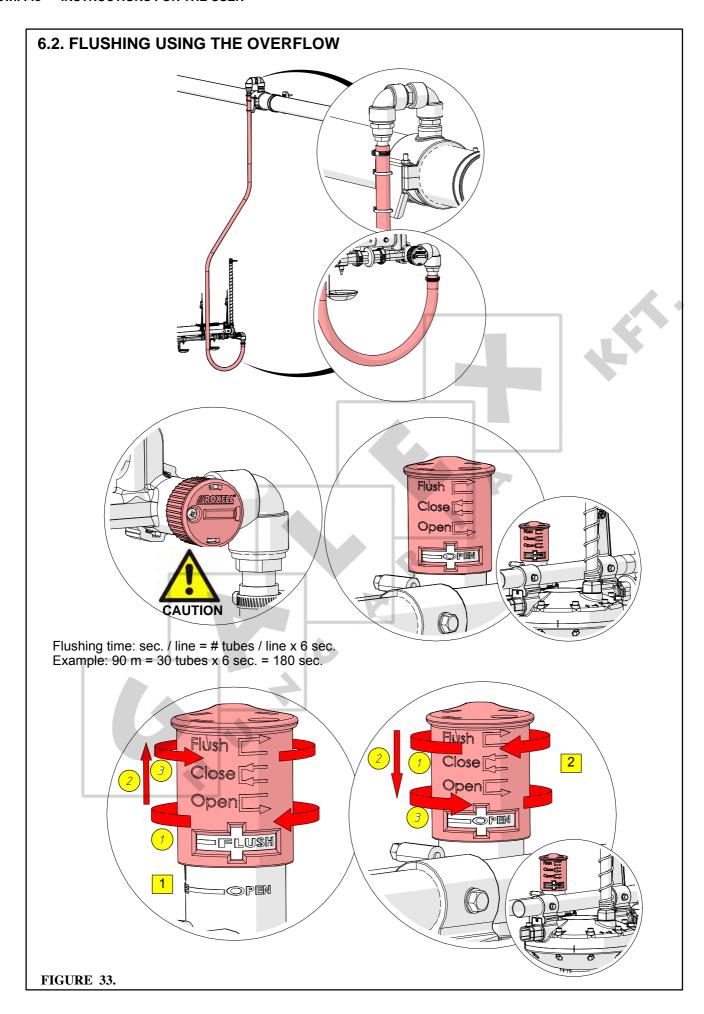


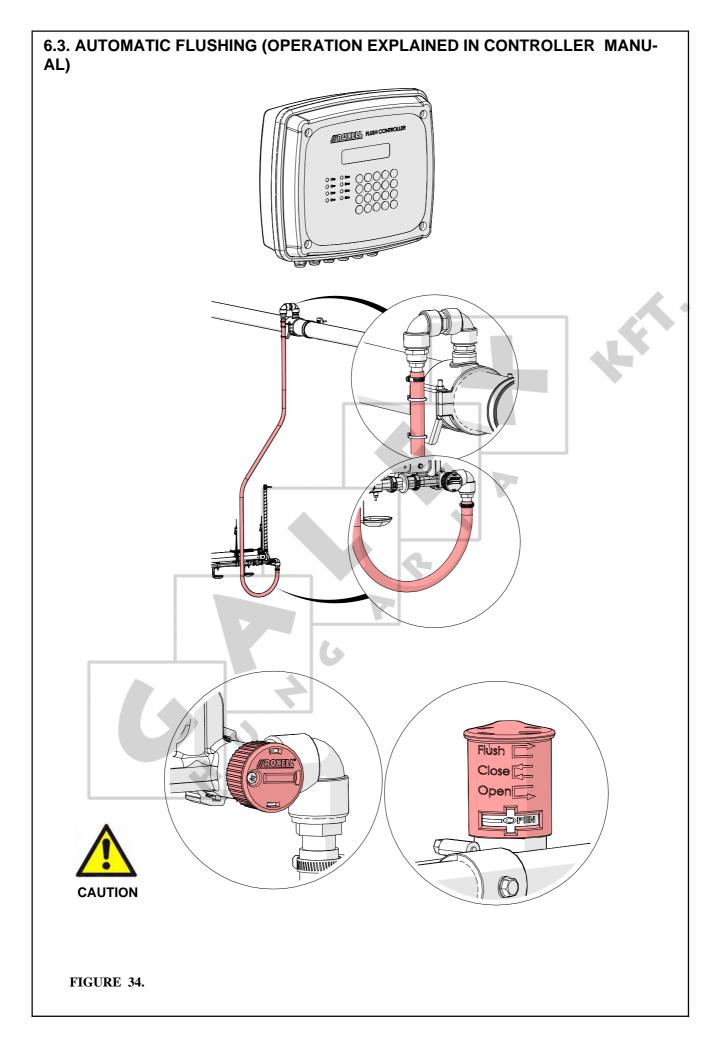
### 6. TO CLEAN THE SYSTEM



In order to maintain the correct functioning of the drinking system, cleaning (flushing) should be performed on a regular basis.





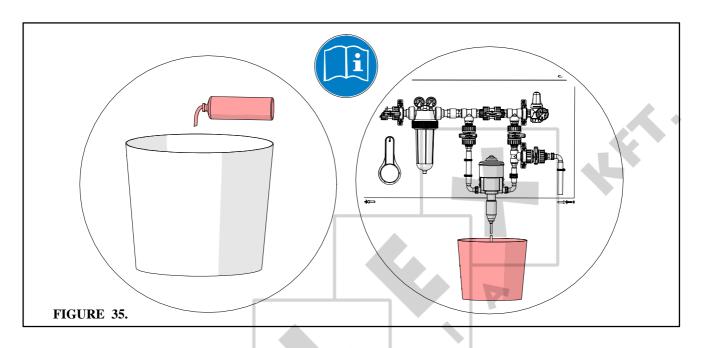


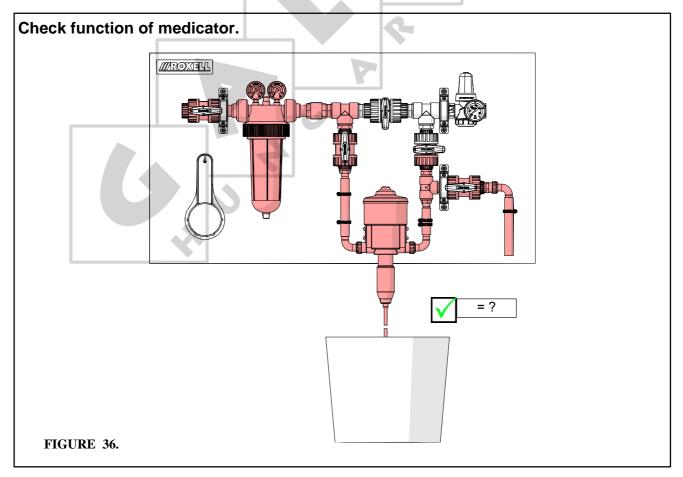
# 7. TO ADMINISTER VACCINE OR MEDICATION HOW TO DO

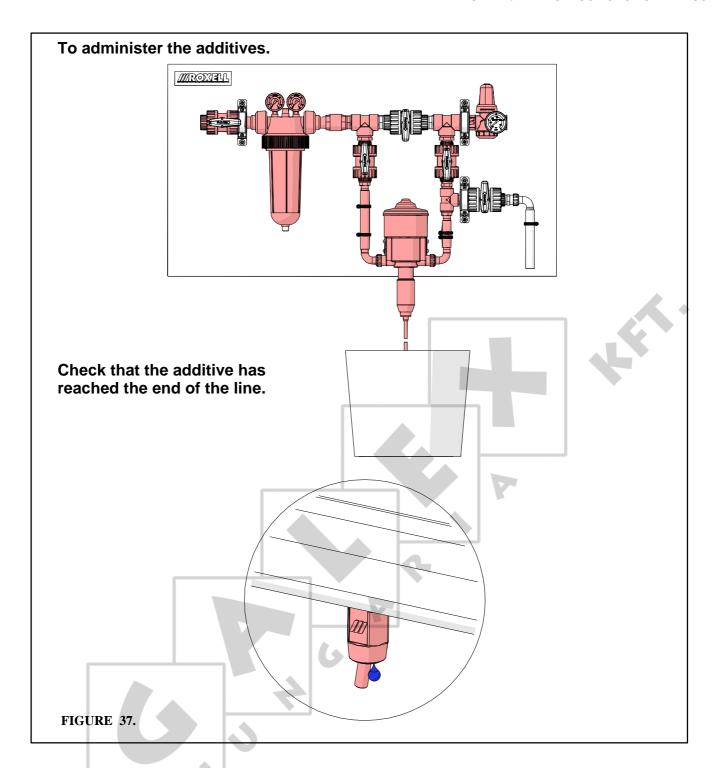


Note: Follow the instructions of the additive supplier!

CAUTION









ALWAYS clean the system before and after administering!

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#### 8. PERCH PROTECTION AND THE SYSTEM

#### 8.1. ELECTRICAL PERCH PROTECTION



When entering the house, FIRST switch off the electrical power! The line height should be correct depending on the age of the birds.

#### 8.2. SPINSOFT

- The line height should be correct depending on the age of the birds.
- Keep the cable under tension.
- At the beginning some birds might perch on the system. They will find themselves unstable, so they will find it not attractive.
- They will learn not to perch on the system.



# MAINTENANCE INSTRUCTIONS



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

ACTIONS IN GREY BACKGROUND MUST BE DONE BY A TECHNICALLY TRAINED PERSON.						
	At first system startup	During the flock	Between 2 flocks	Every 6 months		
Filter	Check differential pressure and clean filter cartridge if necessary.	and clean filter cartridge if necessary.		Clean filter cartridge carefully as described in the instructions.		
Flushing the system (recommended: 1 min/10m drinking line)	Always	After adding products to the water (vaccine, medication, etc.)  2 x per week	Always			
		When the temperature of the water in the drinking line is too high.	P			
Poultry perch system: - Electric	Check mechanical tension on the cable.	Daily: check that no animals are perching on the drinking line.	cable.			
- SpinSoft	Spinsoft: check movability of the spinners.		Spinsoft, check movability of the spinners.			
Water supply	Check for sufficient supply flow and pressure.	Daily: check for sufficient supply flow and pressure.	Check for sufficient supply flow and pressure.			
Cleaning			Clean all components to ensure system hygiene.			
		P	Empty drip cups after cleaning so that no residue remains in the cups.			
automatic flush system	Check proper closure of valves.	Check that no water escapes via the drain for flushing when the valves are not operated.				
Drain system			When there is a risk of the lines freezing up.			
Suspension system	Check the main cable and the other suspension system components for possible damage. Check the operation of the hand winch.		Check the main cable and the other suspension system components for possible damage. Check the operation of the hand winch.	components for possible damage.		

#### TROUBLE SHOOTING GUIDE



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

#### ACTIONS IN GREY BACKGROUND MUST BE DONE BY A TECHNICALLY TRAINED PERSON.

#### **IMPORTANT**



IF YOU MUST REPLACE LEAKING NIPPELS, REMOVE THEM CAREFULLY. SCREW THE NIPPLES VERTICALLY INTO THE PIPE, SO THAT YOU DO NOT DEFORM CAUTION THE SCREW THREAD. DO NOT SCREW THE NIPPLE TOO DEEP.

PROBLEM	CAUSE	CORRECTIVE ACTION
Leaking nipples.	a. Dirt in the system when starting up.	- Rinse the lines before using them.
	b. Bad water quality.	Have the water tested by a renowned specialist and take action if needed.
	c. Vaccines/medicines.	- Rinse the lines before and after administering additives.
	d. Water is polluted.	Regularly clean the filter cartridge.     Use clear water.
	e. Wear of nipples.	- Regularly adjust the height of the lines.
	f. Use of certain detergents/disinfect- ants/medecines.	<ul> <li>Consult the list of allowed products and check specifications of suppliers before using any of them.</li> </ul>
	g. Nipple is not suitable for the type of bird.	- Consult the recommendations types of bird/nipple.
2. Water wastage.	a. Water supply at the wrong spot.	- See instructions for the maximum length per water supply point.
	b. Scope is too high.	Install the water supply at the correct position. Refer to instructions on the slope regulator.
	c. Incorrect height of the line.	- Adjust the height.
	d. Wrong combination of nipple/type of bird.	- Consult the recommendations types of bird/nipple.
	e. Drip cup is not suitable for the type of bird.	- Consult the recommendations types of bird/nipple.
	f. Water pressure set too high.	- Adjust water pressure as recommended, as a function of the age of the animal.
Water consumption too low.	<ul><li>a. Incorrect level of the line :</li><li>Uneven floor.</li><li>height of the line.</li></ul>	<ul><li>Level the litter on the floor.</li><li>Adjust the height.</li><li>Regularly adjust the height of the line.</li></ul>
	b. Water is too hot.	Rinse every hour with fresh, cool water. You can use the RFC (Roxell Flushing Controller) to do this automatically.
	c. Nipple is not suitable for the type of bird.	- Consult the recommendations types of bird/nipple.
	d. Water pressure is too low.	- Adjust the water pressure.
	Nipples are silted up (vaccination/ medicines).	- Refer to the supplier's instructions for the specific means to be used to release the
	<ul> <li>f. A large number of nipples are blocked by a too high content of calcium/iron.</li> </ul>	nipples. Follow the specifications and instructions for use of these means.
	g. Pollution of individual nipples.	<ul> <li>Move the nipple bars a few times to and fro until the dirt comes off or replace the complete nipple.</li> </ul>

PROBLEM	CAUSE	CORRECTIVE ACTION
	h. Debeaked birds.	- Install start cups.
	i. Not enough water consumption by day-olds.	<ul><li>Increase pressure.</li><li>Increase lighting.</li></ul>
	j. Too many birds per nipple.	- Adjust the stocking rate.
	k. Use of another system during rearing of layers/breeders.	Temporarily reduce the water pressure and use start cups.
	Drip cup too large (starting period) or too small (end of the flock).	Consult the recommendations types of bird/nipples/drip cups.
Contamination of the drip cups.	a. Not enough birds per drip cup.	- Temporarily use less lines. Check the individual nipples.
	b. Nipples are silted up (calcium/iron).	- Agitate the nipples to let water through them to rinse.
5. Obstruction to the movement of birds.	a. Lines are suspended too low.	- Adjust the height.
The synthetic material of the drip cup is affected.	a. Use of non-authorized products.	Consult the list of allowed products before using any of them.
<ol><li>Leaking connectors.</li></ol>	Incorrect installation.     Too high pressure.	- Use the correct tools and follow the instructions.
		<ul> <li>Check position of the flush button on the pressure regulator.</li> <li>Check if valve of the end unit is open during flushing.</li> </ul>
8. Connectors get loose.	a. Too much water pressure on the line.	First open end valve for flushing in case of manual flushing.     Maximum water pressure = 3 BAR.
	b. Incorrect procedure when rinsing.	- See instructions part 1.
	c. Broken clamp ring 19802941.	- Replace clamp ring and follow the instructions.
Deformed tubes.	a. Heat source is too close.	- Remove the heat source, so that the line is no longer exposed to a temperature of more than 50°C.
10. Perching animals in case of electric	<ul> <li>No cable for poultry perch guard in- stalled.</li> </ul>	<ul> <li>Install cables for poultry perch guard or perch protection system when needed.</li> </ul>
poultry perch sys- tem.	b. Cable for poultry perch guard is not electrified.	<ul> <li>Make a correct connection to the poultry perch guard.(turn on).</li> <li>Check on short circuits.</li> </ul>
	c. Cable for poultry perch guard not stretched enough.	- Control by expert.
	d. Wrong connection between the poultry perch guard and the line.	Wrong connection between the poultry perch guard and the line.
	e. There is no earthing.	- Provide correct earthing.
	f. The animals tend to perch on the line.	<ul> <li>For breeders/layers: winch up the lines every evening and/or encourage the birds from the lines before switching off the lights.</li> </ul>

PROBLEM	CAUSE	CORRECTIVE ACTION
11. Perching animals in case of SpinSoft poultry perch system.	Spinners touch the suspension tube.     They do not move smoothly around the cable.	<ul> <li>Check if clearance between hangers and wings is sufficient according to the instructions.</li> <li>Check if no dirt has accumulated in the cable guide of the spinners. Clean the cable guide if necessary.</li> </ul>
	b. The cable sags too much. Not enough tension on the cable when the animals try to perch on the SpinSoft system.	Check tension on the cable and readjust in accordance with the instructions.
12.The line sags.	Individual suspension points at in- correct height.	- Suspend the line at the correct height.
13.Deformed suspen-	a. Cable is stretched too much.	- Adjust the stretch on the cable.
sions.	b. Birds perch on the line.	See actions in case of birds perching on the system.
14.Connector at the water tank/pres-	a. Lines are winched up too high.	- Pay attention when winching up the lines.
sure regulator is broken.		- Replace.
15.Water pressure on	a. Water pressure not set correctly.	- Put in correct position.
the line is too high.	<ul> <li>Diaphragm valve of the automatic flush system is leaking.</li> </ul>	<ul><li>Check diaphragm valve for leakage.</li><li>Replace diaphragm if necessary.</li></ul>
16. Twisting of the water tank/pressure regulator.	Incorrect connection of the water hose.	- See instructions part 1
17.Water level in the breather unit difficult to read.	a. Inadequate cleaning.	- Clean using a brush (02206258).
18. Water pressure at the end of the line	Angle of floor slope too great (> 15 cm water supply point).	Install extra water supply points (see sloping regulator).
is too low/high.	b. Length of line per water supply points is too high.	- Check the number of water supply points per line and install extra water supply points if necessary.
19.Suspension cord loose.	Incorrect fixing of the three hole string adjuster / adjusting plate.	<ul> <li>Incorrect fixing of the three hole string adjuster / adjusting plate.</li> </ul>
20.Insufficient water	a. Water pressure is too low.	- Check the pump.
supply in the house.	b. Diameter of supply tube is too small.	- See instructions part 1.
21. Difference between incoming and outgoing pressure in the filter.	a. Contamination of filter set.	- Regularly clean the filter cartridge. Use clear water.
22.Leaks at the screw thread.	A. Nipple removed carelessly.     Nipple not screwed in vertically or too deep.	Use sealing material.     If necessary, replace the part which leaks.     If there are several leaks, replace the tube partly or completely.
23.Nipples discolour.	Corrosive substances (acid) in the water.	Stop administering additives. Contact your supplier of additives.
24. Insufficient water consumption when starting up the layers (production) at the age of 16-18 weeks.	<ul><li>a. Birds have been reared on another system.</li><li>b. Not enough adaptation time.</li></ul>	<ul> <li>Longer period with light (24 hours).</li> <li>Maximum light intensity.</li> <li>Trigger all nipples until drops appear and/ or until there is water in the drip cup.</li> <li>Reduce the water pressure to 10 cm.</li> </ul>

# HAND WINCH TROUBLE SHOOTING GUIDE



Not respecting above-mentioned instructions can cause physical injury or material damage.
Use personal protective equipment.

#### **DANGER**

#### ACTIONS IN GREY BACKGROUND MUST BE DONE BY A TECHNICALLY TRAINED PERSON.



SEE TO IT THAT YOU FIRST REMOVE EACH ELEMENT WHICH CAN OBSTRUCT A SAFE OPERATION OF THE SYSTEM!

PROBLEM	CAUSE		CORRECTIVE ACTION
1. Brake doesn't work.	Screw thread on the drive shaft or the handle is damaged.		Replace the hand winch.
	b. Screw thread on the drive shaft or the handle is dirty.		Clean the hand winch dry.
		-	When <b>not ok</b> , please ask a technically trained person.
	c. Brake disks are dirty.	А	Clean the hand winch dry.
			When <b>not ok</b> , please ask a technically trained person.
	d. Handle has been screwed up against the locknut when turning down.		Release the handle form the locknut.
2. Winching up does-	a. Load is too heavy.	-	Limit the load till max. 300 kg.
n't work.	b. Cable to load is blocked somewhere.	-	Release the cable.
	c. Drum weldment or drive shaft of the	h.	Clean the hand winch and grease where
	hand winch is blocked because of dirt or rust.		necessary.
3. Putting down the load doesn't work.	a. Safety lock is switched on.	-	Take the handle and unlock the safety lock.
	b. Cable to load is blocked somewhere.	-	Release the cable.
	c. Drum weldment or drive shaft of the		Clean the hand winch and grease where
	hand winch is blocked because of dirt or rust.		necessary.

#### **MAINTENANCE INSTRUCTIONS**



#### Use personal protection protective equipment.

#### **DANGER**

- Remove all dirt and dust after each batch or at least every 6 months.
- See to it that the handle turns fluently on the screw thread of the main shaft.
- Don't use water to clean the hand winch.
- Use grease to grease moving parts.

# **OPERATOR'S GUIDE**

Swii'Flo™

INSTRUCTIONS FOR THE USER

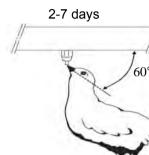
#### 1. HEIGHT

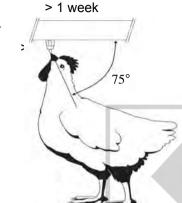
#### Adjust the line height:

This height depends on the size of the animals and their

drinking behaviour.

0-2 days





#### MANAGEMENT OF THE HEIGHT ADJUSTMENT OF THE LINE

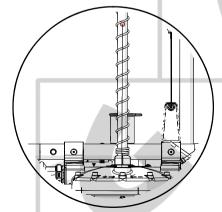
#### 2. WATER PRESSURE

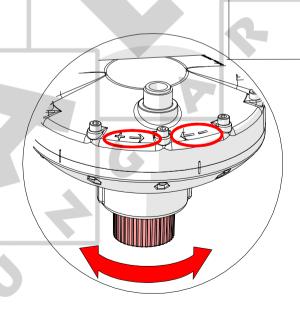
- 2.1. Adjust the water pressure to the age of the birds.
- 2.2 If the litter under the drinking lines is wet: reduce the pressure.

If there is not enough water consumption:

increase the pressure.

#### WATER PRESSURE IN THE REGULATOR

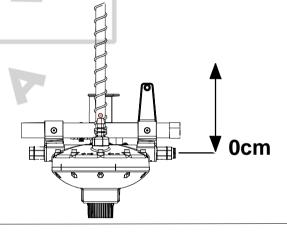




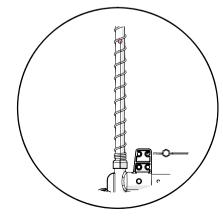
#### 3. OPERATION OF THE DRINKING SYSTEM

General guidelines for water pressure ((water column) in function of the age of the birds:

Age [days]	Water column [cm]
0 - 7	7 - 10
7 - 21	10 - 20
21 - end of the flock	20 - 35



#### WATER PRESSURE IN THE END UNIT

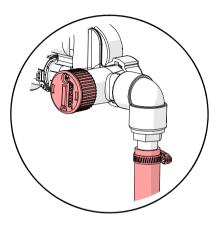


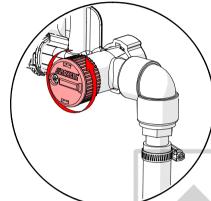
# **OPERATOR'S GUIDE**



#### 4. MANUAL FLUSHING

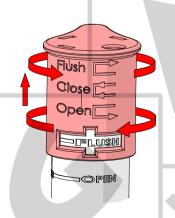
4. 1 Connect the end unit to the drain hose.
Put the end unit valve in the flushing position.





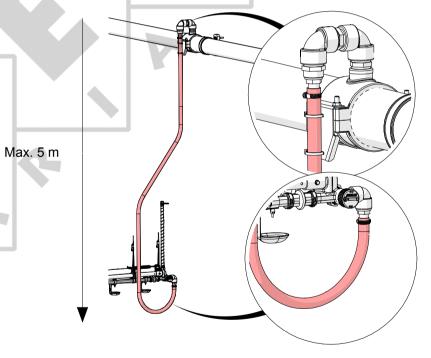
#### **FLUSHING POSITION OF THE END UNITS**

- 4. 2 Put the pressure regulator operation valve in the flushing position.
- 4. 3 Flush the lines one after another (max. 3 BAR /40 Psi).
- 4. 4 After flushing, put all components back into their original position.



#### 5. FLUSHING WITH OVERFLOW

- 5. 1 Proceed as described in MANUAL FLUSHING 4.1-4.4.
- 5. 2 The end unit valve is always in flushing postion.
- 5. 3 The end unit is connected to the drain pipe (over flow).
- 5. 4 Put the pressure regulator operation valve in the flushing position.
- 5. 5 After flushing, put all components back into their original position.



We recommend a **maximum height of 5 m** for the drainage system **The minimum height is 2 m!** 





**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:

SPARKcup/SPARKnipple/Swii'Flo Nr: 025.../022...

Drinksysteem voor pluimvee (met pomp).

Drinking system for poultry (with pump).

Waarop deze verklaring betrekking heeft, in overeenstemming is met:

- de volgende richtlijnen: 2006/42/EG (Machinery Directive); 2014/30/EU (Electromagnetic Compatibility).
- de geharmoniseerde Europese Normen: EN ISO 13857:2008; EN 349:1993 + A1:2008; EN ISO 12100:2010; EN 60204-1:2006; EN 61439-1:2011; EN 61439-2:2011

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 informatieverschaffing laat de intellectueeleigendomsrechten van de fabrikant van de niet voltooide machine onverlet.

(NL)

Relating to this declaration, is conform

- The following directives 2006/42/EC (Machinery Directive); 2014/30/EU (Electromagnetic Compatibility).
- The harmonised European standards: EN ISO 13857:2008; EN 349:1993 + A1:2008; EN ISO 12100:2010; EN 60204-1:2006; EN 61439-1:2011; EN 61439-2:2011

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, 01/01/2017
The Circ Ver Lorder
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.1A)
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 byba.
(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.



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

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:

Winching system Nr: 00102368 / 00102087 Liersysteem voor voer- en drinklijnen; manueel en gemotoriseerd Winching system for feed- and drink lines; manual and motorised Nummer CE-label/number CE-label:

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 349:1993 + A1:2008; EN ISO 12100:2010; gemotoriseerd: EN 60204-1:2006; EN 61439-1:2011; EN 61439-2:2011
- 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 door bijvoorbeeld de verdeler en/of installateur en/of eindgebruiker toegevoegde componenten en/of verrichte bewerkingen.

(NL)

Relating to this declaration, is conform

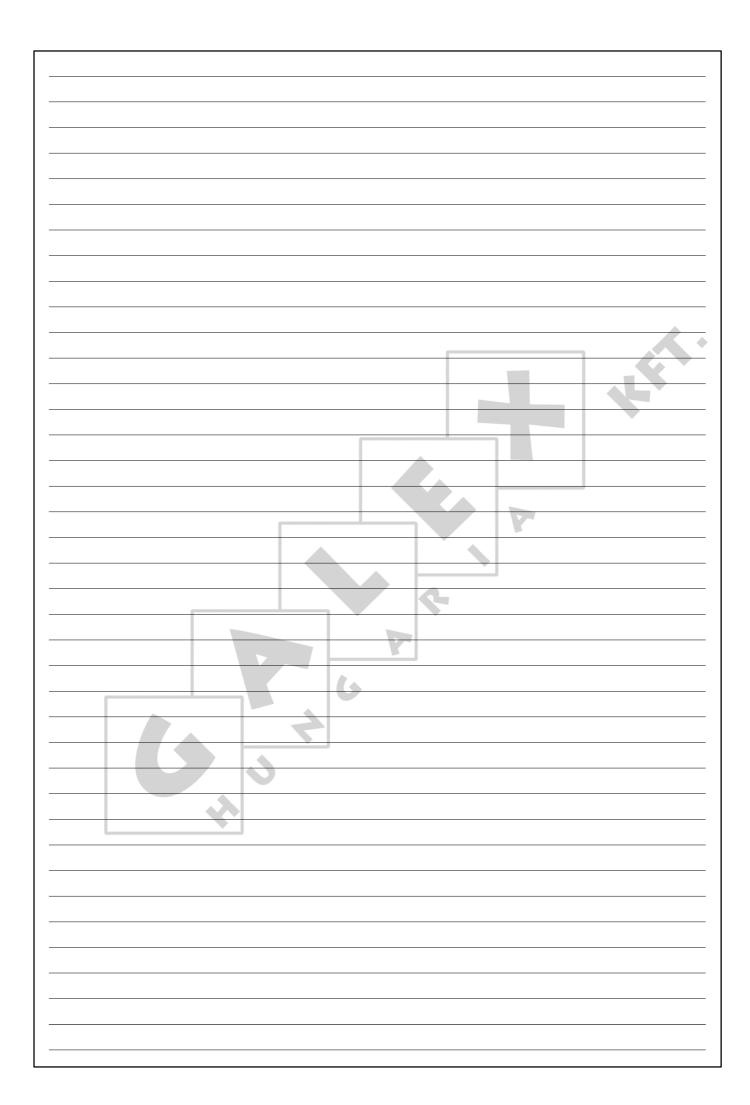
- The following directives 2006/42/EC (Machinery Directive); 2014/30/EU (Electromagnetic Compatibility).
  - The harmonised European standards: EN ISO 13857:2008; EN 349:1993 + A1:2008; EN ISO 12100:2010; motorised: EN 60204-1:2006; EN 61439-1:2011; EN 61439-2:2011

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.

(EN)

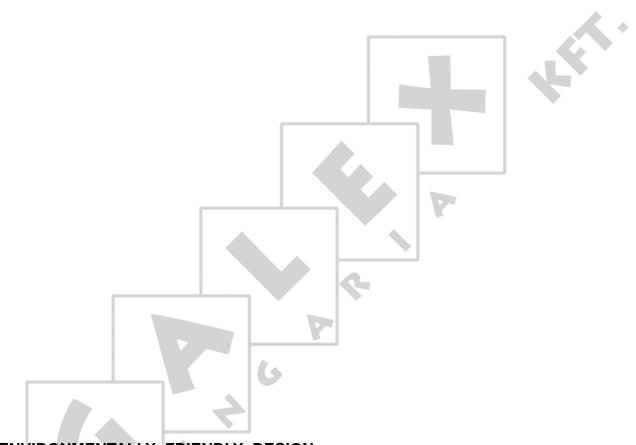
Plaats, Datum / Place, Date: Maldegem, 01/01/2017

Dhr. Gino Van Landuyt
Managing Director



# PART II

# **COMPONENTS**

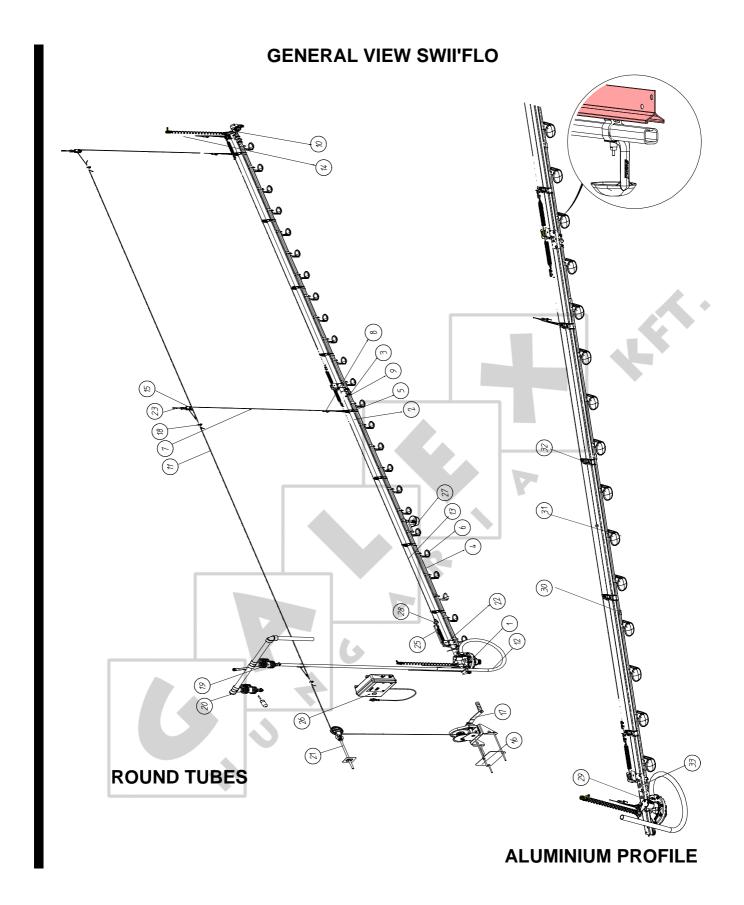


#### 1. ENVIRONMENTALLY-FRIENDLY DESIGN

Roxell complies with the Commission Regulation (EU) No. 4/2014 of 6 January 2014, amending Regulation (EC) No 640/2009 implementing Directive 2005/32/EC (the European standard IEC 60034) of the European Parliament and of the Council with regard to eco design requirements for electric motors.

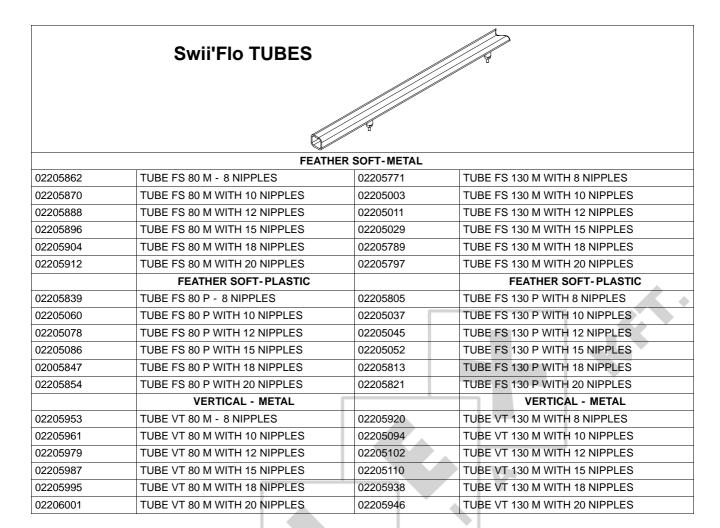
#### 2. COMMUNICATION

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

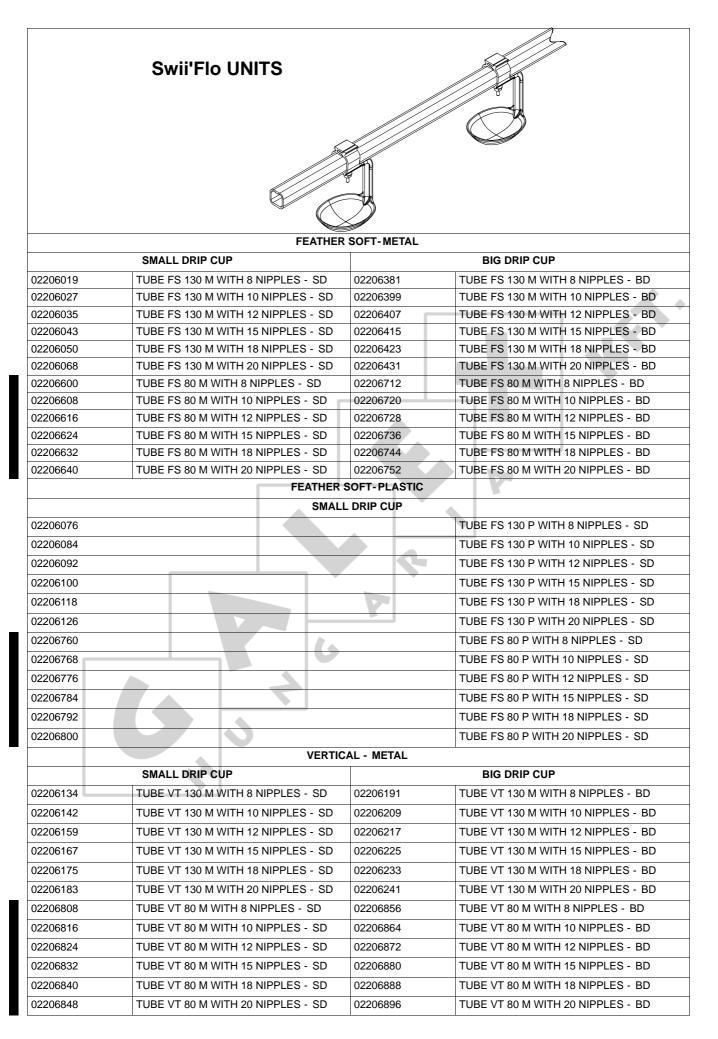


# PRODUCT NUMBERS SWII'FLO

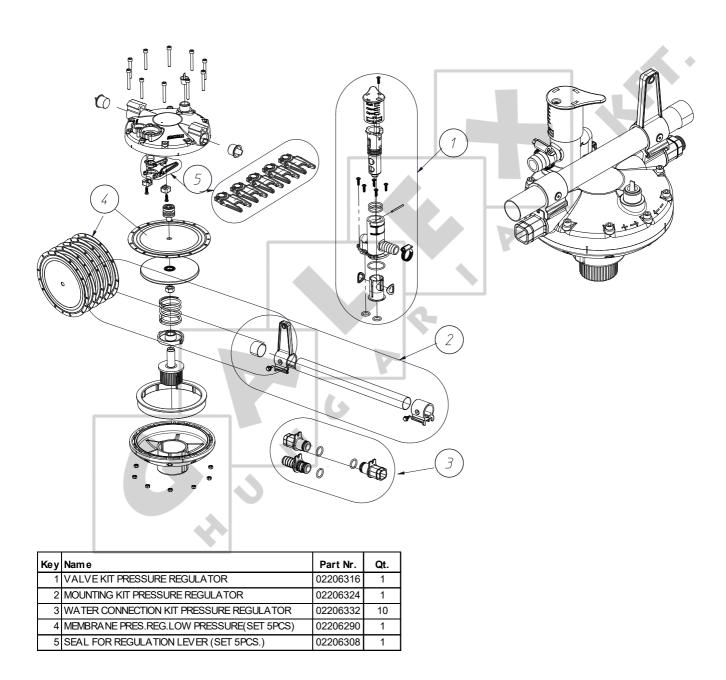
1 PRESSURE REGULATOR LOW PRESSURE 2 SUSPENSION TUBE 3/4" LG=3080MM 02203: 3 EXPANSION CONNECTOR WITH CLIP 122016 4 TUBE WITH NIPPLES 5 HANGER FOR ROUND TUBE 022046 6 SMALL DRIP CUP 12 BIG DRIP CUP 12 BIG DRIP CUP 13 SUSPENSION SCREW - GREY 14 TUBE WITH SCREW 4.8 X 13 15 END UNIT LOW PRESSURE 16 END UNIT LOW PRESSURE 17 CABLE 1/16" - 1.5 MM - 250M 18 CABLE 1/16" - 1.5 MM - 500M 19 SMALL PULLEY WITH STAINLESS STEEL HOOK 19 SMALL METAL PULLEY 10 HAND WINCH 10 END UNICH BRACKET ASS'Y 11 CABLE CLAMP NO. 5 12 PVC STOP 1" 13 CABLE CLAMP NO. 5 14 BREATHER UNIT PERCH GUARD KIT 15 CABLE CLAMP NO. 5 16 HAND WINCH 17 CABLE OUTLET 18 CABLE CLAMP NO. 5 19 PVC LINE OUTLET 19 SCREW HOOK 90 MM 10 SCREW HOOK 160 MM 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 1066 10 CABLE F. PERCH GUARD - 100M 10 10 1066 10 CABLE F. PERCH GUARD - 100M 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 1066 10 10 10 10 1066 10 10 10 1066 10 10 10 1066 10 10 10 10 1066 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 10 1066 10 10 10 1066 10 10 10 10 1066 10 10 10 106	۱r.
3 EXPANSION CONNECTOR WITH CLIP 4 TUBE WITH NIPPLES 5 HANGER FOR ROUND TUBE 02203: 6 SMALL DRIP CUP 02204: 7 ROPE - Ø3 - POLYPROP - 250M 02001: 8 THREE HOLE STRING ADJUSTER 02203: 9 SELF DRILLING SCREW - GREY 02204: 11 CABLE Ø 3MM 02001: 12 WATER HOSE DIA. 3/4" - 50M 02001: 13 CABLE 1/16" - 1.5 MM - 250M 0ABLE 1/16" - 1.5 MM - 500M 14 BREATHER UNIT 450MM 15 SMALL PULLEY WITH STAINLESS STEEL HOOK 16 HAND WINCH BRACKET ASS'Y 17 HAND WINCH 18 CABLE CLAMP NO. 5 19 PVC LINE OUTLET 20 PVC STOP 1" 21 HEAVY DUTY PULLEY (METAL) 22 POULTRY PERCH GUARD - 50M 050000 25 CABLE F. PERCH GUARD - 50M 050000	373
4 TUBE WITH NIPPLES see ta 5 HANGER FOR ROUND TUBE 02203: 6 SMALL DRIP CUP 02204: 7 ROPE - Ø3 - POLYPROP - 250M 02001: 8 THREE HOLE STRING ADJUSTER 02203: SUSPENSION SCREW - GREY 02201: 9 SELF DRILLING SCREW 4.8 X 13 20103: 10 END UNIT LOW PRESSURE 02204: 11 CABLE Ø 3MM 02001: 12 WATER HOSE DIA. 3/4" - 50M 02001: 13 CABLE 1/16" - 1.5 MM - 250M 00106: CABLE 1/16" - 1.5 MM - 500M 00106: 14 BREATHER UNIT 450MM 02205  SMALL PULLEY WITH STAINLESS STEEL HOOK 00104: SMALL METAL PULLEY 00102: 16 HAND WINCH BRACKET ASS'Y 02000: 17 HAND WINCH BRACKET ASS'Y 02000: 18 CABLE CLAMP NO. 5 00100: 19 PVC LINE OUTLET 02500: 20 PVC STOP 1" 02500: 21 HEAVY DUTY PULLEY (METAL) 00702: 22 POULTRY PERCH GUARD KIT 02001: 23 CABLE F. PERCH GUARD - 50M 00106: 02204: 0	263
5 HANGER FOR ROUND TUBE  6 SMALL DRIP CUP  7 ROPE - Ø3 - POLY PROP - 250M  8 THREE HOLE STRING ADJUSTER  8 SUSPENSION SCREW - GREY  9 SELF DRILLING SCREW 4.8 X 13  10 END UNIT LOW PRESSURE  11 CABLE Ø 3MM  12 WATER HOSE DIA. 3/4" - 50M  13 CABLE 1/16" - 1.5 MM - 250M  14 BREATHER UNIT 450MM  15 SMALL PULLEY WITH STAINLESS STEEL HOOK  5 SMALL METAL PULLEY  16 HAND WINCH BRACKET ASS'Y  17 HAND WINCH  18 CABLE CLAMP NO. 5  19 PVC LINE OUTLET  20 PVC STOP 1"  21 HEAVY DUTY PULLEY (METAL)  22 CABLE F. PERCH GUARD - 50M  022044  02204	336
6 SMALL DRIP CUP BIG DRIP CUP 022044 7 ROPE - Ø3 - POLYPROP - 250M 020019 8 THREE HOLE STRING ADJUSTER 022033 SUSPENSION SCREW - GREY 022011 9 SELF DRILLING SCREW 4.8 X 13 10 END UNIT LOW PRESSURE 11 CABLE Ø 3MM 12 WATER HOSE DIA. 3/4" - 50M 13 CABLE 1/16" - 1.5 MM - 250M 020019 14 BREATHER UNIT 450MM 02205  SMALL PULLEY WITH STAINLESS STEEL HOOK 001043 SMALL METAL PULLEY 00102 16 HAND WINCH BRACKET ASS'Y 17 HAND WINCH 18 CABLE CLAMP NO. 5 19 PVC LINE OUTLET 20 PVC STOP 1" 21 HEAVY DUTY PULLEY (METAL) 22 POULTRY PERCH GUARD KIT 025000 02001 021 CABLE F. PERCH GUARD - 50M 001066 02204 022	ble
6 BIG DRIP CUP 7 ROPE - Ø3 - POLYPROP - 250M 9 THREE HOLE STRING ADJUSTER SUSPENSION SCREW - GREY 9 SELF DRILLING SCREW 4.8 X 13 10 END UNIT LOW PRESSURE 11 CABLE Ø 3MM 12 WATER HOSE DIA. 3/4" - 50M 13 CABLE 1/16" - 1.5 MM - 250M CABLE 1/16" - 1.5 MM - 500M 14 BREATHER UNIT 450MM 15 SMALL PULLEY WITH STAINLESS STEEL HOOK SMALL METAL PULLEY 16 HAND WINCH BRACKET ASS'Y 17 HAND WINCH 18 CABLE CLAMP NO. 5 19 PV C LINE OUTLET 20 PV C STOP 1" 21 HEAVY DUTY PULLEY (METAL) 22 POULTRY PERCH GUARD - 50M SCREW HOOK 160 MM SCREW HOOK 160 MM SCREW HOOK 160 MM SCREW HOOK 160 MM 02001  18 CABLE F. PERCH GUARD - 50M 02001 0200	362
BIG DRIP CUP	357
### THREE HOLE STRING ADJUSTER    SUSPENSION SCREW - GREY   022018   9   SELF DRILLING SCREW 4.8 X 13   201039   10   END UNIT LOW PRESSURE   022048   11   CABLE Ø 3MM   020019   12   WATER HOSE DIA. 3/4" - 50M   020019   CABLE 1/16" - 1.5   MM - 250M   001069   CABLE 1/16" - 1.5   MM - 500M   001069   CABLE 1/16" - 1.5   MM - 500M   001069   14   BREATHER UNIT 450MM   022059   SMALL PULLEY WITH STAINLESS STEEL HOOK   001049   SMALL METAL PULLEY   001029   16   HAND WINCH BRACKET ASS'Y   0200019   17   HAND WINCH   0220119   18   CABLE CLAMP NO. 5   001009   19   PVC LINE OUTLET   025009   20   PVC STOP 1"   025009   21   HEAVY DUTY PULLEY (METAL)   007029   22   POULTRY PERCH GUARD KIT   020019   23   SCREW HOOK 90 MM   050009   CABLE F. PERCH GUARD - 50M   001069	365
8 SUSPENSION SCREW - GREY 022018 9 SELF DRILLING SCREW 4.8 X 13 201038 10 END UNIT LOW PRESSURE 022048 11 CABLE Ø 3MM 020018 12 WATER HOSE DIA. 3/4" - 50M 020018 13 CABLE 1/16" - 1.5 MM - 250M 001068 CABLE 1/16" - 1.5 MM - 500M 001068 14 BREATHER UNIT 450MM 022058 SMALL PULLEY WITH STAINLESS STEEL HOOK 001048 SMALL METAL PULLEY 001028 16 HAND WINCH BRACKET ASS'Y 020008 17 HAND WINCH BRACKET ASS'Y 020008 18 CABLE CLAMP NO. 5 001008 19 PVC LINE OUTLET 025008 20 PVC STOP 1" 025008 21 HEAVY DUTY PULLEY (METAL) 007028 22 POULTRY PERCH GUARD KIT 020018 23 SCREW HOOK 90 MM 050008 25 CABLE F. PERCH GUARD - 50M 001068	583
SUSPENSION SCREW - GREY  9 SELF DRILLING SCREW 4.8 X 13  10 END UNIT LOW PRESSURE  11 CABLE Ø 3MM  12 WATER HOSE DIA. 3/4" - 50M  CABLE 1/16" - 1.5 MM - 250M  CABLE 1/16" - 1.5 MM - 500M  14 BREATHER UNIT 450MM  SMALL PULLEY WITH STAINLESS STEEL HOOK  SMALL METAL PULLEY  16 HAND WINCH BRACKET ASS'Y  17 HAND WINCH  18 CABLE CLAMP NO. 5  19 PVC LINE OUTLET  20 PVC STOP 1"  21 HEAVY DUTY PULLEY (METAL)  22 POULTRY PERCH GUARD KIT  33 CABLE F. PERCH GUARD - 50M  022013  022044  022044  022044  022014  020015  021016  021016  022016  022016  022016  022017  022007  022017  022007  023 SCREW HOOK 90 MM  022017  023 SCREW HOOK 160 MM  022017  023 SCREW HOOK 160 MM  022017  022017  023 SCREW HOOK 160 MM	321
10 END UNIT LOW PRESSURE  11 CABLE Ø 3MM  12 WATER HOSE DIA. 3/4" - 50M  CABLE 1/16" - 1.5 MM - 250M  CABLE 1/16" - 1.5 MM - 500M  14 BREATHER UNIT 450MM  5 SMALL PULLEY WITH STAINLESS STEEL HOOK  SMALL METAL PULLEY  16 HAND WINCH BRACKET ASS'Y  17 HAND WINCH  18 CABLE CLAMP NO. 5  19 PVC LINE OUTLET  20 PVC STOP 1"  21 HEAVY DUTY PULLEY (METAL)  22 POULTRY PERCH GUARD KIT  23 SCREW HOOK 90 MM  SCREW HOOK 160 MM  CABLE F. PERCH GUARD - 50M  002001  10 O2204  11 O2204  12 CABLE F. PERCH GUARD - 50M  001066  001066  001066	387
11 CABLE Ø 3MM 02001  12 WATER HOSE DIA. 3/4" - 50M 02001  13 CABLE 1/16" - 1.5 MM - 250M 001068  CABLE 1/16" - 1.5 MM - 500M 001068  14 BREATHER UNIT 450MM 02205  SMALL PULLEY WITH STAINLESS STEEL HOOK 001043  SMALL METAL PULLEY 001023  16 HAND WINCH BRACKET ASS'Y 02000  17 HAND WINCH 02001  18 CABLE CLAMP NO. 5 001008  19 PVC LINE OUTLET 025003  20 PVC STOP 1" 025003  21 HEAVY DUTY PULLEY (METAL) 007025  22 POULTRY PERCH GUARD KIT 02001  23 SCREW HOOK 90 MM 050003  25 CABLE F. PERCH GUARD - 50M 001068	974
12 WATER HOSE DIA. 3/4" - 50M 020019  13 CABLE 1/16" - 1.5 MM - 250M 001069  14 BREATHER UNIT 450MM 022059  15 SMALL PULLEY WITH STAINLESS STEEL HOOK 001049  SMALL METAL PULLEY 001029  16 HAND WINCH BRACKET ASS'Y 020009  17 HAND WINCH BRACKET ASS'Y 020014  18 CABLE CLAMP NO. 5 001009  19 PVC LINE OUTLET 025009  20 PVC STOP 1" 025009  21 HEAVY DUTY PULLEY (METAL) 007029  22 POULTRY PERCH GUARD KIT 020014  23 SCREW HOOK 90 MM 050009  24 CABLE F. PERCH GUARD - 50M 001069	399
CABLE 1/16" - 1.5 MM - 250M  CABLE 1/16" - 1.5 MM - 500M  14 BREATHER UNIT 450MM  02205  15 SMALL PULLEY WITH STAINLESS STEEL HOOK  SMALL METAL PULLEY  16 HAND WINCH BRACKET ASS'Y  17 HAND WINCH  18 CABLE CLAMP NO. 5  19 PVC LINE OUTLET  20 PVC STOP 1"  21 HEAVY DUTY PULLEY (METAL)  22 POULTRY PERCH GUARD KIT  23 SCREW HOOK 90 MM  SCREW HOOK 160 MM  001068	154
13 CABLE 1/16" - 1.5 MM - 500M 001068 14 BREATHER UNIT 450MM 02205 15 SMALL PULLEY WITH STAINLESS STEEL HOOK 001043 SMALL METAL PULLEY 001023 16 HAND WINCH BRACKET ASS'Y 020003 17 HAND WINCH 020014 18 CABLE CLAMP NO. 5 001003 19 PVC LINE OUTLET 025003 20 PVC STOP 1" 025003 21 HEAVY DUTY PULLEY (METAL) 007023 22 POULTRY PERCH GUARD KIT 020014 23 SCREW HOOK 90 MM 050003 26 CABLE F. PERCH GUARD - 50M 001068	575
CABLE 1/16" - 1.5 MM - 500M 001066  14 BREATHER UNIT 450MM 02205  15 SMALL PULLEY WITH STAINLESS STEEL HOOK 001043  SMALL METAL PULLEY 001023  16 HAND WINCH BRACKET ASS'Y 02000  17 HAND WINCH 02001  18 CABLE CLAMP NO. 5 001006  19 PVC LINE OUTLET 025003  20 PVC STOP 1" 025003  21 HEAVY DUTY PULLEY (METAL) 007023  22 POULTRY PERCH GUARD KIT 020014  23 SCREW HOOK 90 MM 050003  26 CABLE F. PERCH GUARD - 50M 001066	339
SMALL PULLEY WITH STAINLESS STEEL HOOK   001043     SMALL METAL PULLEY   001023     16	331
15 SMALL METAL PULLEY 001023 16 HAND WINCH BRACKET ASS'Y 020003 17 HAND WINCH 020014 18 CABLE CLAMP NO. 5 001003 19 PVC LINE OUTLET 025003 20 PVC STOP 1" 025003 21 HEAVY DUTY PULLEY (METAL) 007023 22 POULTRY PERCH GUARD KIT 020014 23 SCREW HOOK 90 MM 050003 26 CABLE F. PERCH GUARD - 50M 001063	128
SMALL METAL PULLEY 001023  16 HAND WINCH BRACKET ASS'Y 02000  17 HAND WINCH 020014  18 CABLE CLAMP NO. 5 001003  19 PVC LINE OUTLET 025003  20 PVC STOP 1" 025003  21 HEAVY DUTY PULLEY (METAL) 007023  22 POULTRY PERCH GUARD KIT 020014  23 SCREW HOOK 90 MM 050003  SCREW HOOK 160 MM 050003	349
17       HAND WINCH       020014         18       CABLE CLAMP NO. 5       001009         19       PVC LINE OUTLET       025009         20       PVC STOP 1"       025009         21       HEAVY DUTY PULLEY (METAL)       007029         22       POULTRY PERCH GUARD KIT       020014         23       SCREW HOOK 90 MM       050009         SCREW HOOK 160 MM       050009         25       CABLE F. PERCH GUARD - 50M       001068	335
18 CABLE CLAMP NO. 5  19 PVC LINE OUTLET  20 PVC STOP 1"  21 HEAVY DUTY PULLEY (METAL)  22 POULTRY PERCH GUARD KIT  23 SCREW HOOK 90 MM  SCREW HOOK 160 MM  25 CABLE F. PERCH GUARD - 50M  001068	792
19 PVC LINE OUTLET 025003 20 PVC STOP 1" 025003 21 HEAVY DUTY PULLEY (METAL) 007023 22 POULTRY PERCH GUARD KIT 020014 23 SCREW HOOK 90 MM 050003 35 CABLE F. PERCH GUARD - 50M 001063	110
20 PVC STOP 1" 025009 21 HEAVY DUTY PULLEY (METAL) 007029 22 POULTRY PERCH GUARD KIT 020014 23 SCREW HOOK 90 MM 050009 SCREW HOOK 160 MM 050009 25 CABLE F. PERCH GUARD - 50M 001069	545
21 HEAVY DUTY PULLEY (METAL) 007029 22 POULTRY PERCH GUARD KIT 020014 23 SCREW HOOK 90 MM 050003 SCREW HOOK 160 MM 050003 25 CABLE F. PERCH GUARD - 50M 001068	361
22 POULTRY PERCH GUARD KIT 020014 23 SCREW HOOK 90 MM 050003 SCREW HOOK 160 MM 050003 25 CABLE F. PERCH GUARD - 50M 001063	536
23 SCREW HOOK 90 MM 050002 SCREW HOOK 160 MM 050002 CABLE F. PERCH GUARD - 50M 001068	571
25 SCREW HOOK 160 MM 050002 25 CABLE F. PERCH GUARD - 50M 001068	128
SCREW HOOK 160 MM 050002 CABLE F. PERCH GUARD - 50M 001068	372
25	237
CABLE F. PERCH GUARD - 100M 00106	347
	355
26 POULTRY PERCH GUARD 001050	392
27 START CUP FOR METAL VALVE 022019	<b>∂</b> 11
28 DUPLEX CABLE CLAMP ST.ST 3MM 001069	945
29 PRESS. REGULATOR LOW PRESSURE F/PROFILE 022060	356
30 HOLDER GREY 12201	794
31 ALUMINIUM PROFILE 3M 02206	576
32 HANGER FOR PROFILE 022060	348
33 METAL COUPLING FOR ALUMINIUM PROFILE 02206	704



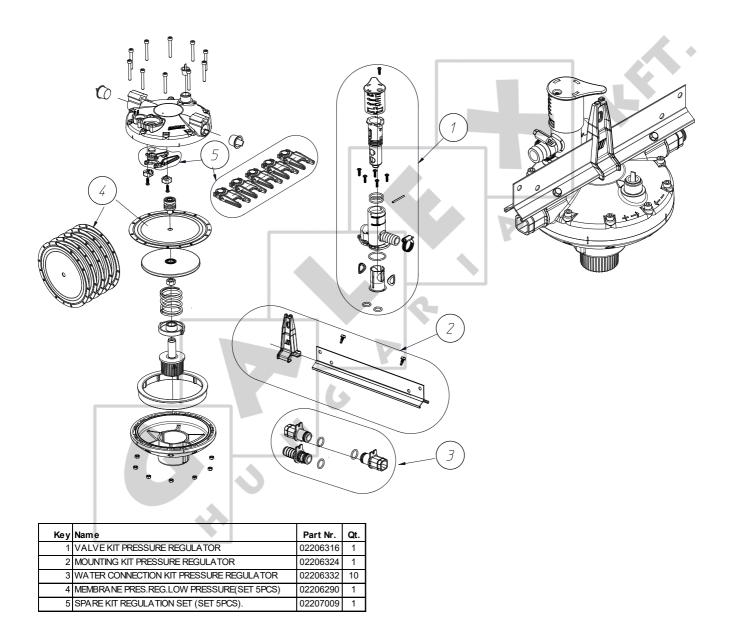




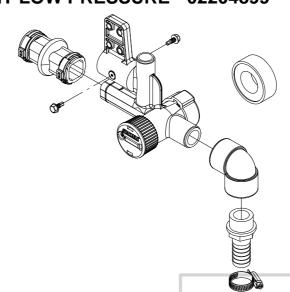
# PRESSURE REGULATOR LOW PRESSURE - 02204890



# PRESS. REGULATOR LOW PRESSURE FOR PROFILE - 02207025



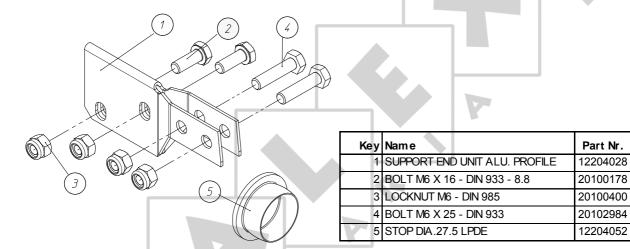
# **END UNIT LOW PRESSURE - 02204899**



# **MOUNTING KIT END UNIT FOR PROFILE - 02001623**

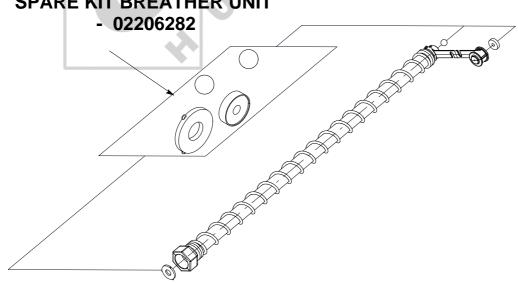
Qt.

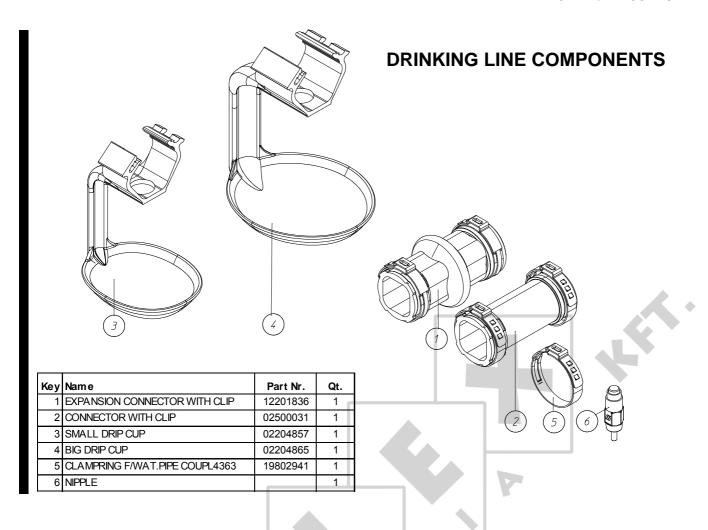
2



# **BREATHER UNIT 450 MM - 02205128**

SPARE KIT BREATHER UNIT



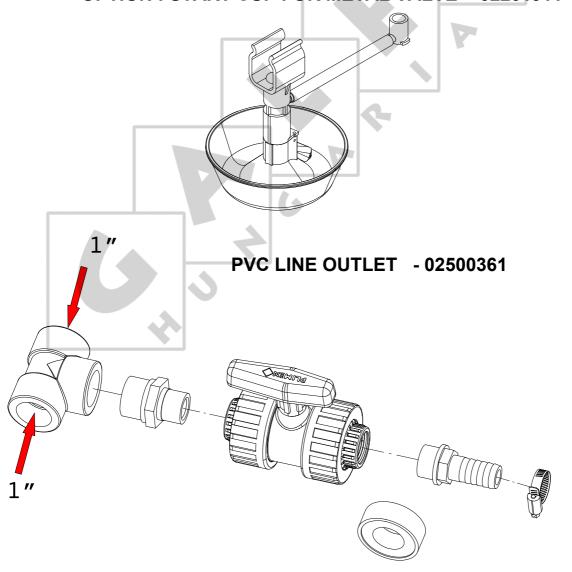


# **HOTSPARE SET**

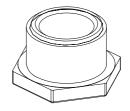
	Name	Number	Qt.	Qt.
			NIPPLE	NIPPLE KEY 12201935
	FS 130 P	02204949	10	1
	FS 130 P	02206904	300	1
	FS 80 P	02204956	10	1
	FS 80 P	02206920	300	1
ſ	FS 130 M	02204964	10	1
	FS 130 M	02206912	300	1
	FS 80 M	02204972	10	1
	FS 80 M	02206928	300	1
	VT 130 M	02204980	10	1
	VT 130 M	02206936	300	1
	VT 80 M	02204998	10	1
	VT 80 M	02206944	300	1



**OPTION: START CUP FOR METAL VALVE - 02201911** 

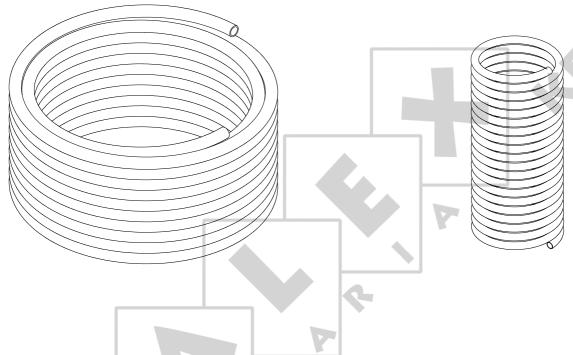


**PVC STOP 1" - 02500536** 

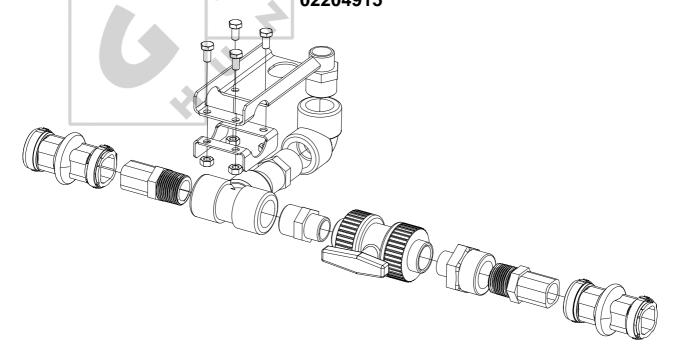


WATER HOSE DIA. 3/4" - 50M - 02001575

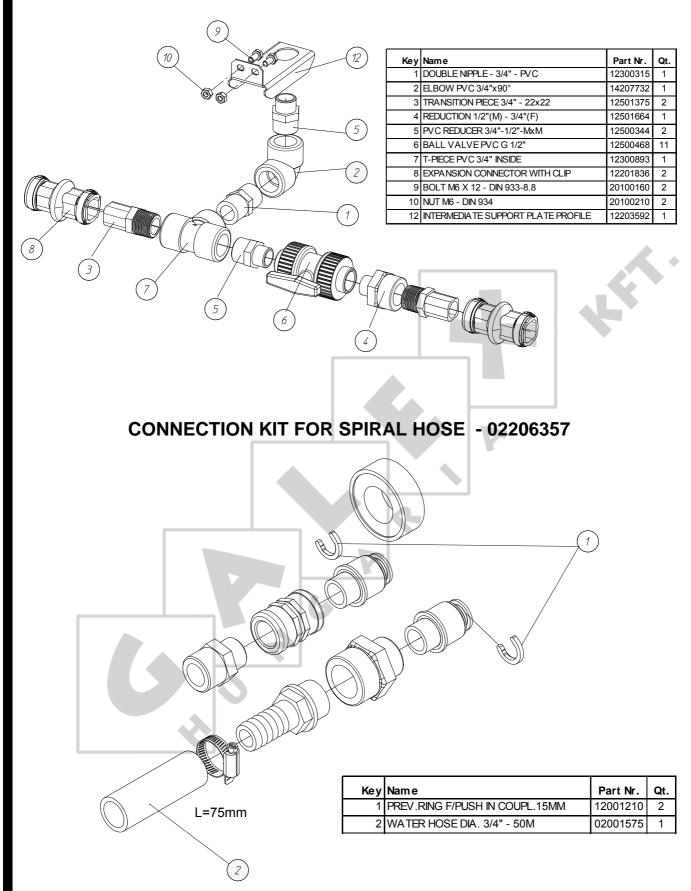
# SPIRAL HOSE Ø12.5XØ15 LG = 9M - 02001113



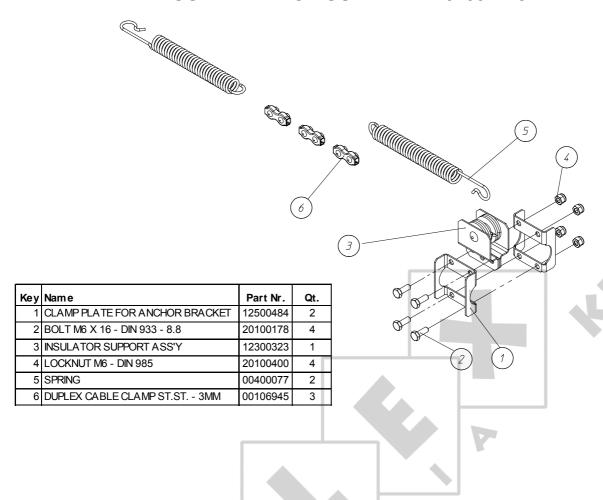
OPTION: INTERMEDIATE SHUT OFF VALVE - LOW PRESSURE-02204915



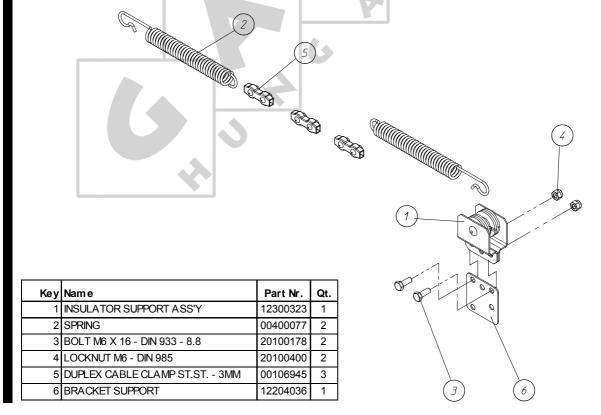
#### **OPTION: INTERMEDIATE SHUT-OFF VALVE LP F/PROFILE- 02206672**



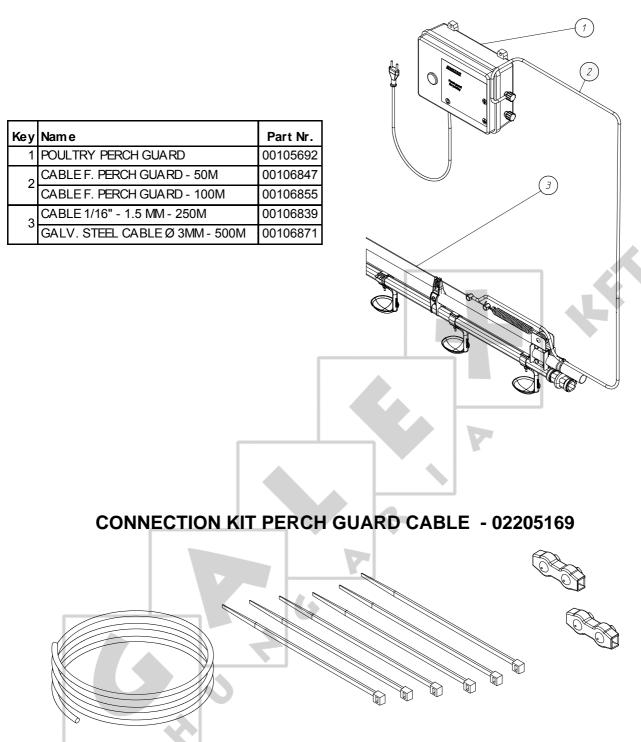
#### **POULTRY PERCH GUARD KIT - 02001428**



# OPTION: PERCH GUARD KIT DRINKING SYSTEM F/PROFILE - 02001615



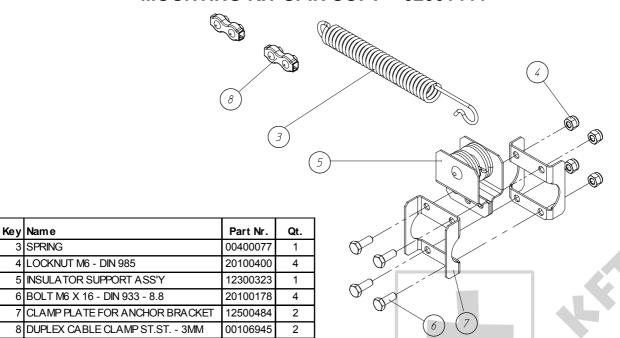
# **OPTION: POULTRY PERCH GUARD**



SPIN SOFT 50M - 00106484 SPIN SOFT 25M - 00106492

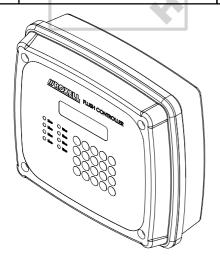


# **MOUNTING KIT SPIN SOFT - 02001444**



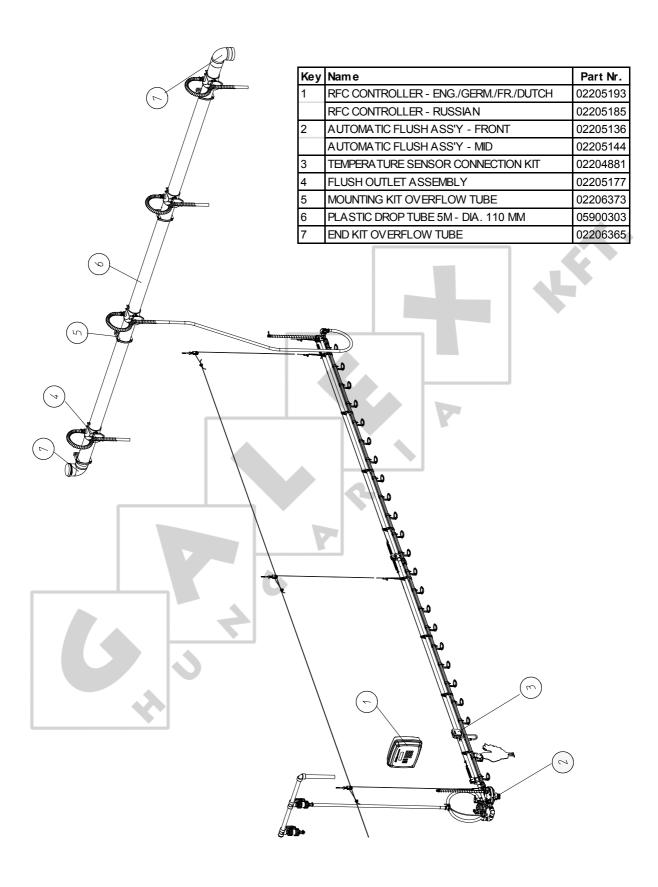
# MOUNTING KIT SPIN SOFT FOR PROFILE- 02001607

Key	Name	Part Nr.	Qt.
11	INSULATOR SUPPORT ASS'Y	12300323	1
2	BRACKET SUPPORT	12204036	1
3	SPRING	00400077	1
4	LOCKNUT M6 - DIN 985	20100400	2
5	BOLT M6 X 16 - DIN 933 - 8.8	20100178	2
6	DUPLEX CABLE CLAMP ST.ST 3MM	00106945	2

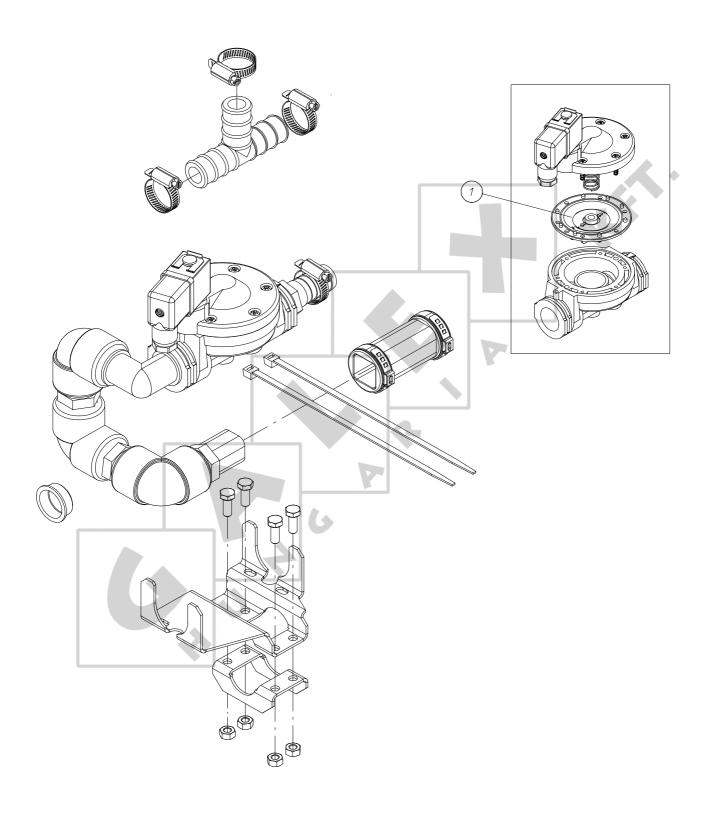


RFC CONTROLLER ENG./GERM./FR./DUTCH - 02205193
RFC CONTROLLER RUSSIAN - 02205185

# **LAYOUT**

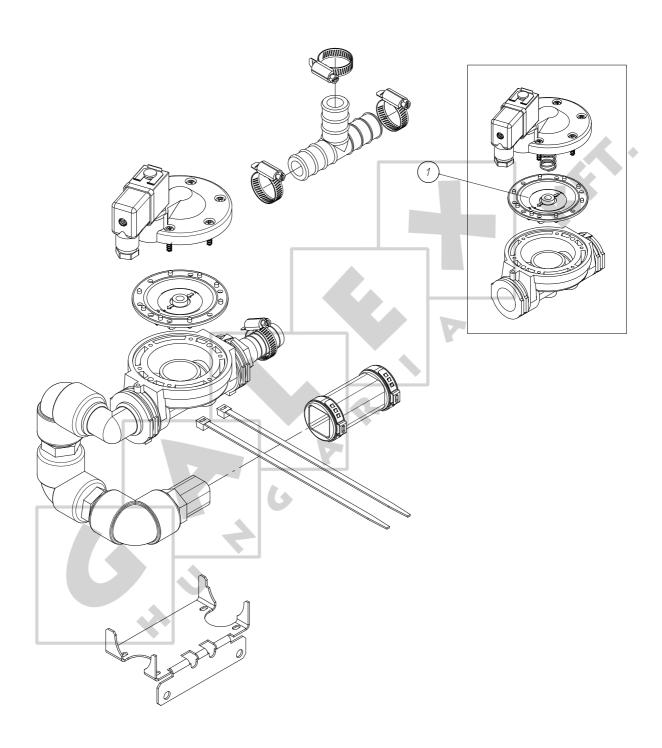


# **AUTOMATIC FLUSH ASS'Y - FRONT - 02205136**



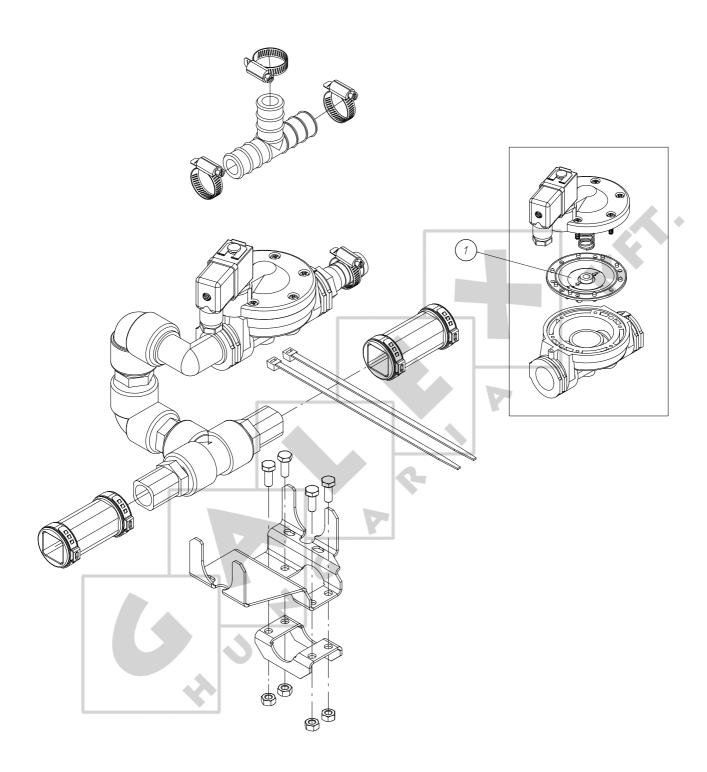
Key	Name	Part Nr.	Qt.
1	MEMBRANE FOR FLUSH VALVE	12203683	1

# **AUTOMATIC FLUSH ASS'Y- FRONT FOR PROFILE - 02206680**



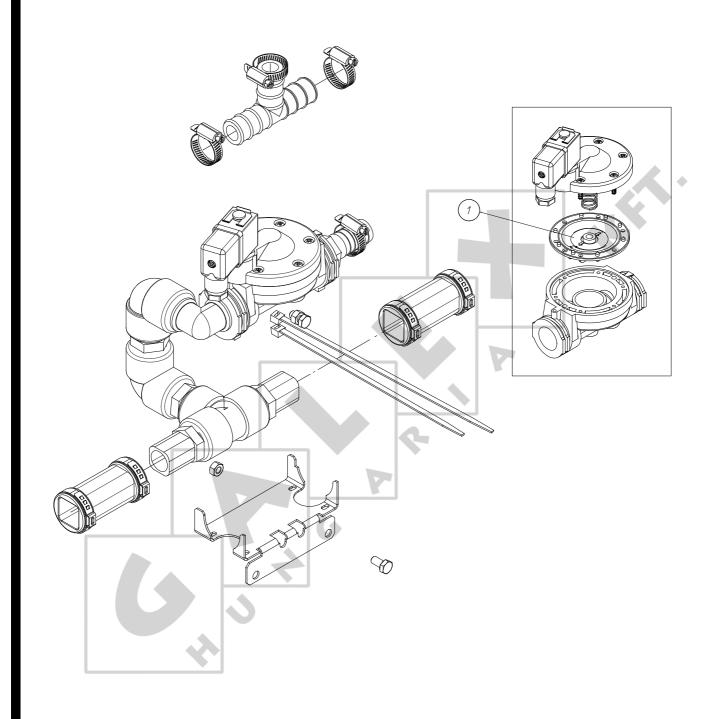
Key	Nam e	Part Nr.	Qt.
1	MEMBRANE FOR FLUSH VALVE	12203683	1

# **AUTOMATIC FLUSH ASS'Y - MID LINE- 02205144**

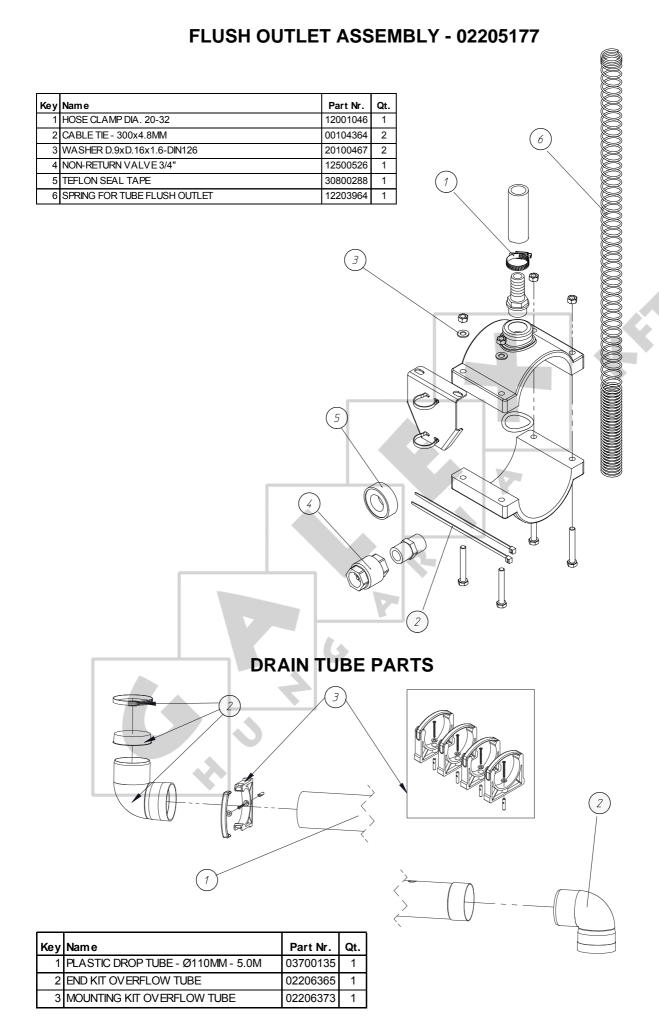


Key	Nam e	Part Nr.	Qt.
1	MEMBRANE FOR FLUSH VALVE	12203683	1

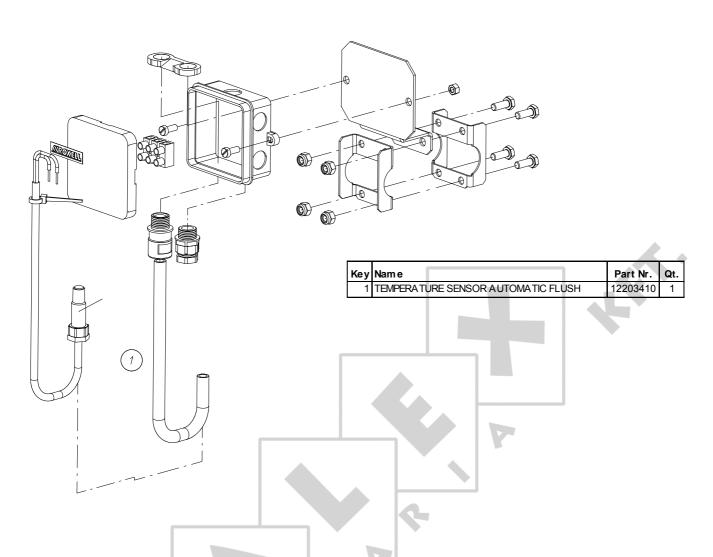
# **AUTOMATIC FLUSH ASS'Y - MID FOR PROFILE - 02206688**



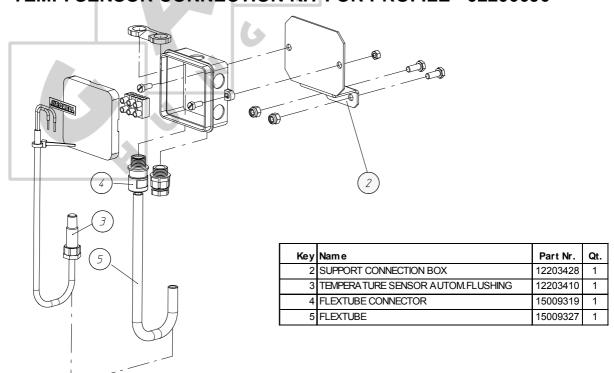
Key	Nam e	Part Nr.	Qt.
1	MEMBRANE FOR FLUSH VALVE	12203683	1



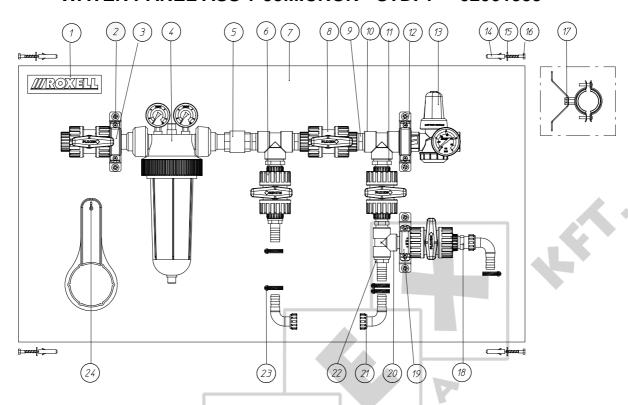
# **TEMPERATURE SENSOR CONNECTION KIT - 02204881**



# **TEMP. SENSOR CONNECTION KIT FOR PROFILE - 02206696**

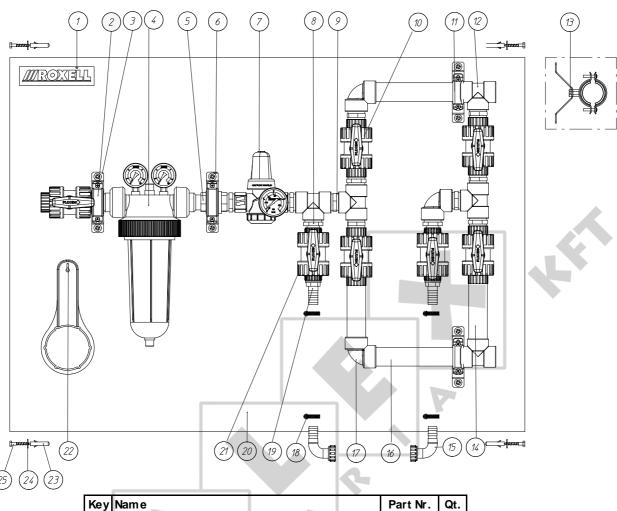


# WATER PANEL ASS'Y 100MICRON - STD. 1" - 02001485 WATER PANEL ASS'Y 55MICRON - STD. 1" - 02001559



Key	Name	Part Nr.	Qt.
1	ROXELL DECAL	10101129	1
2	SCREW DIA.6.3X16 - PARCKER	20101895	6
3	TUBE CLAMP - ø38-45	12500880	2
4	FILTER SET 100µ WITH PRESSURE GAUGES	02001451	1
	FILTER SET 55µ W/PRESSURE GAUGES	02001543	1
6	BALL VALVE PVC G 3/4"	12500153	3
7	MOUNTING PLATE FOR WATERPANEL-SMALL	12500872	1
8	BALL VALVE PVC G 1"	02500528	2
9	DOUBLE NIPPLE 1" OUTSIDE THREAD	12500583	4
10	T-PIECE 1" x 1" x 1"	12500575	2
11	REDUCING PIECE 1"x3/4" (MxM)	12500567	2
12	SUPPORT PLATE FOR WATER PANEL	12500591	3
13	PRESSURE RESTRICTOR 3 BAR 1" WITH GAUGE	02001477	1
14	PLUG DIA. 8 MM - NYLON	20109187	4
15	WASHER 6.4x18x1.5-DIN 9021	20100756	4
16	HEXA G.WOOD SCREW 6X40-DIN 571	20102026	4
17	BOLT M8X16-DIN 933-8.8	20100228	3
18	DOUBLE NIPPLE - 3/4" - PVC	12300315	3
19	TUBE CLAMP ø28-35MM	14204283	1
20	T-PIECE PV C 3/4" INSIDE	12300893	1
21	HOSE CONNECTOR 90° ø19 - 3/4"	12500203	3
22	HOSE CONNECTOR ø19 - 3/4"	12500211	2
23	HOSE CLAMP DIA. 20-32	12001046	5
24	SQUARE HOOK Ø3x40x16MM	20110235	1

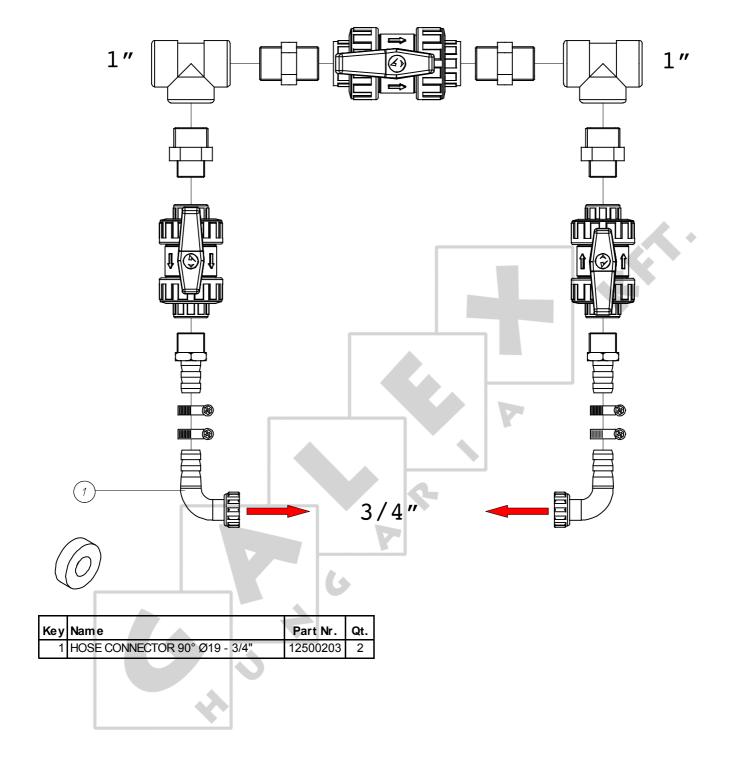
# PRE ASS. WATER PAN. 100MICRON-1" F/DIV.HOUSES - 02001493 PRE ASS. WATER PAN. 55MICRON-1" F/DIV.HOUSES - 02001567



Key	Nam e	Part Nr.	Qt.
1	ROXELL DECAL - 160X40	10101129	1
2	TUBE CLAMP - Ø38-45	12500880	2
3	SUPPORT PLATE FOR WATER PANEL	12500591	4
4	FILTER SET 100µ WITH PRESSURE GAUGES	02001451	1
	FILTER SET 55µ W/PR. GAUGES	02001543	1
6	SCREW Ø6.3X16 - PARCKER	20101895	8
7	PRESSURE RESTRICTOR 3 BAR 1" WITH GAUGE	02001477	1
8	REDUCING PIECE 1"X3/4" (MXM)	12500567	2
9	DOUBLE NIPPLE 1" OUTSIDE THREAD	12500583	10
10	BALL VALVE PVC G 1"	02500528	5
11	TUBE CLAMP Ø28-35	14204283	2
12	T-PIECE 1"X1"X1"	12500575	5
13	BOLT M8X16 - DIN 933-8.8	20100228	4
14	PVC TUBE LG=150 W/ G1"(2X)	12500849	2
15	HOSE CONNECTOR 90° Ø19 - 3/4"	12500203	2
16	PVC TUBE L=250 W/ G1"(2X)	12500831	2
17	ELBOW 90°X1"	12500815	3
18	HOSE CLAMP Ø20-32MM	12001046	4
19	HOSE CONNECTOR Ø19 - 3/4"	12500211	2
20	MOUNTING PLATE FOR WATERPANEL-LARGE	12500856	1
21	BALL VALVE PVC G 3/4"	12500153	2
22	SQUARE HOOK Ø3X40X16	20110235	1
23	PLUG Ø8MM - NYLON	20109187	4
24	HEXAG.WOOD SCREW 6X40-DIN 571	20102026	4
25	WASHER 6.4X18X1.5 - DIN 9021	20100756	4

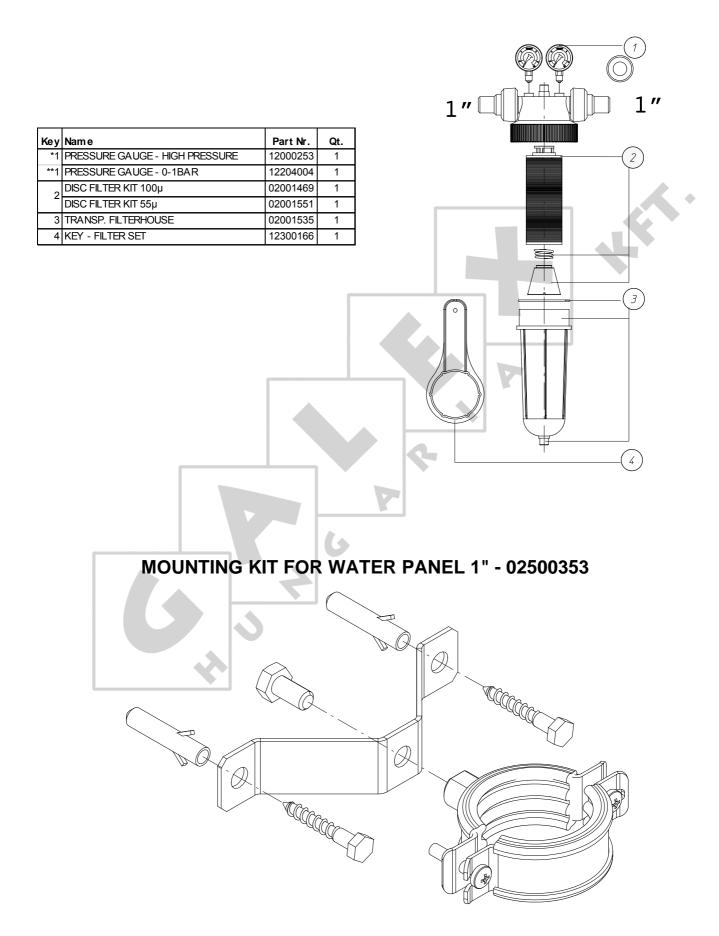
ROXELL - 022 - 4215 Swii'Flo™ - COMPONENTS

### **PVC BYPASS SET - 02500379**



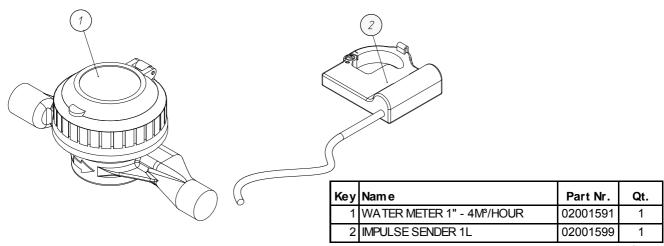
Swii'Flo™ - COMPONENTS ROXELL - 022 - 4215

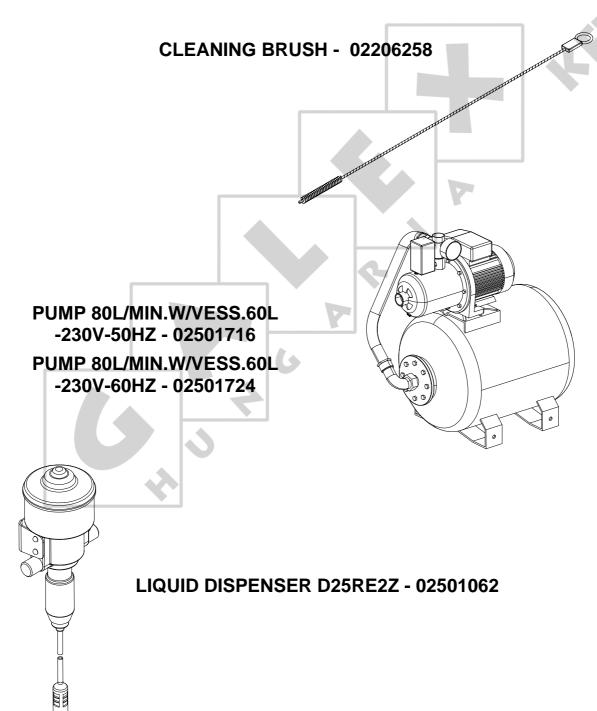
FILTER SET 100 MICRON W/PR. GAUGES - 02001451\*
FILTER SET 55 MICRON W/PR. GAUGES - 02001543\*
FILTER SET 100 MICRON-PR.GAUGES 1BAR - 02206544\*\*
FILTER SET 55 MICRON-PR.GAUGES 1BAR - 02206552\*\*



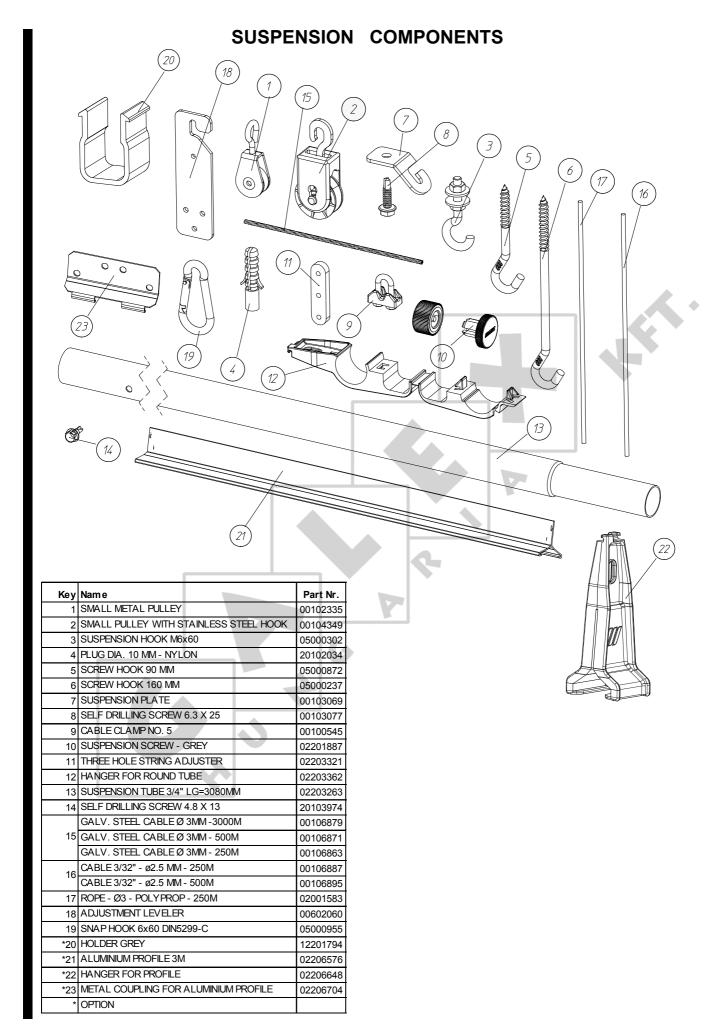
ROXELL - 022 - 4215 Swii'Flo™ - COMPONENTS





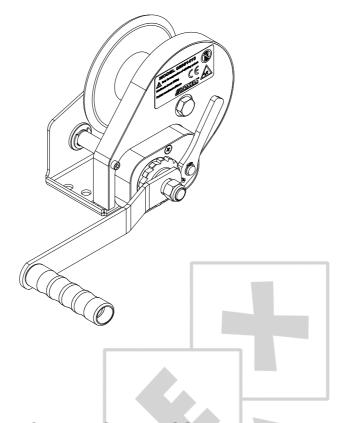


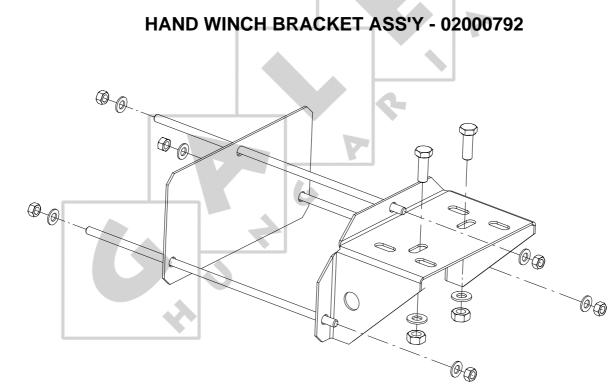
Swii'Flo™ - COMPONENTS ROXELL - 022 - 2416



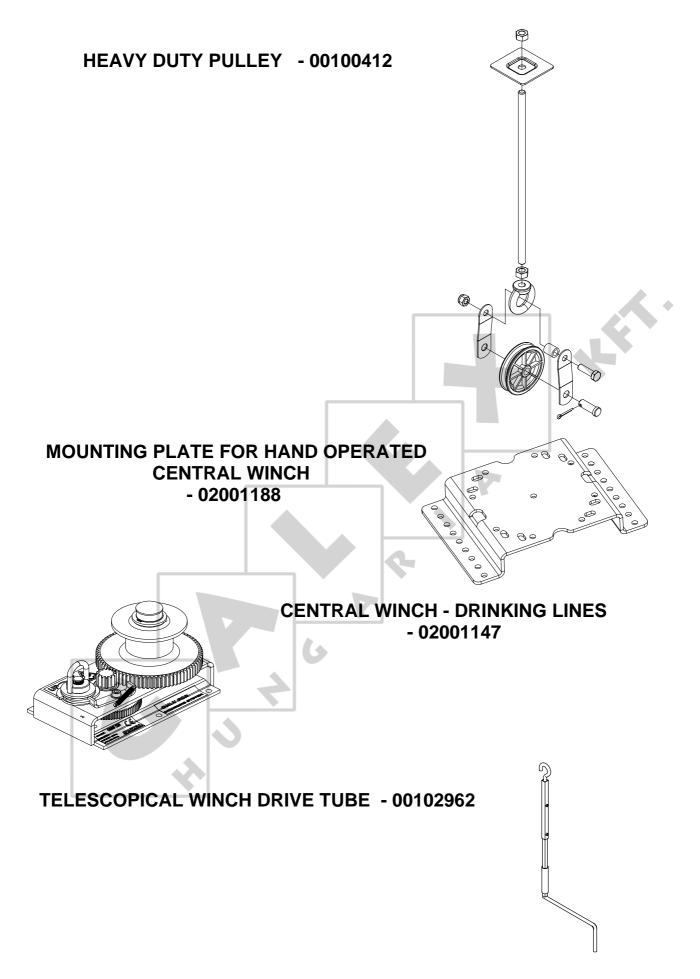
ROXELL - 022 - 4215 Swii'Flo™ - COMPONENTS

### HAND WINCH - 02001410



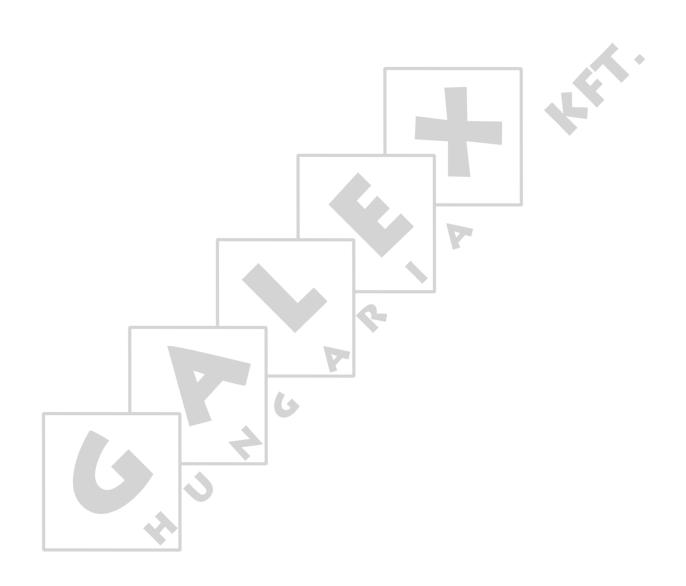


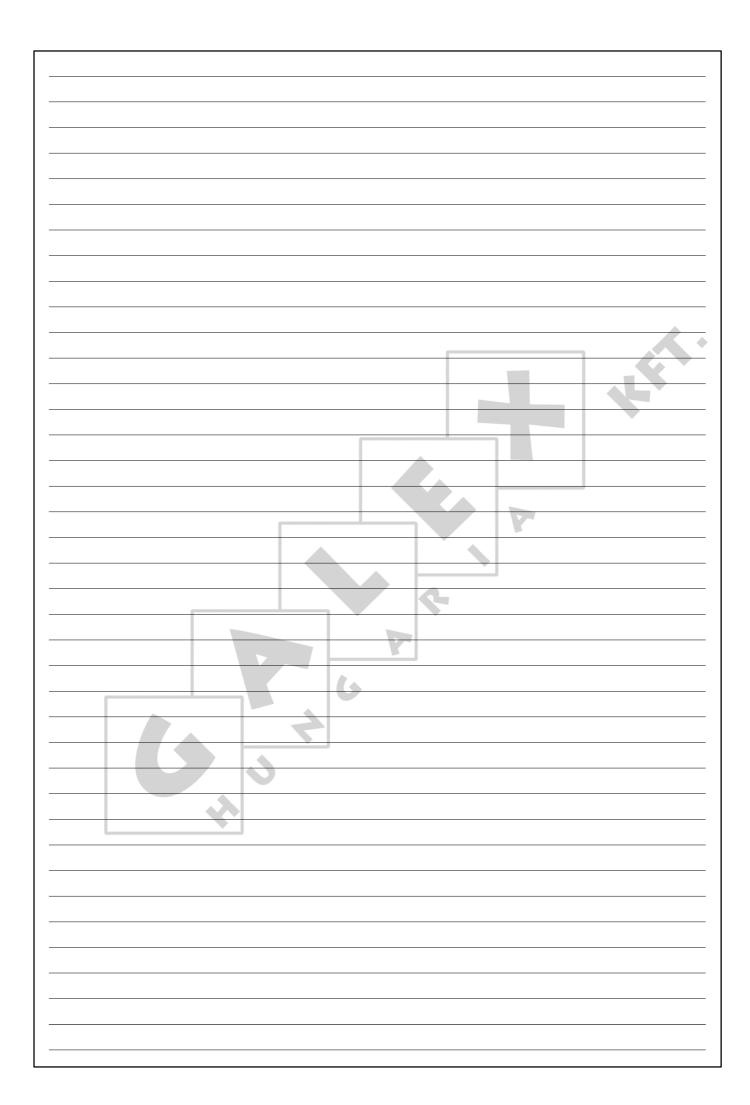
Swii'Flo™ - COMPONENTS ROXELL - 022 - 4215



### **PART III**

## **INSTALLATION INSTRUCTIONS**





## HAND WINCH GENERAL SAFETY RULES

Handlier voor drinklijnen voor pluimvee Hand winch for drinking lines for poultry



#### **IMPORTANT**

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

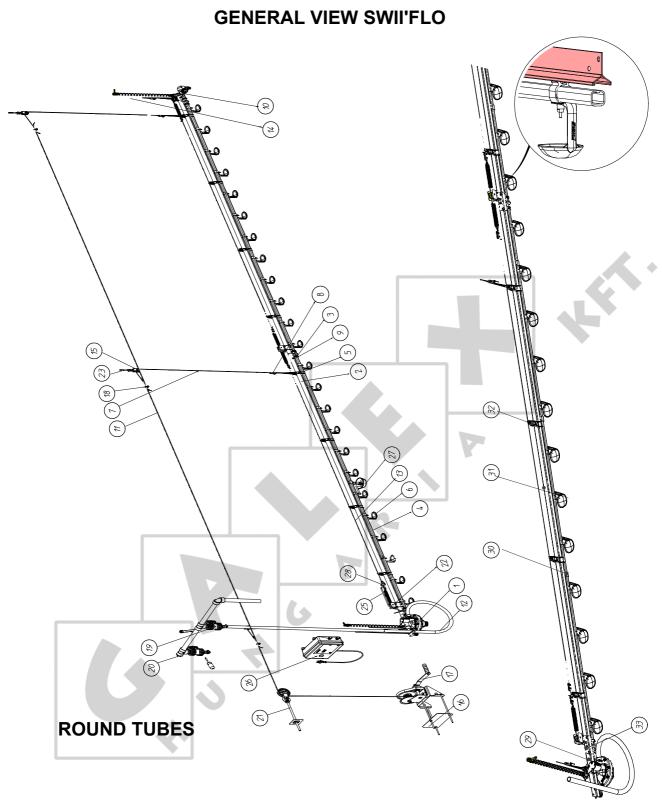
- 1. PAY ATTENTION when WINCHING UP or WINCHING DOWN the drinking lines.
  - STOP the handling in case of any malfunctioning.
  - NEVER stand UNDERNEATH the load when winching up or putting down the drinking lines.
- NEVER ALLOW UNAUTHORIZED PERSONS ENTER the house during your absence.
- **3. ALWAYS** choose a location which stands the maximum lifting capacity of the hand winch.
- **4. Only** use the hand winch for suspension of a **ROXELL drinking line**.
- 5. Put the hand winch
  - in a location where there's less passage.
  - so that the user **doesn't stand underneath the load** while handling.
  - so that the user sees the load while handling.
  - at a well-lit, dry, roofed and good accessible place.
  - on a solid wall.
  - so that the handle can be easily used.
  - so that the warning marking is ALWAYS visible.
- 6. Only use the supplied mounting kit for fixing on the wall.
- 7. ALWAYS check the condition of the hand winch and the cable before operating. A ravelled, kinked or damaged cable must be replaced IMMEDIATELY. A loose or damaged hand winch must be replaced IMMEDIATELY.
- 8. Don't use water to clean the hand winch.



**FORBIDDEN**: **NEVER** use the hand winch to lift persons.



**DANGER**: Getting jammed by the handle may cause **SERIOUS INJURIES**.

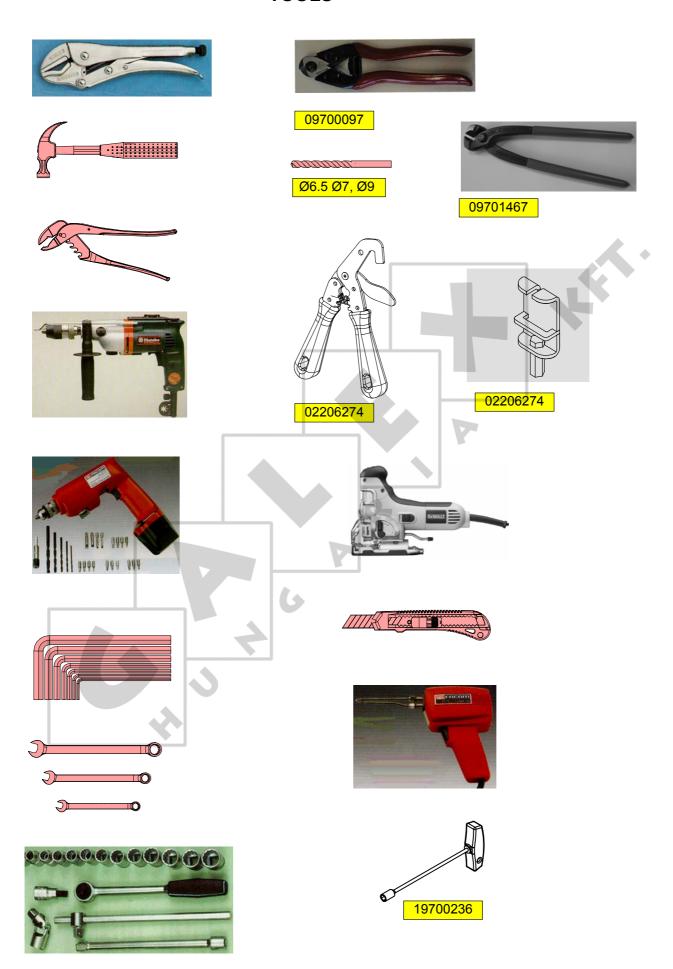


**ALUMINIUM PROFILE** 

### PRODUCT NUMBERS SWII'FLO

Key	Nam e	Part Nr.	
1	PRESSURE REGULATOR LOW PRESSURE	02204873	
2	SUSPENSION TUBE 3/4" LG=3080MM	02203263	
3	EXPANSION CONNECTOR WITH CLIP	12201836	
4	TUBE WITH NIPPLES	see table	
5	HANGER FOR ROUND TUBE	02203362	
6	SMALL DRIP CUP	02204857	
	BIG DRIP CUP	02204865	
7	ROPE - Ø3 - POLYPROP - 250M	02001583	
8	THREE HOLE STRING ADJUSTER	02203321	
0	SUSPENSION SCREW - GREY	02201887	
9	SELF DRILLING SCREW 4.8 X 13	20103974	
10	END UNIT LOW PRESSURE	02204899	
11	CABLE ø 3MM	02001154	
12	WATER HOSE DIA. 3/4" - 50M	02001575	
13	CABLE 1/16" - 1.5 MM - 250M	00106839	
13	CABLE 1/16" - 1.5 MM - 500M	00106831	
14	BREATHER UNIT 450MM	02205128	
15	SMALL PULLEY WITH STAINLESS STEEL HOOK	00104349	
15	SMALL METAL PULLEY	00102335	
16	HAND WINCH BRACKET ASS'Y	02000792	
17	HAND WINCH	02001410	
18	CABLE CLAMP NO. 5	00100545	
19	PVC LINE OUTLET	02500361	
20	PVC STOP 1"	02500536	
21	HEAVY DUTY PULLEY (METAL)	00702571	
22	POULTRY PERCH GUARD KIT	02001428	
23	SCREW HOOK 90 MM	05000872	
23	SCREW HOOK 160 MM	05000237	
25	CABLE F. PERCH GUARD - 50M	00106847	
25	CABLE F. PERCH GUARD - 100M	00106855	
26	POULTRY PERCH GUARD	00105692	
27	START CUP FOR METAL VALVE	02201911	
28	DUPLEX CABLE CLAMP ST.ST 3MM	00106945	
29	PRESS. REGULATOR LOW PRESSURE F/PROFILE	02206656	
30	HOLDER GREY	12201794	
31	ALUMINIUM PROFILE 3M	02206576	
32	HANGER FOR PROFILE	02206648	
33	METAL COUPLING FOR ALUMINIUM PROFILE	02206704	

### **TOOLS**



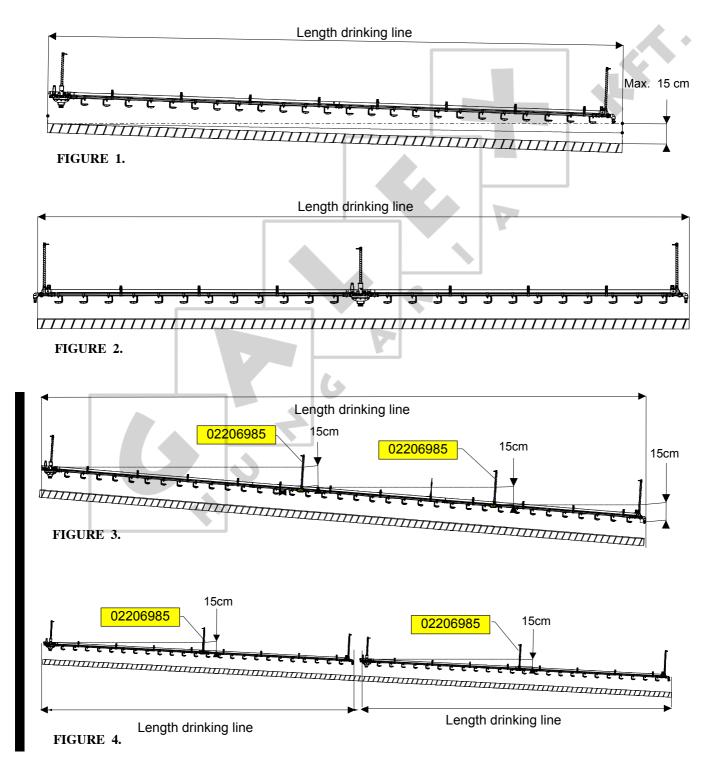
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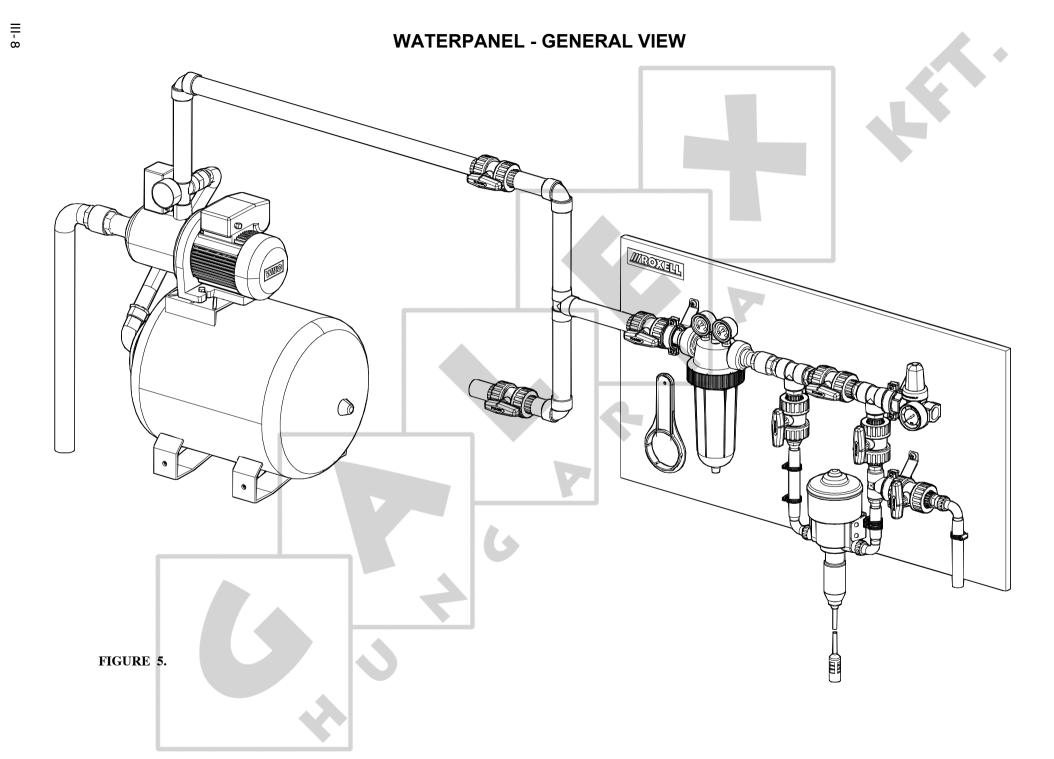
	General		Breeders		
Length drinking line	slope angle	Figure	Length drinking line	slope angle	Figure
difficing fine	Siope angle	rigare	drinking inic	Stope angle	riguie
0 tot 75m	< 15cm	1	0 tot 60m	< 15cm	1
0 tot 75m	> 15cm	3	0 tot 60m	> 15cm	3
> 75m	< 15cm	2	> 60m	< 15cm	2
> 75m	> 15cm	4	> 60m	> 15cm	4

For diameters refer to PART 1, 2.4. DIAMETER OF SUPPLYING TUBES.

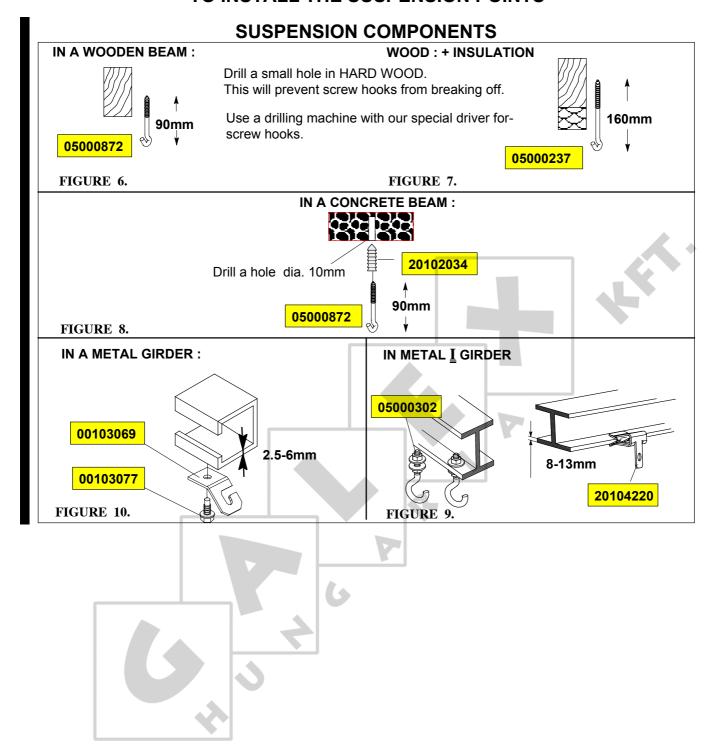
MAXIMUM 1 slope regulator / 50M: if not possibe, see Fig.4.

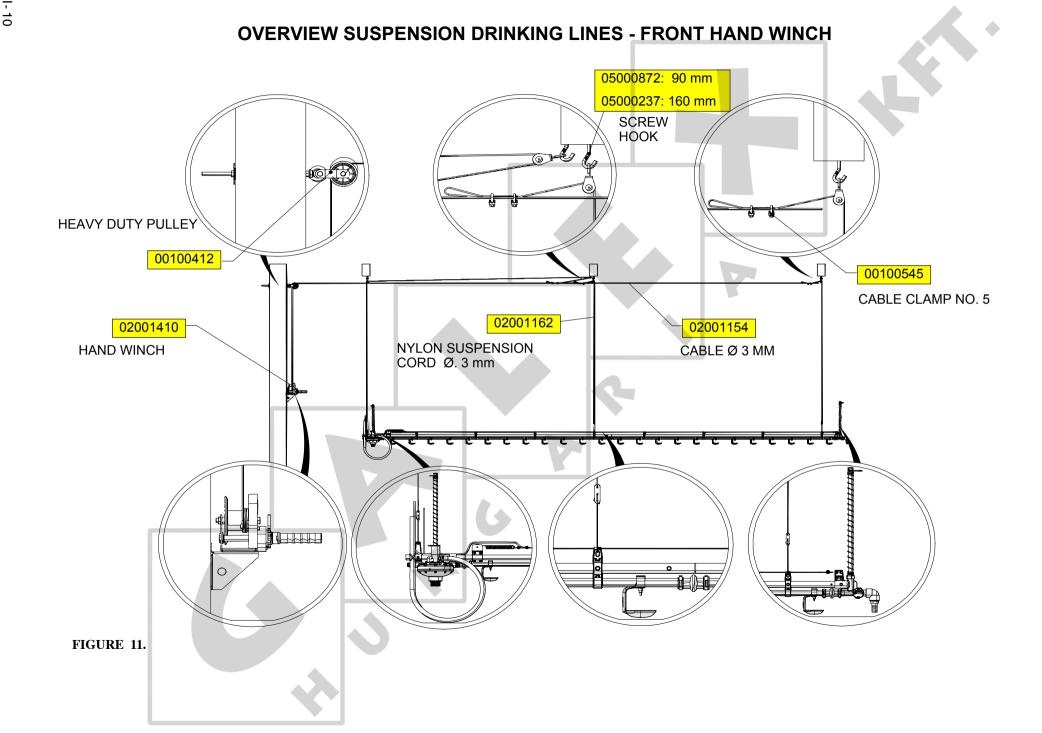
MAXIMUM 2 slope regulators / pressure regulator : if not possibe, see fig.4.



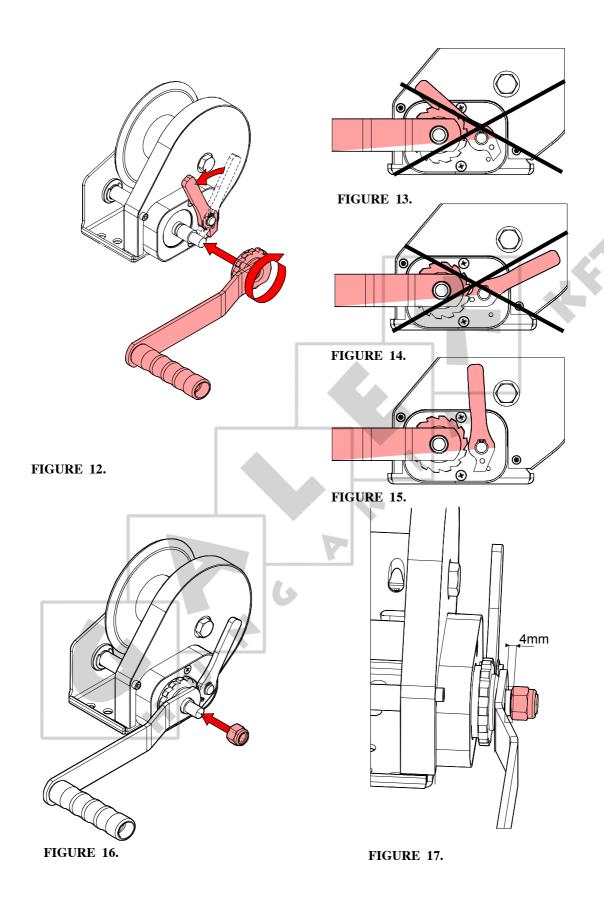


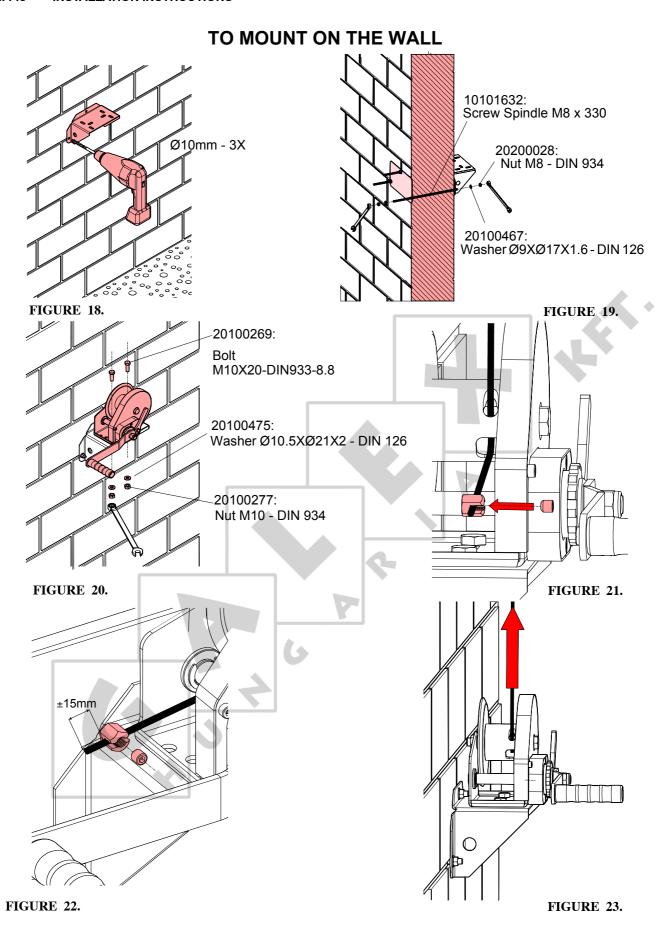
#### TO INSTALL THE SUSPENSION POINTS

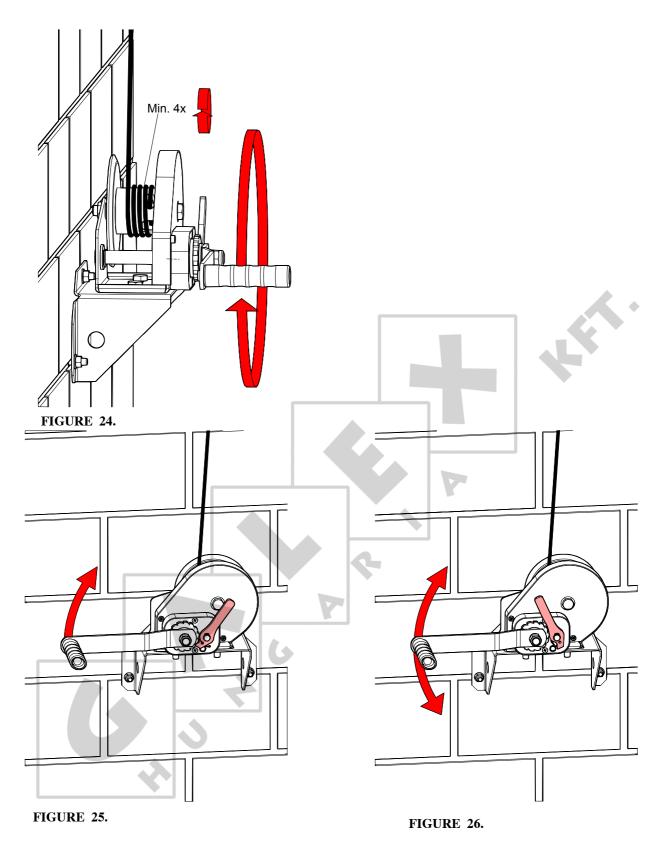


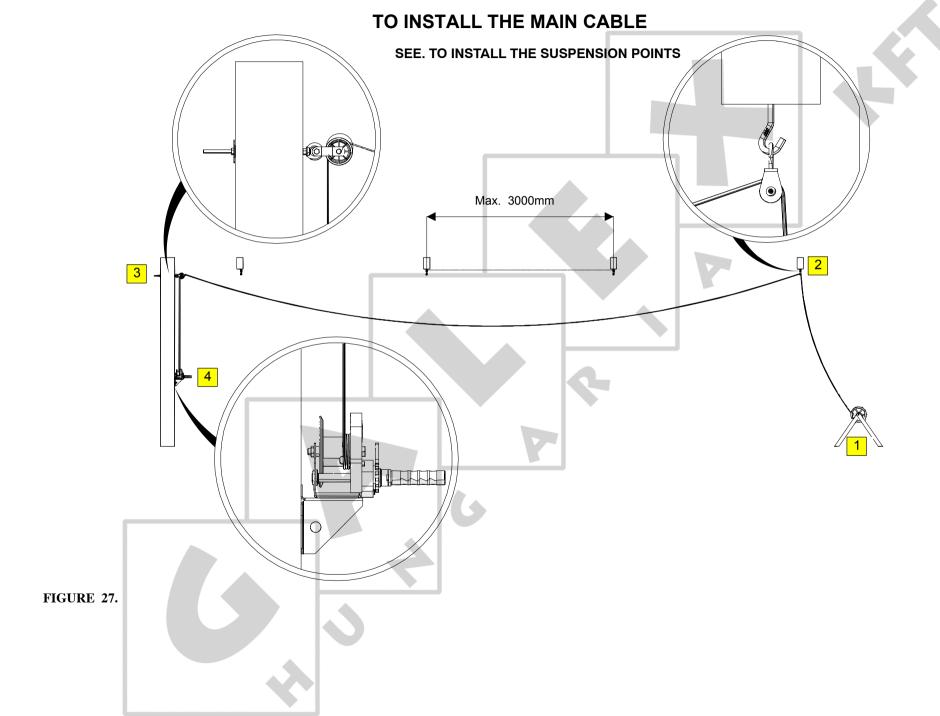


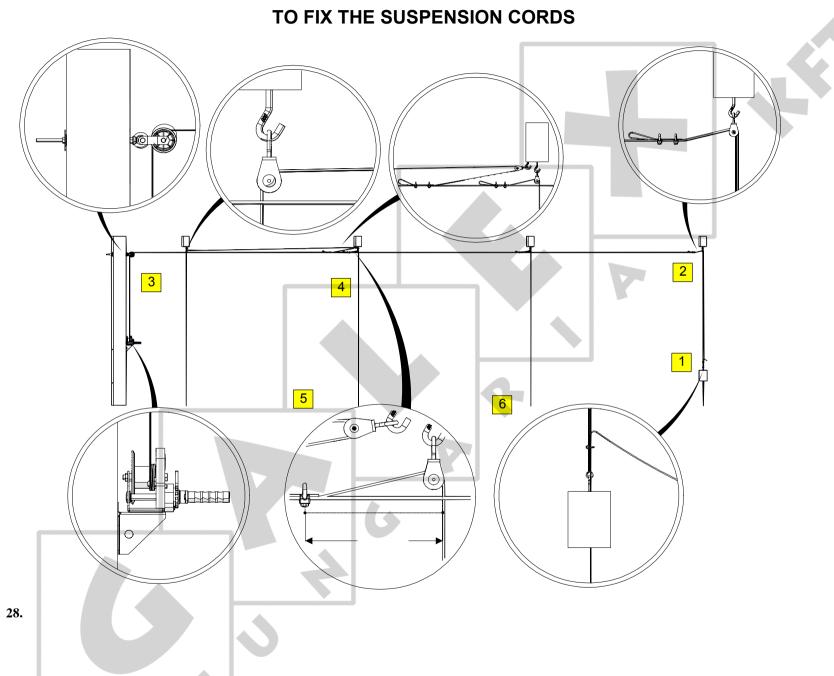
### TO PREPARE THE ASSEMBLY OF THE HAND WINCH











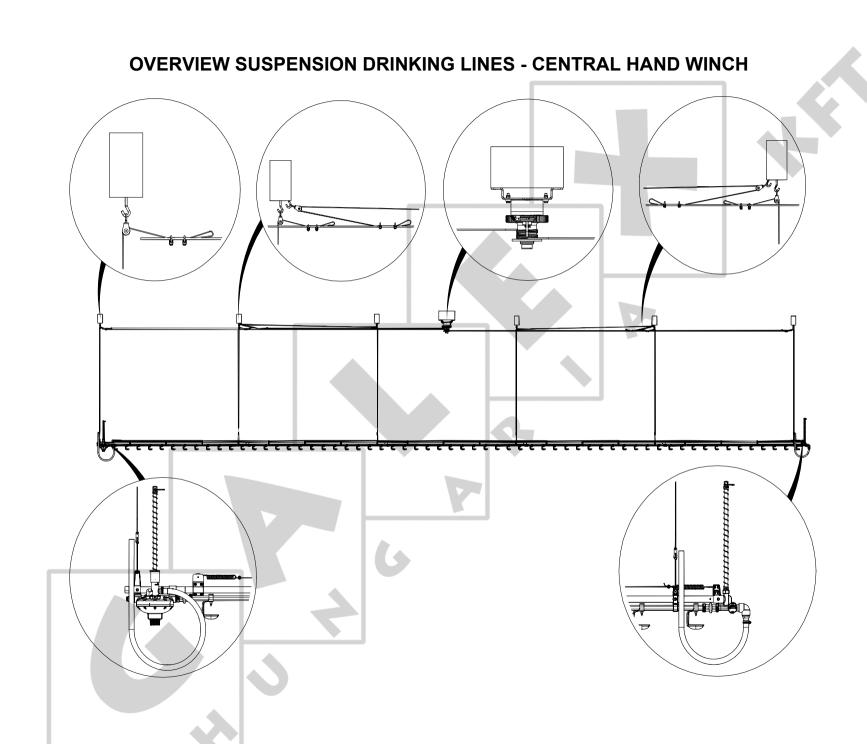
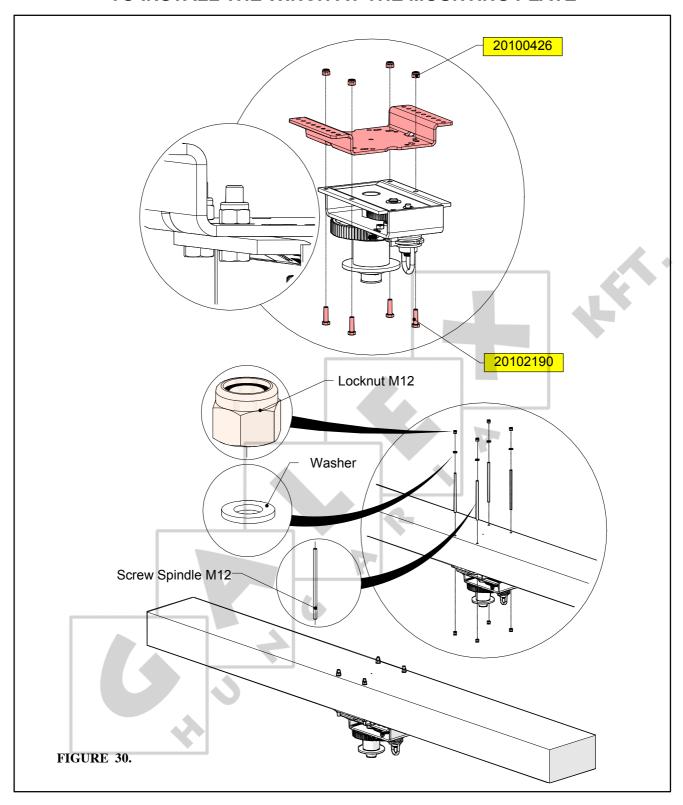
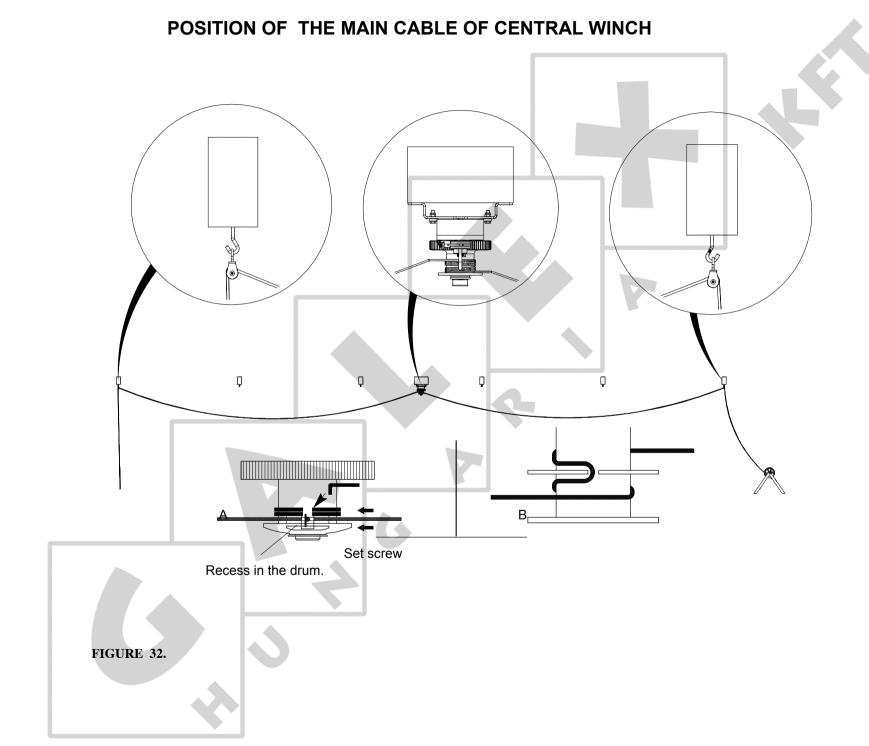


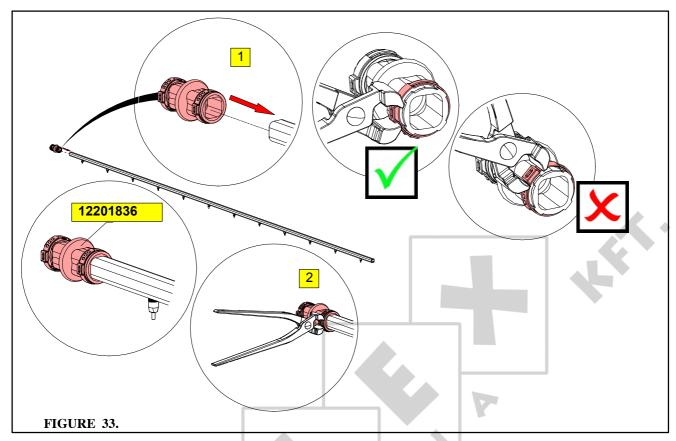
FIGURE 29.

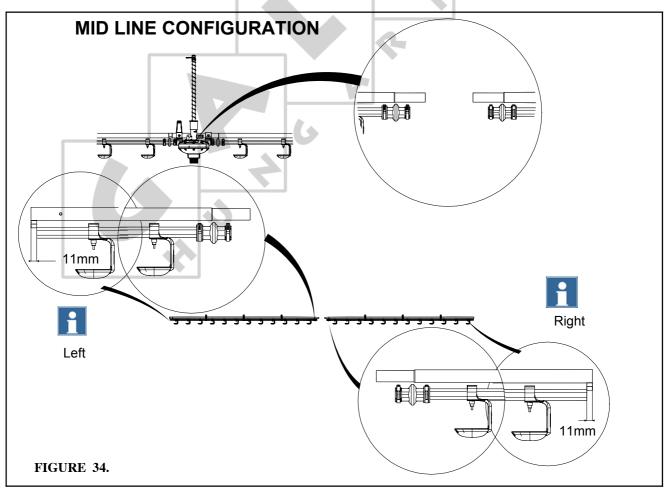
### TO INSTALL THE WINCH AT THE MOUNTING PLATE

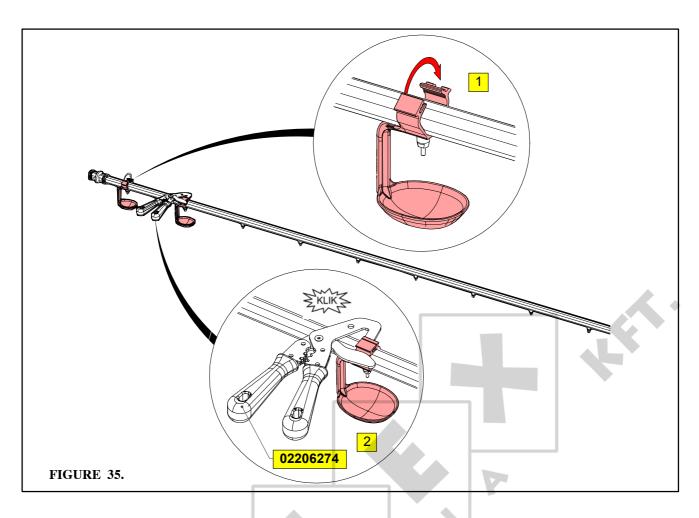


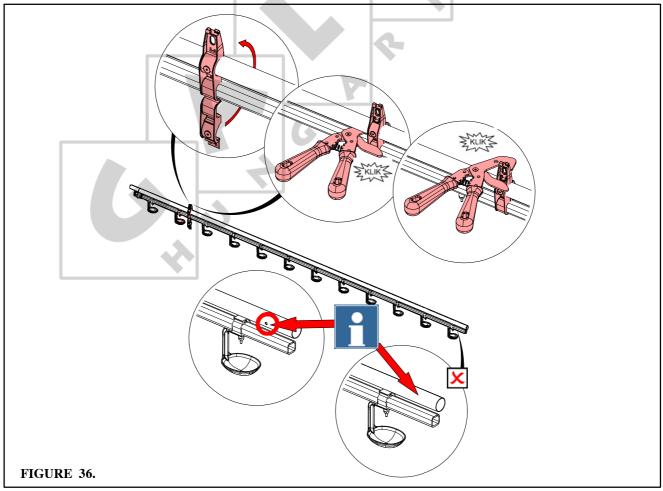


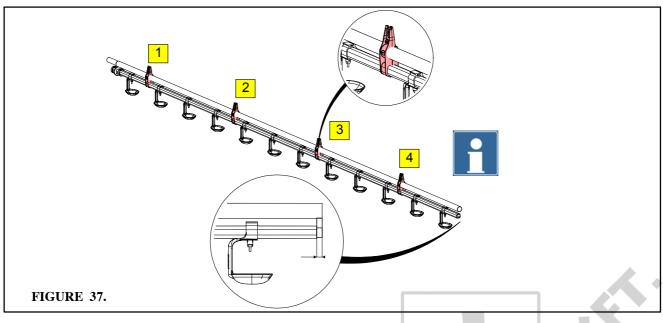
## TO INSTALL THE DRINKING LINE TO ASSEMBLE TUBE WITH CUPS

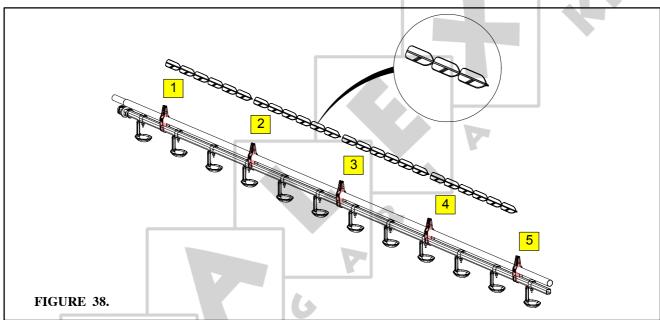


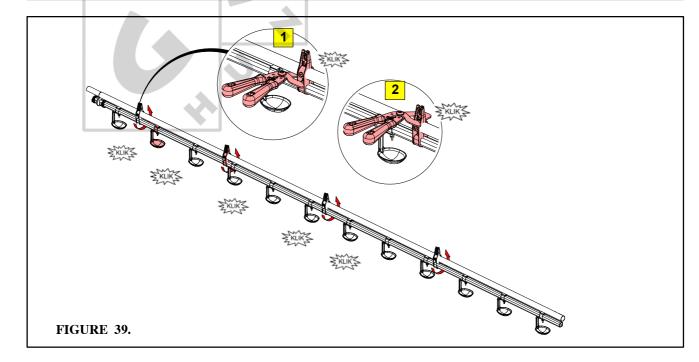




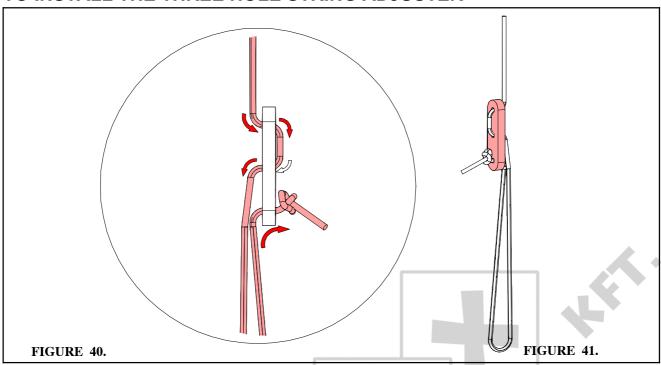




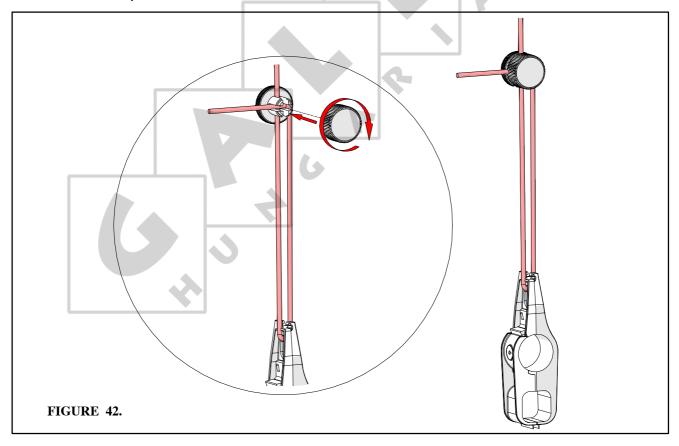




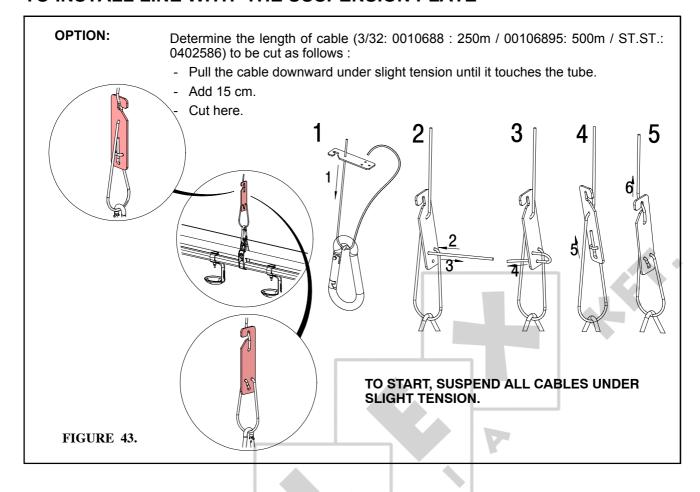
### TO INSTALL THE THREE HOLE STRING ADJUSTER



# TO INSTALL LINE WITH THE SUSPENSION SCREW (LINE ADJUSTING WITH FLOOR)

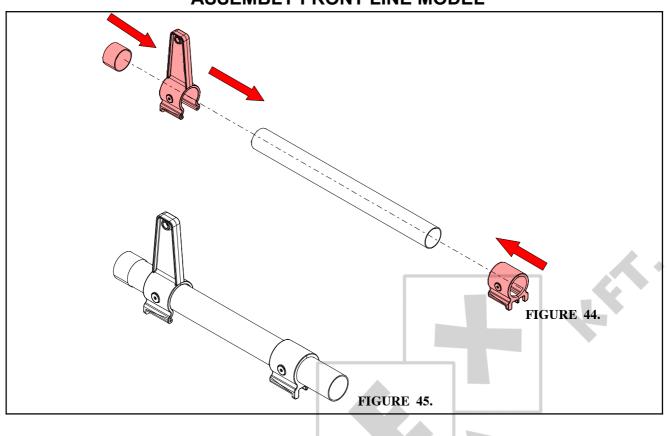


### TO INSTALL LINE WITH THE SUSPENSION PLATE

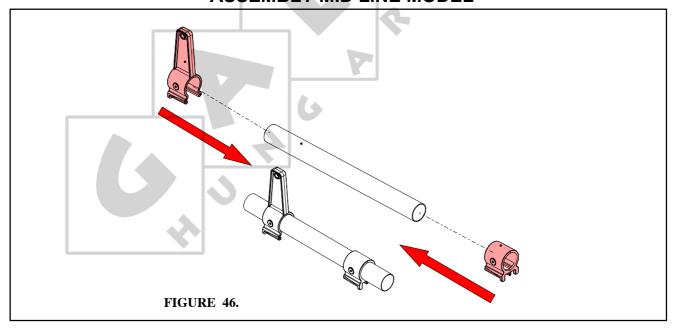


6

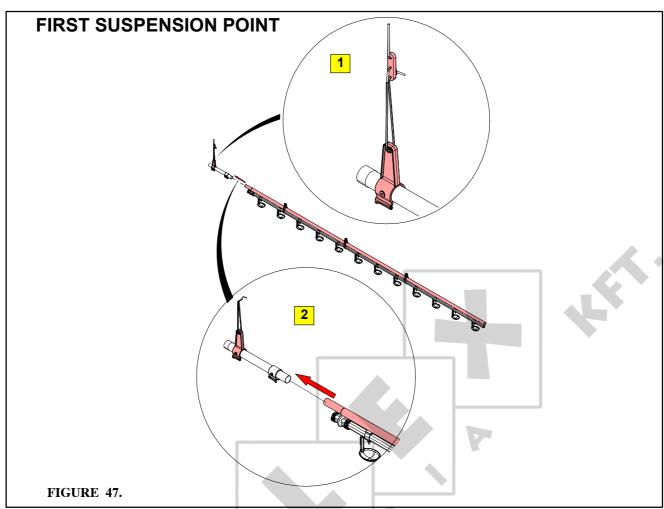
### **ASSEMBLY FRONT LINE MODEL**

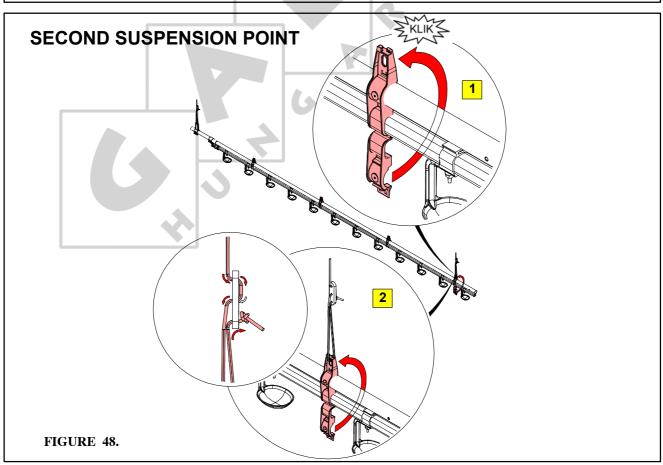


### **ASSEMBLY MID LINE MODEL**

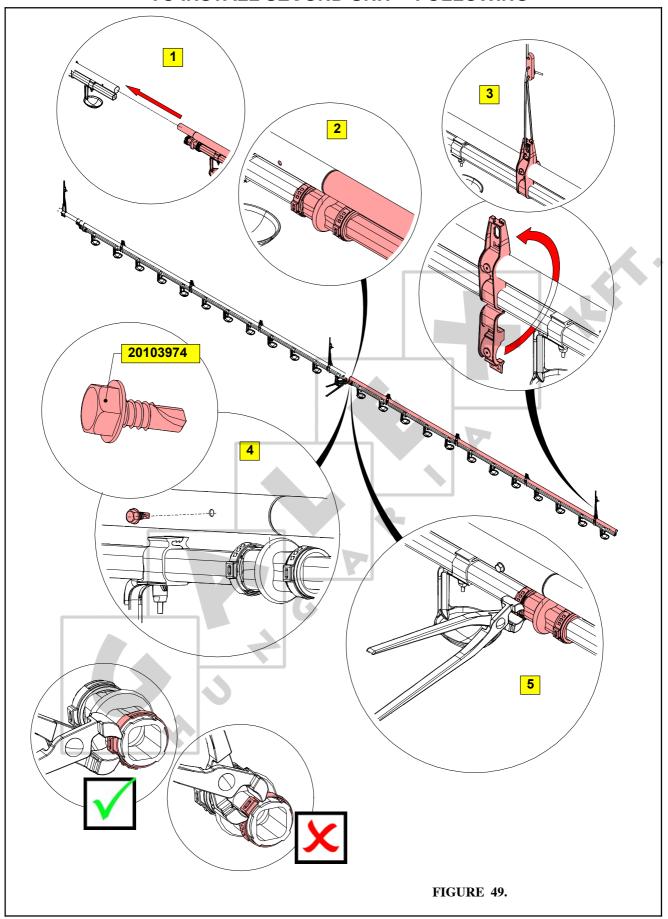


### TO START INSTALLATION OF DRINKING LINE

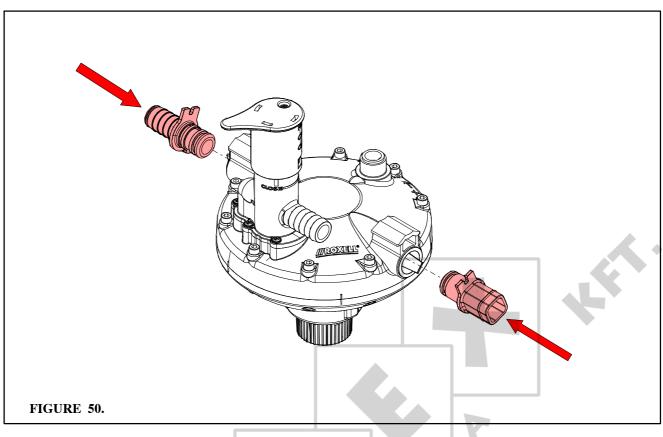


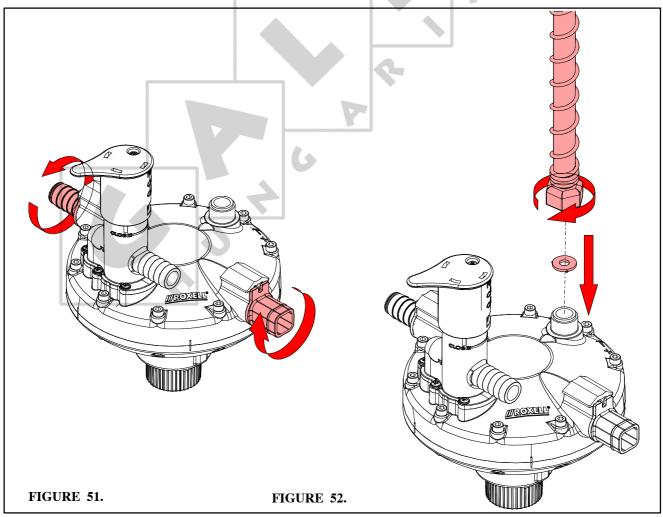


### TO INSTALL SECOND UNIT + FOLLOWING

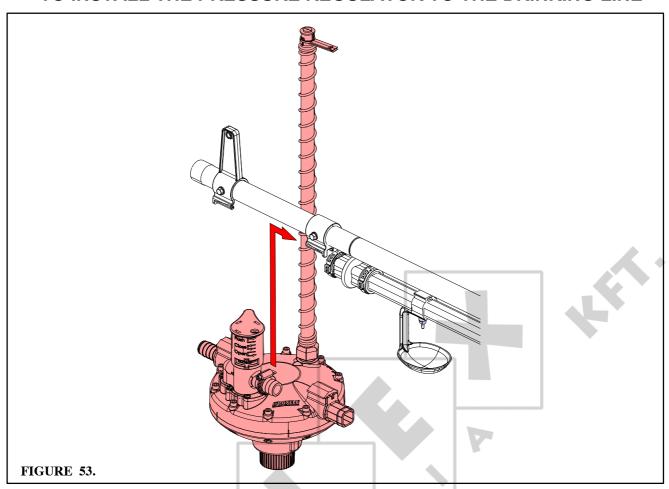


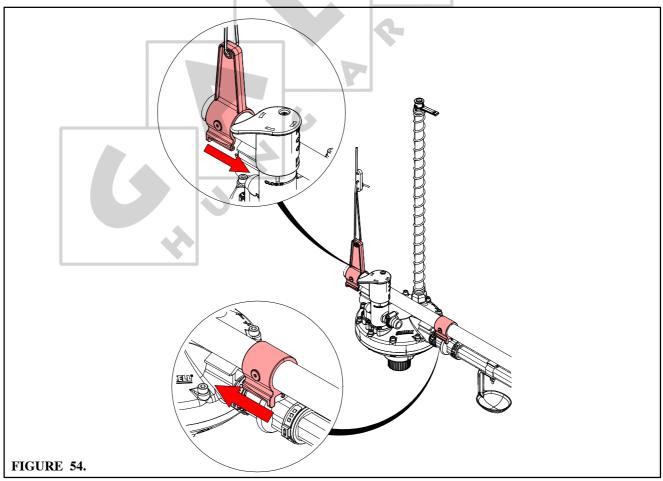
### TO INSTALL THE PRESSURE REGULATOR

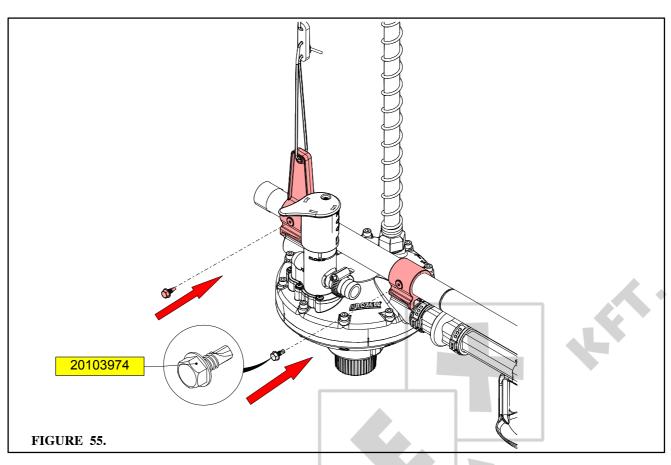


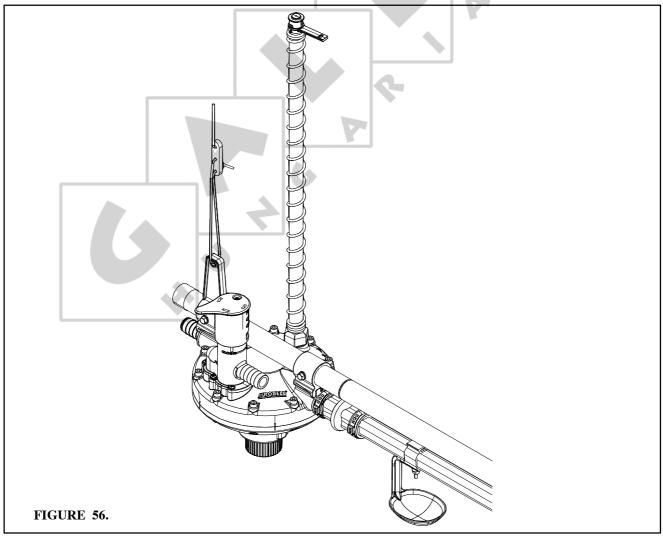


### TO INSTALL THE PRESSURE REGULATOR TO THE DRINKING LINE

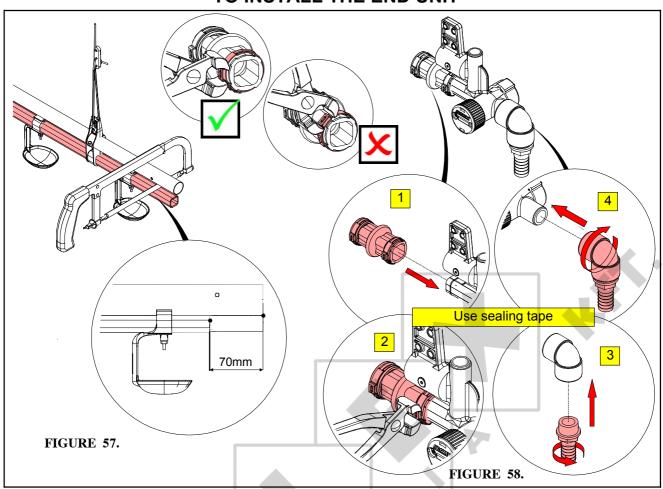


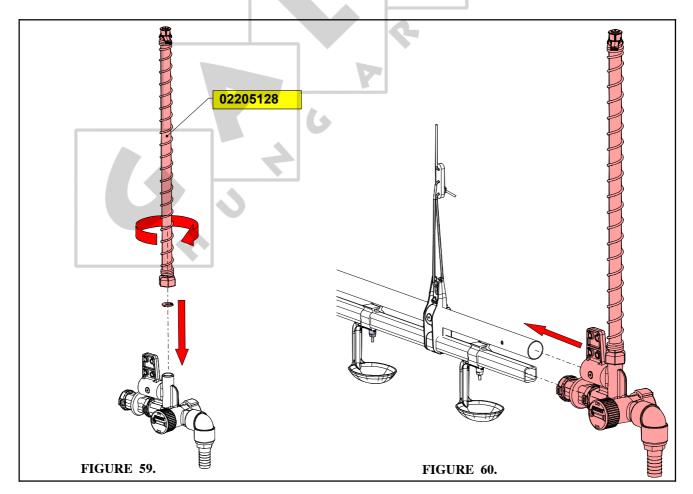


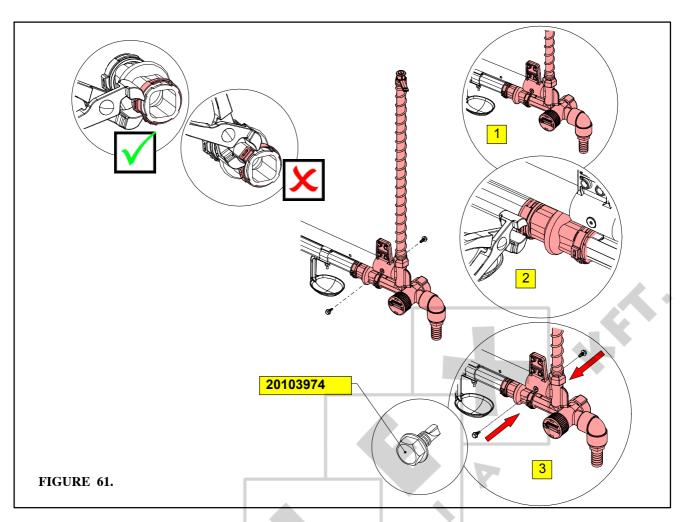


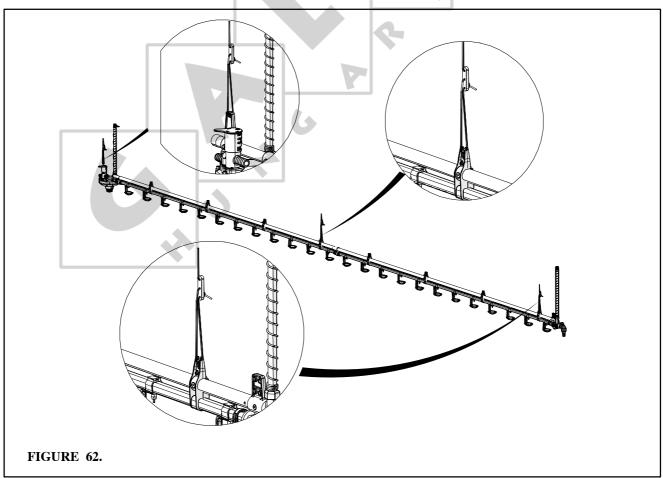


### TO INSTALL THE END UNIT

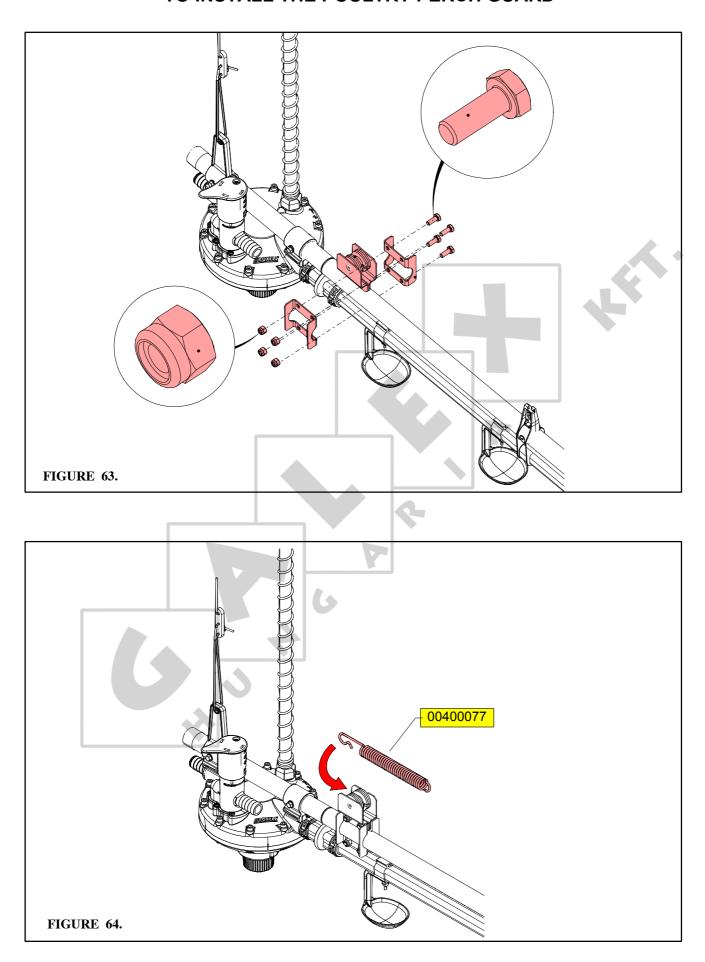


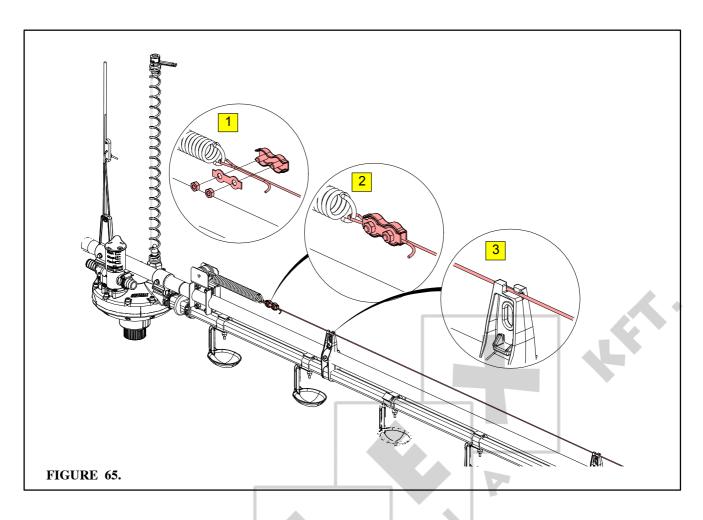


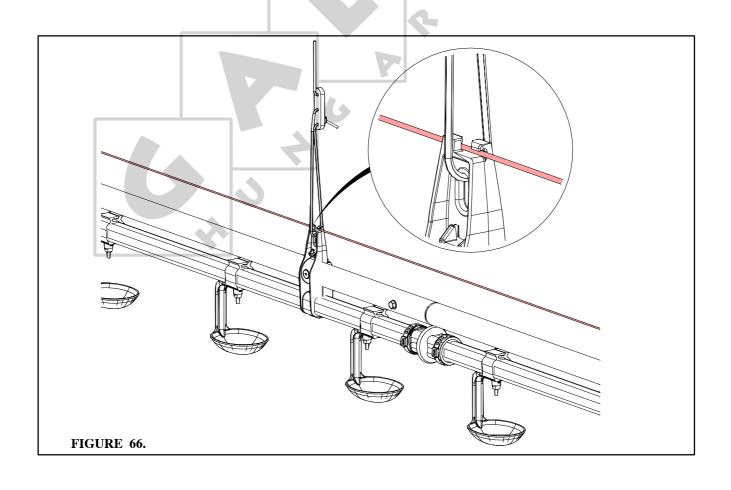


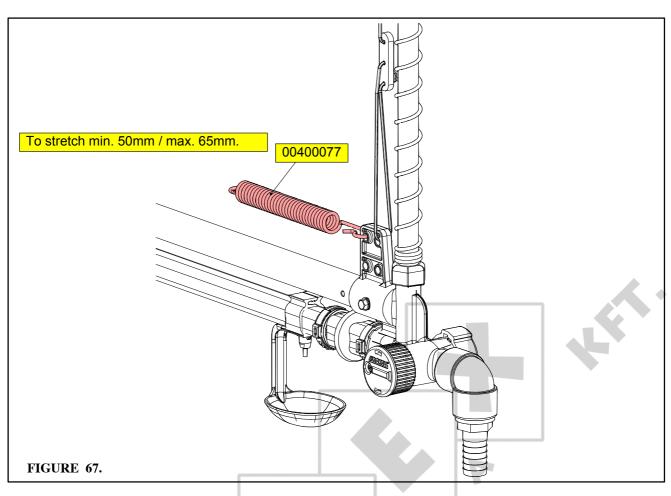


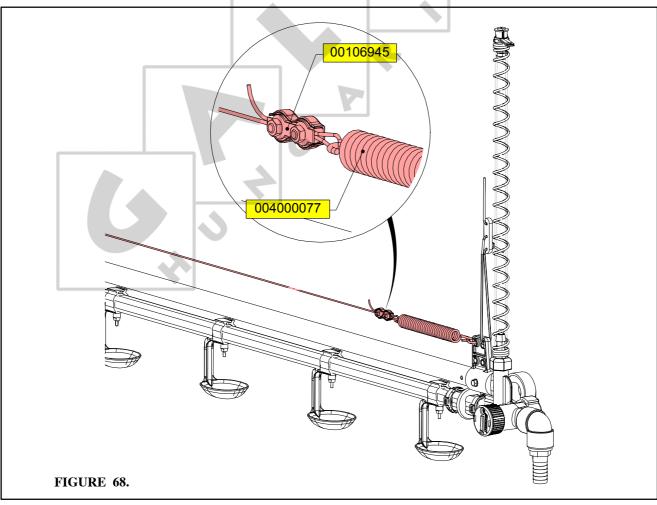
## TO INSTALL THE POULTRY PERCH GUARD



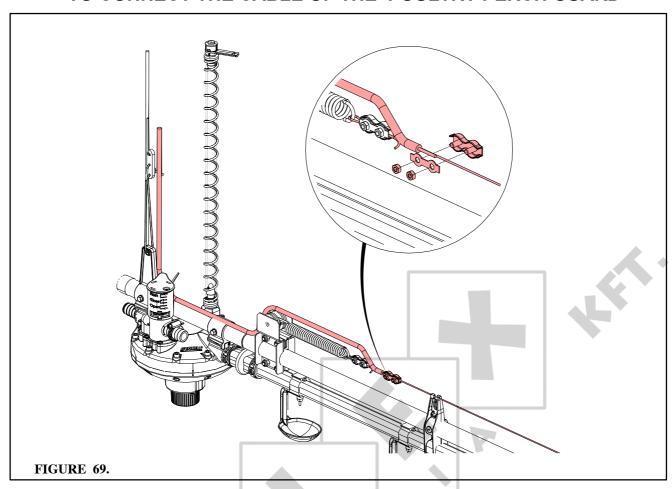


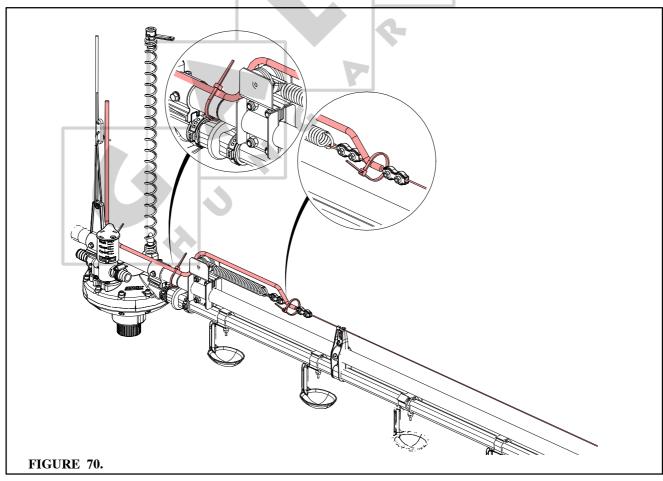




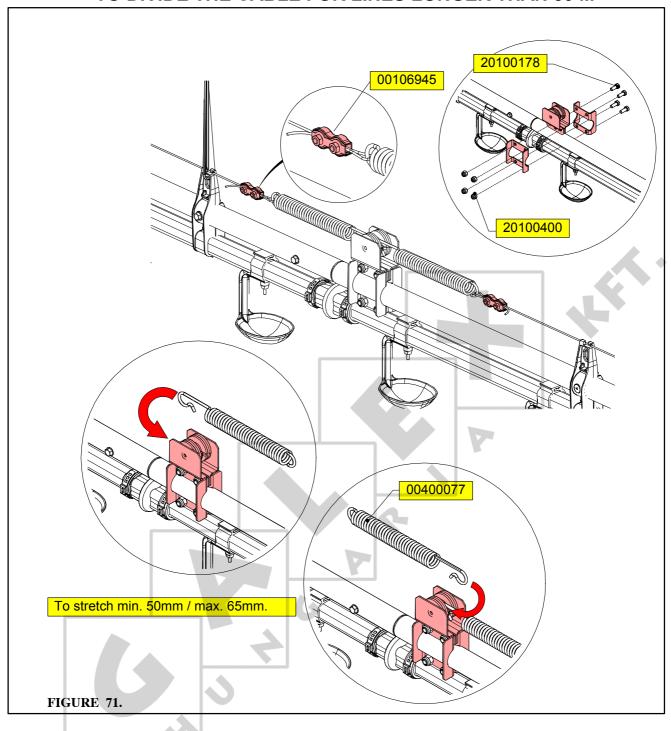


## TO CONNECT THE CABLE OF THE POULTRY PERCH GUARD





### TO DIVIDE THE CABLE FOR LINES LONGER THAN 50 M



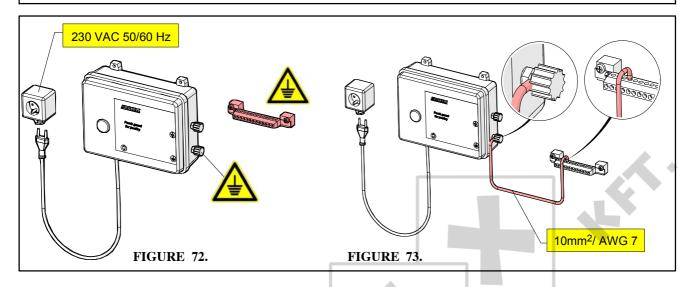
### TO CONNECT THE POULTRY PERCH GUARD

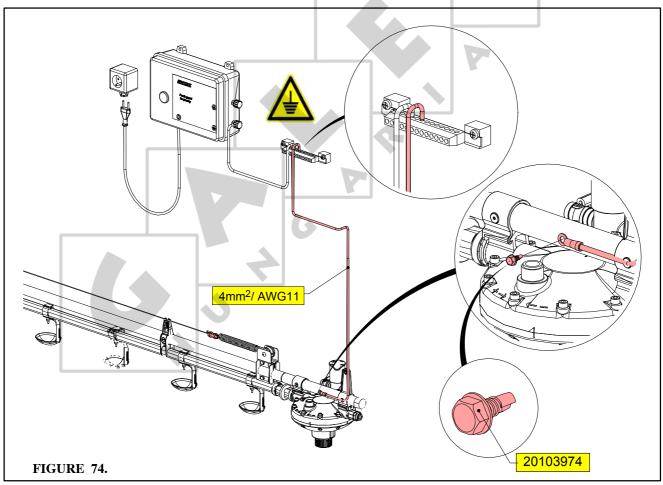


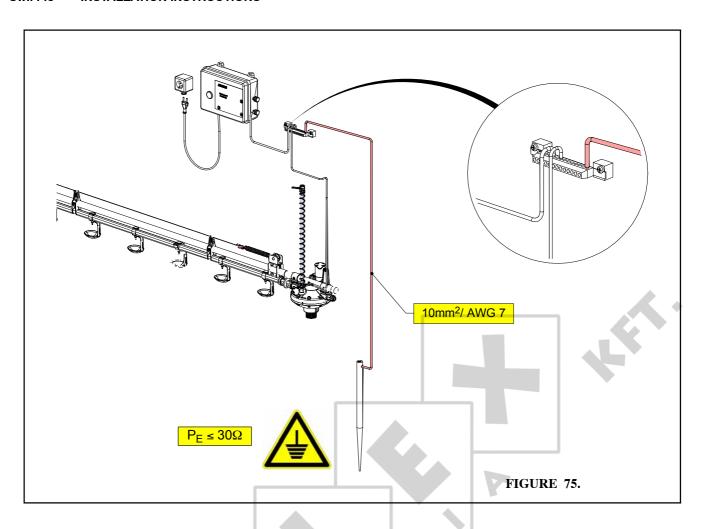
The poultry perch guard and the suspension tube of the drinking line must be earthed !!!

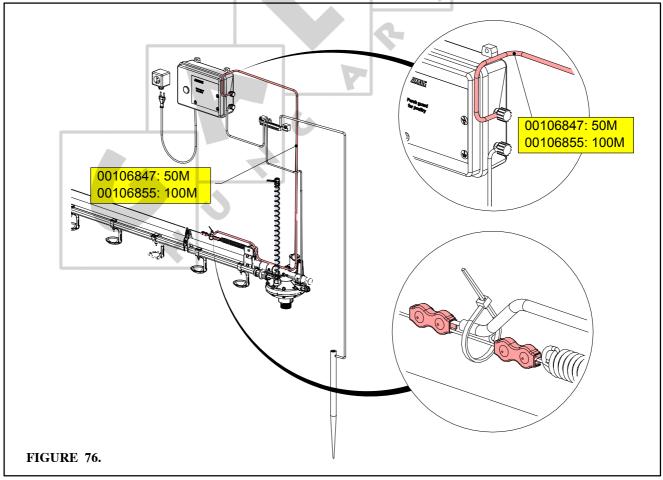




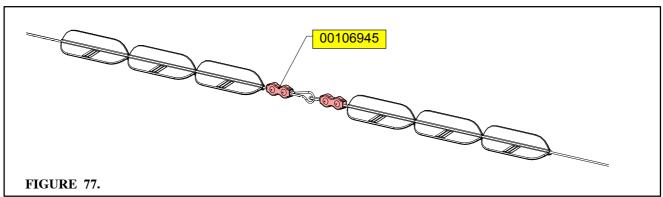


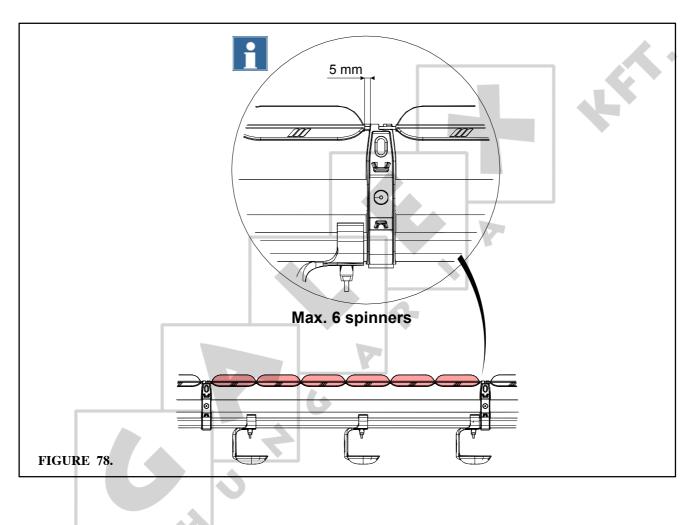


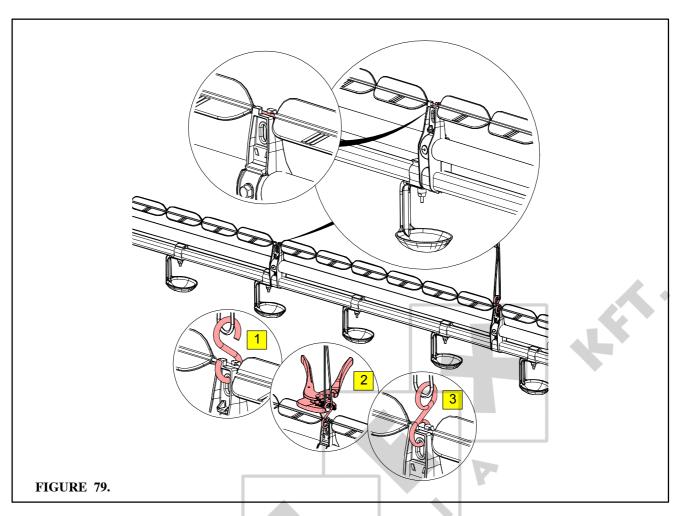


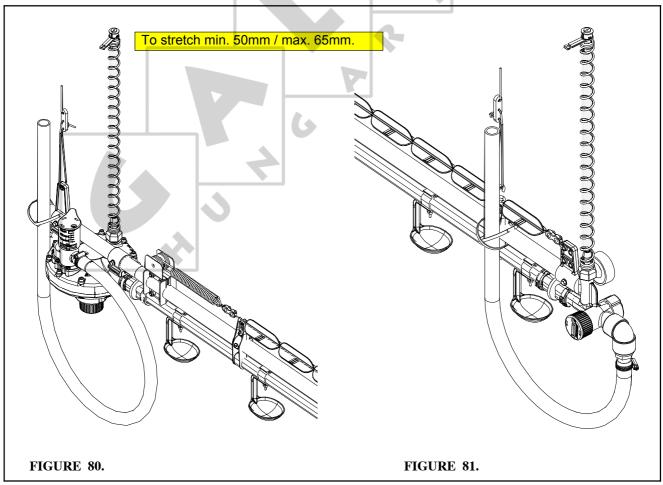


### **OPTION: SPIN SOFT**

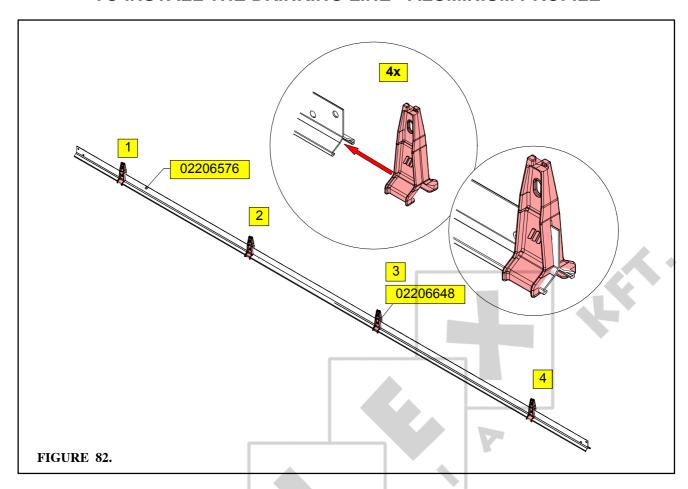


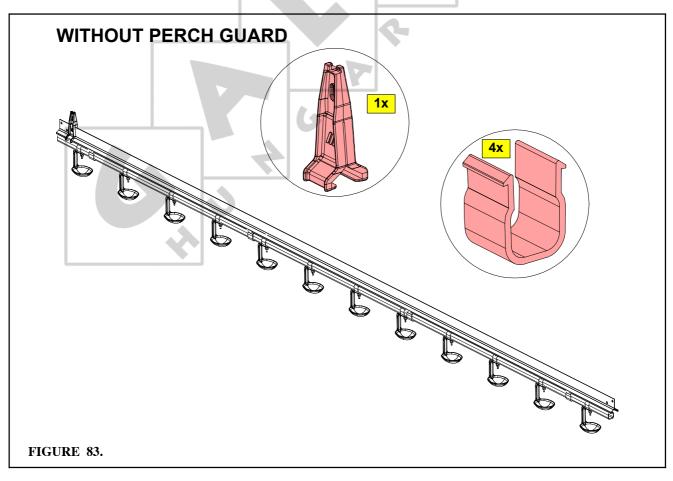


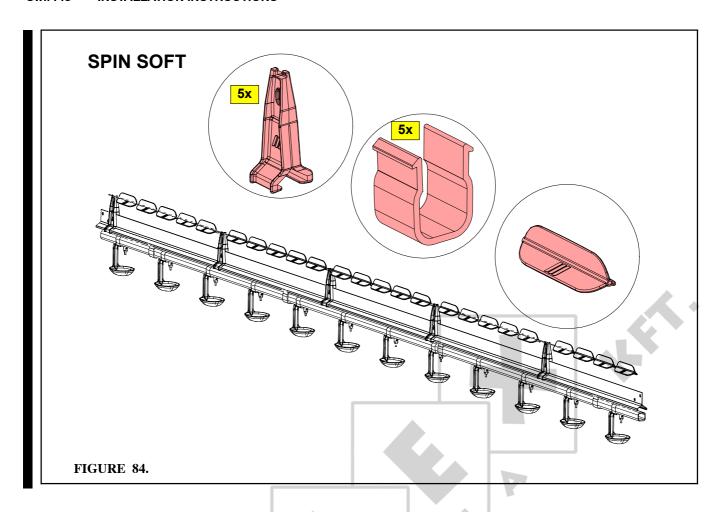


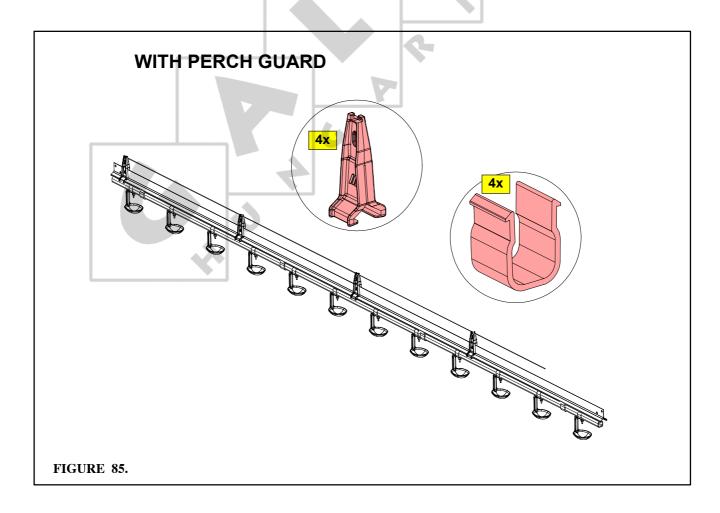


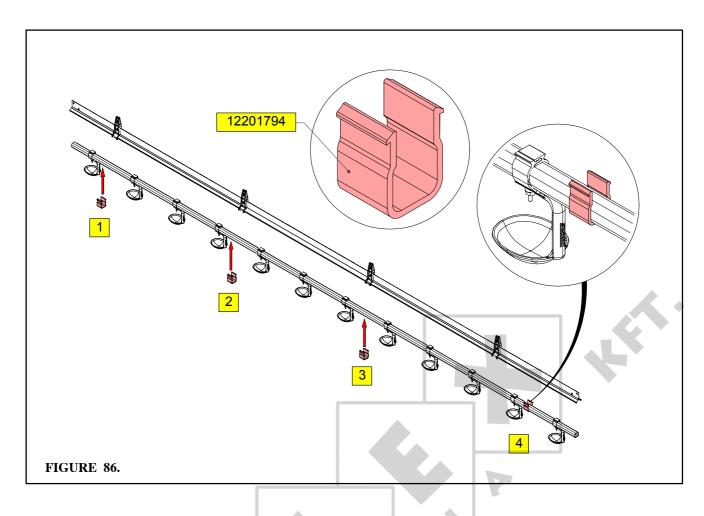
### TO INSTALL THE DRINKING LINE - ALUMINIUM PROFILE

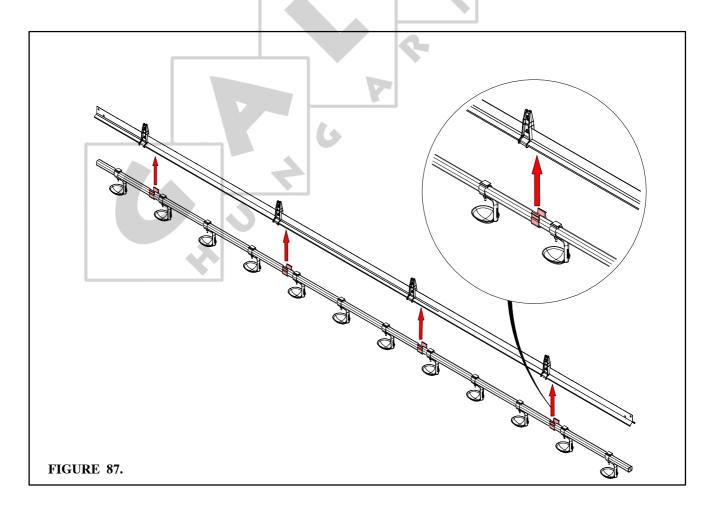


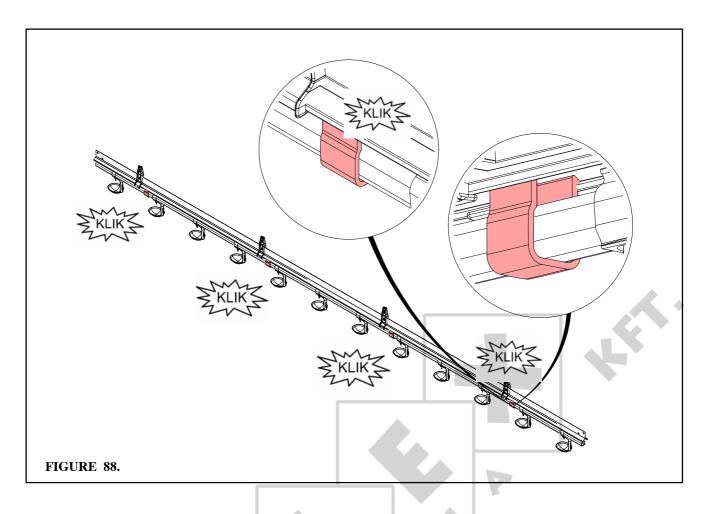


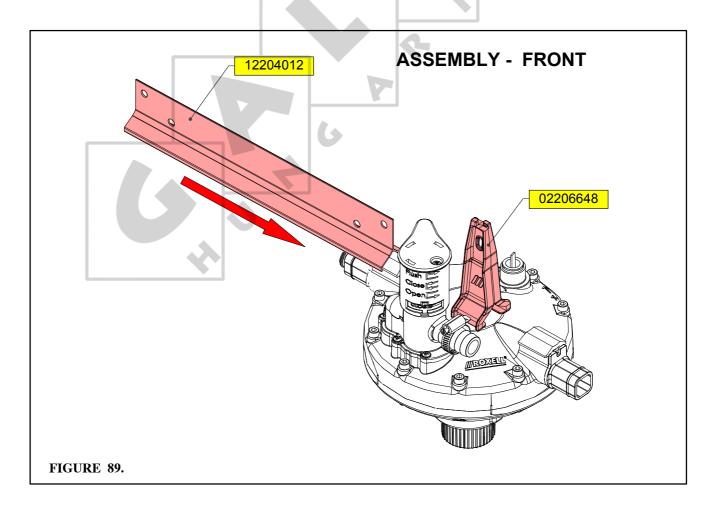


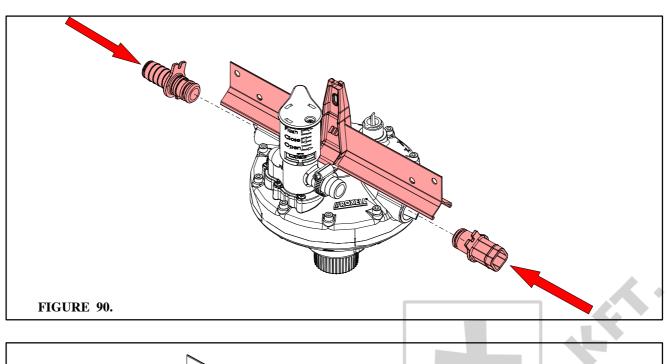


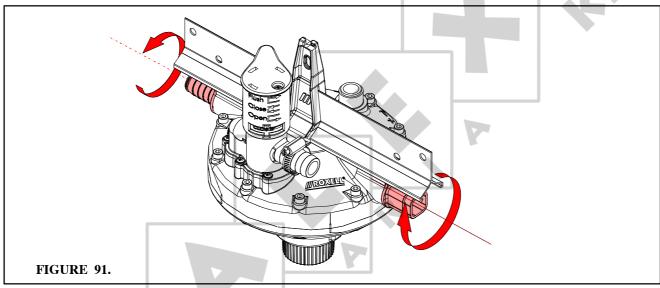


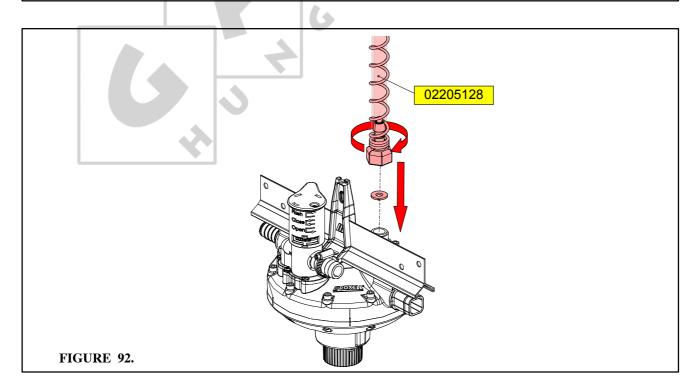


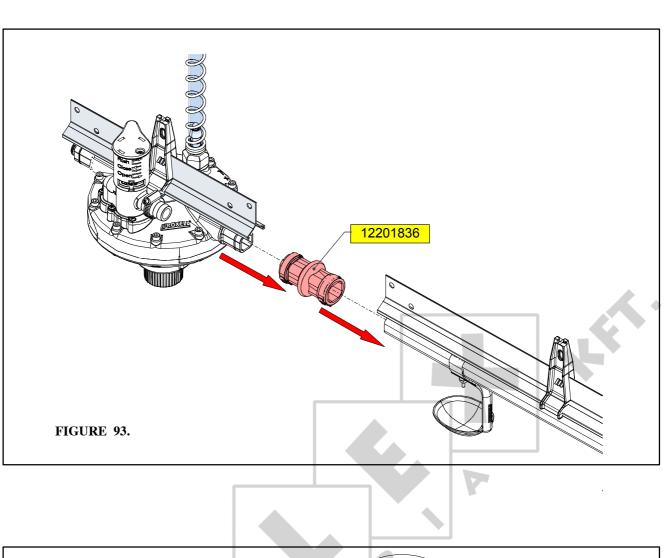


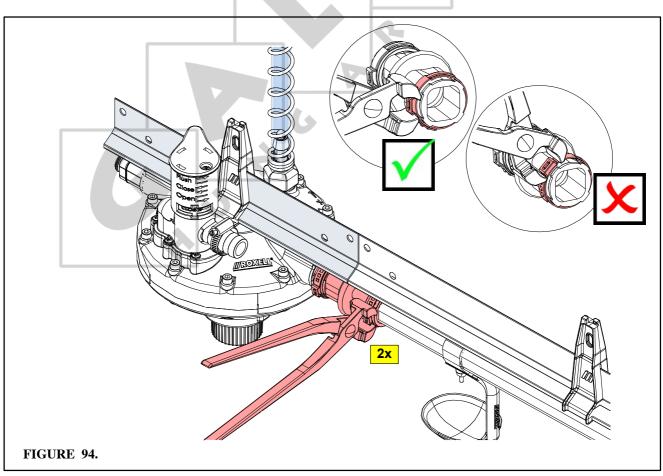


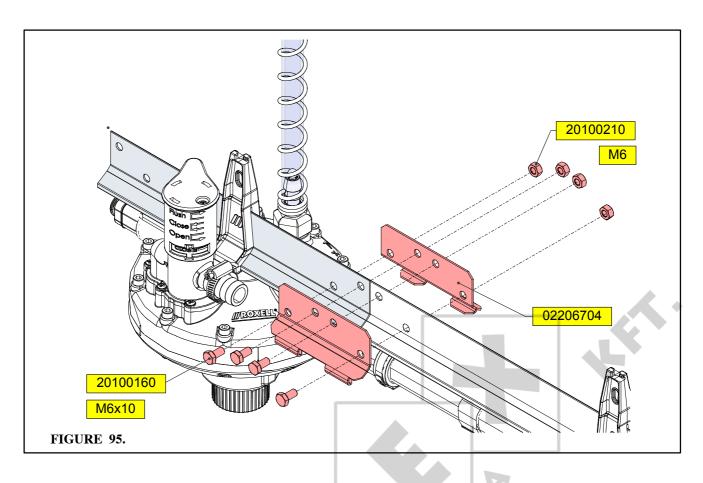


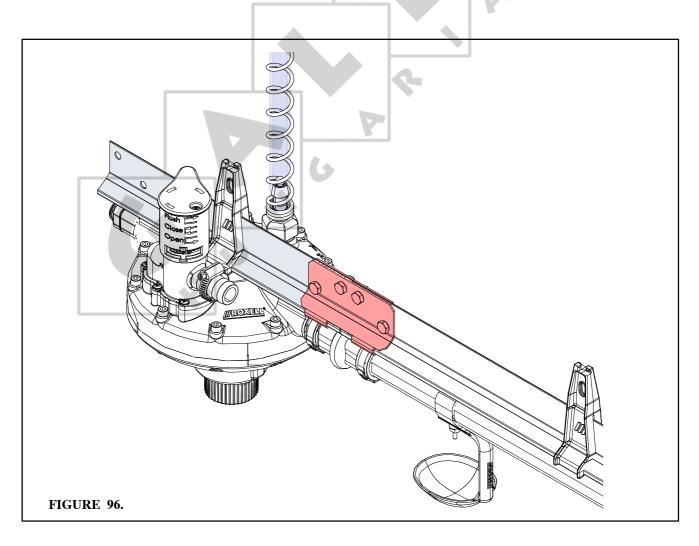


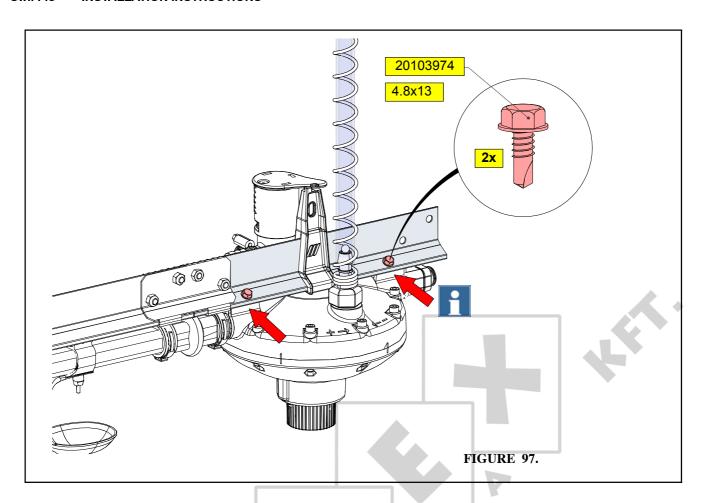


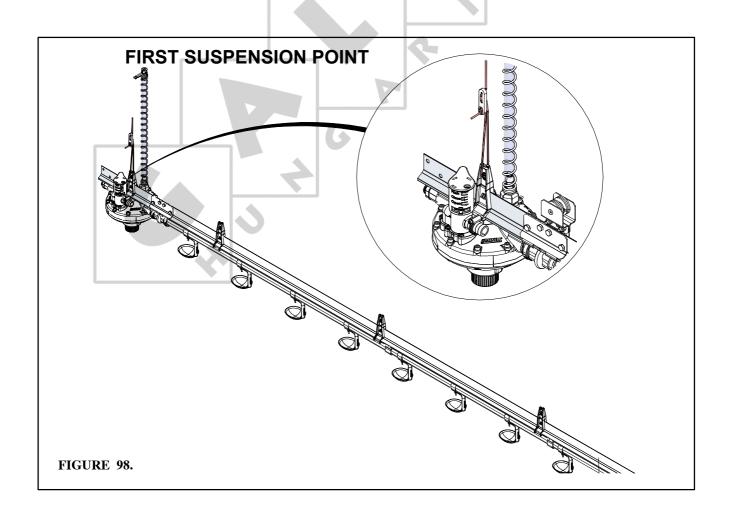


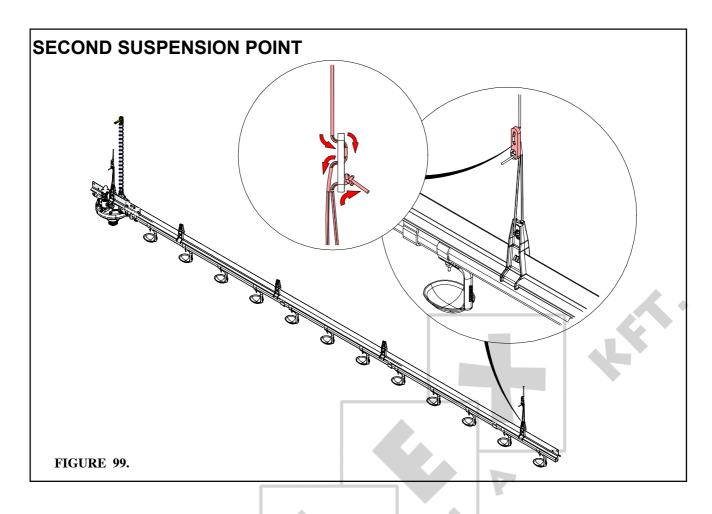


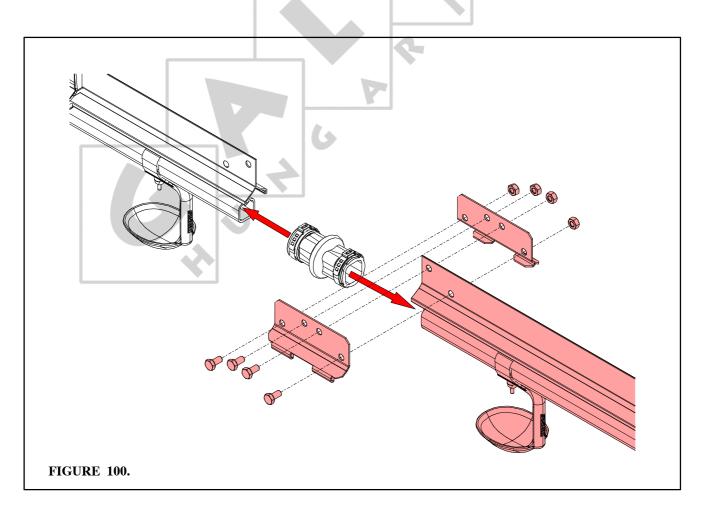


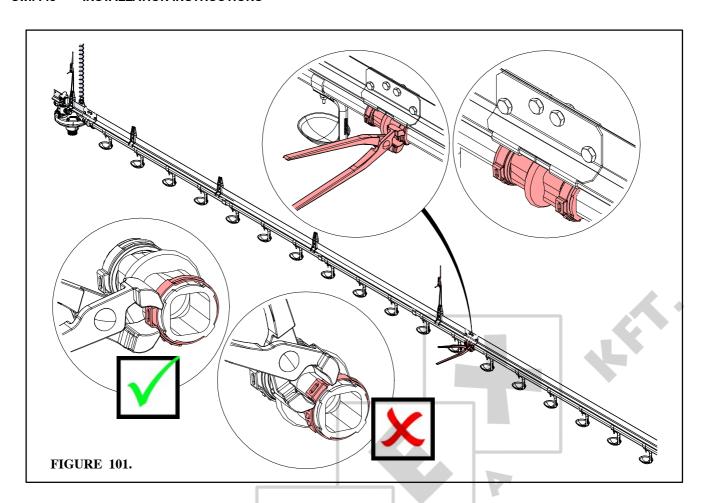




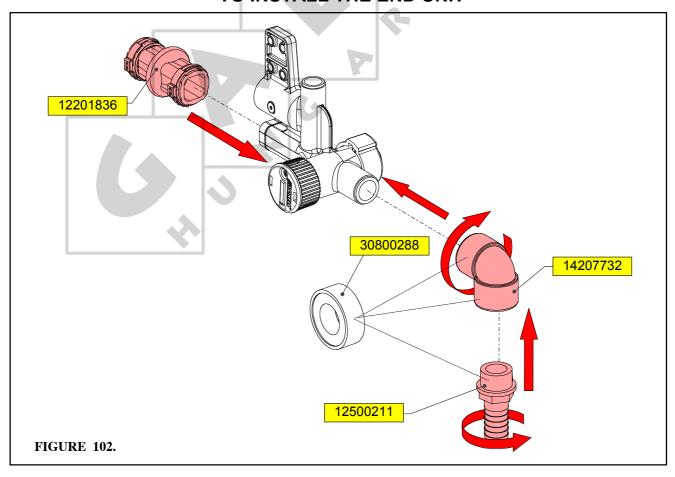


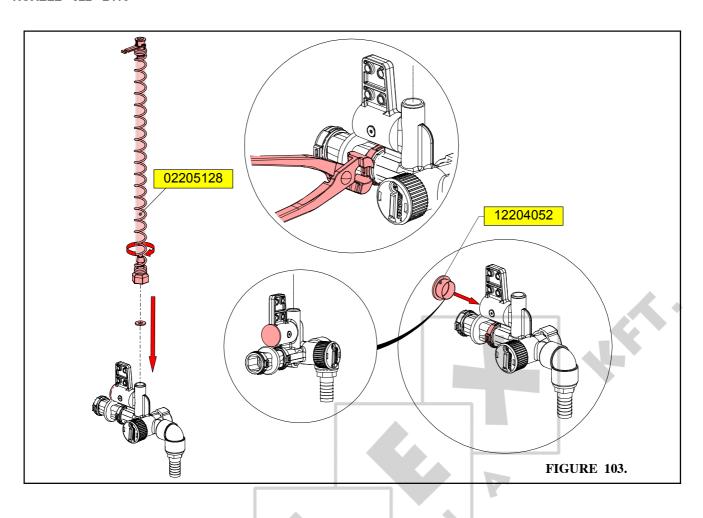


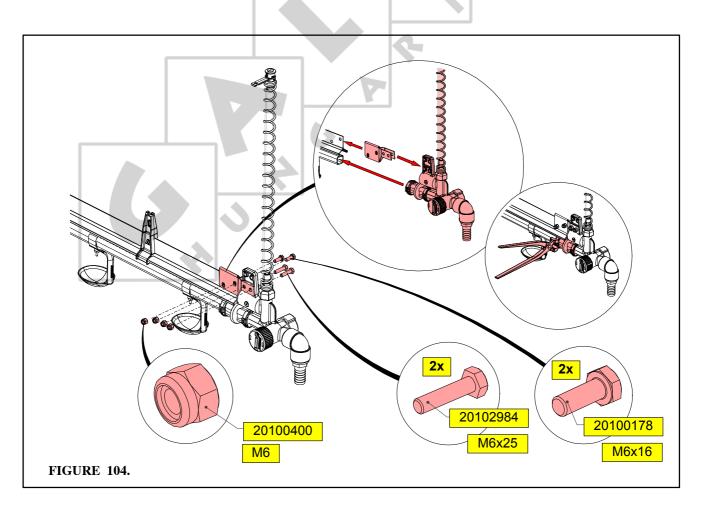


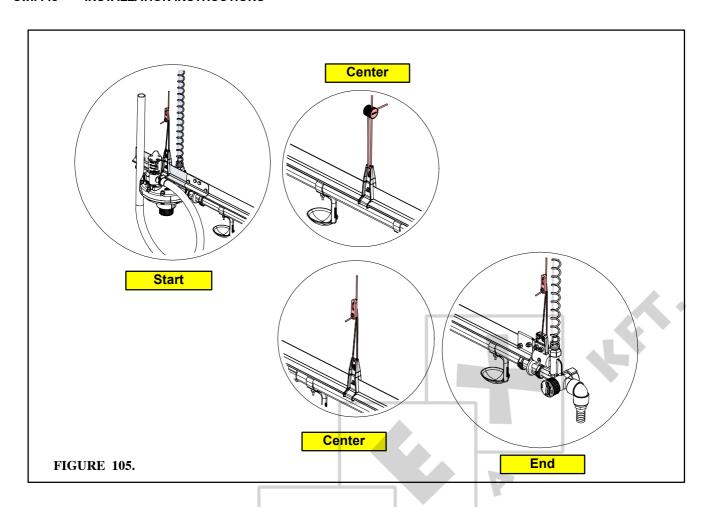


# TO INSTALL THE END UNIT

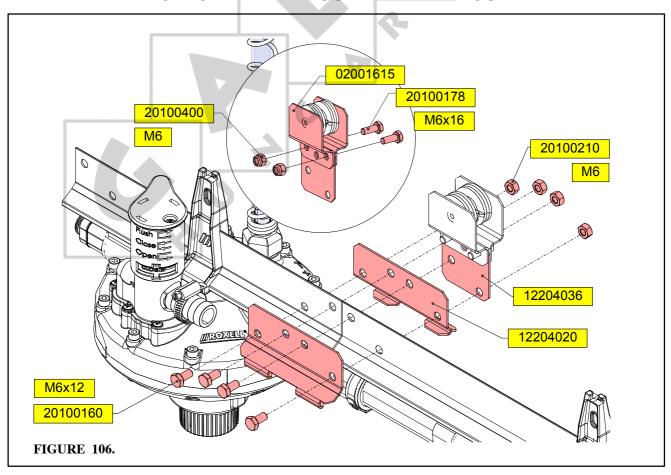


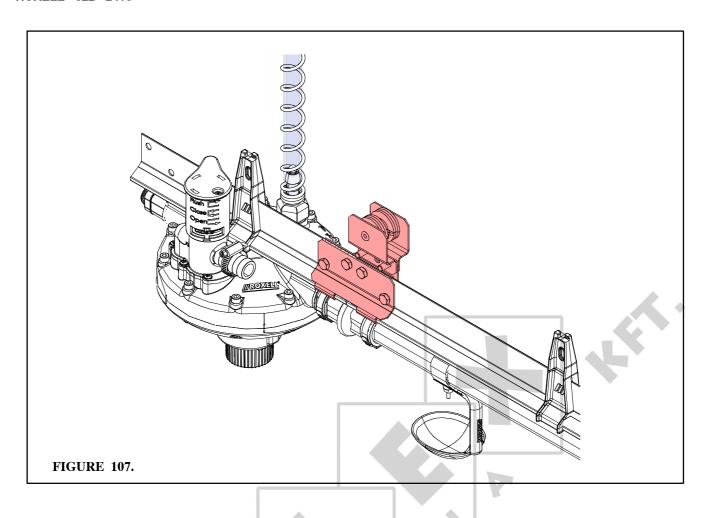


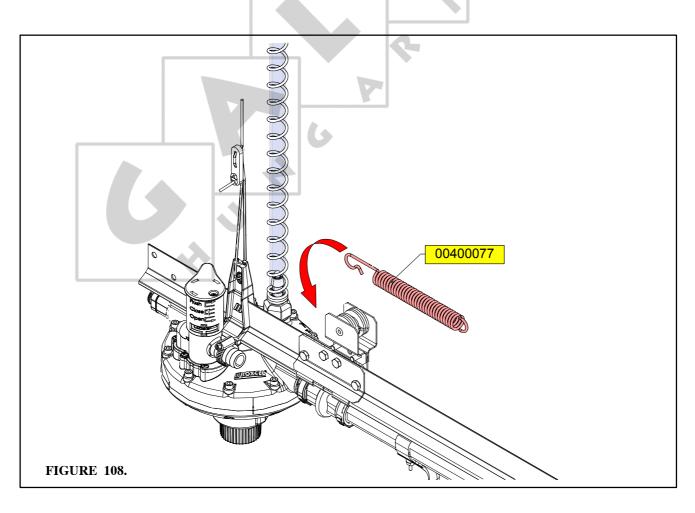


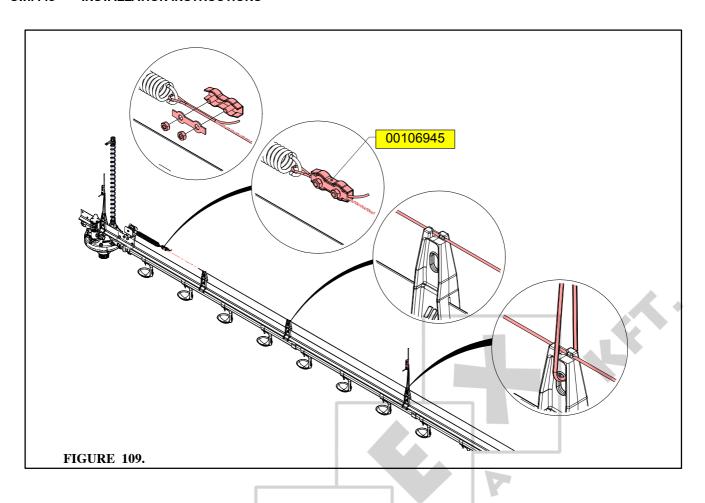


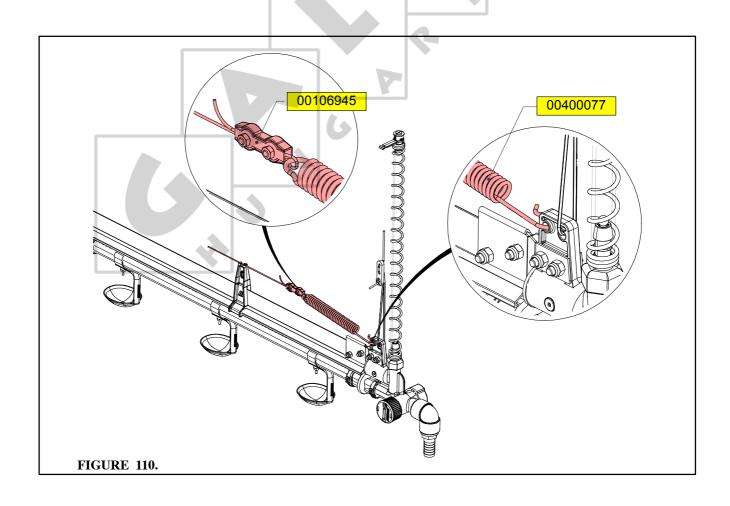
## TO INSTALL THE POULTRY PERCH GUARD

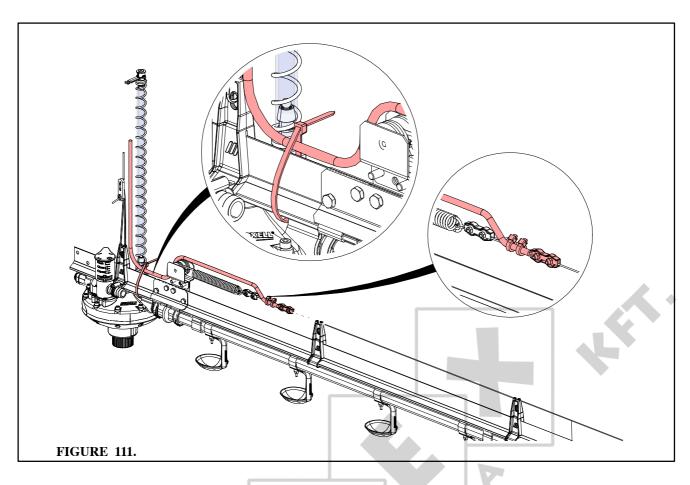


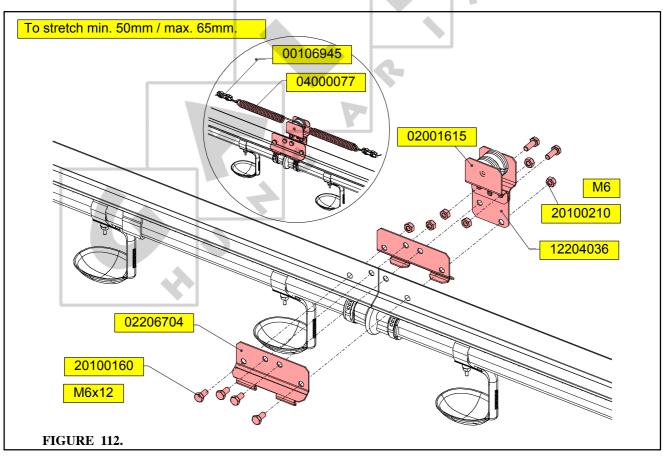




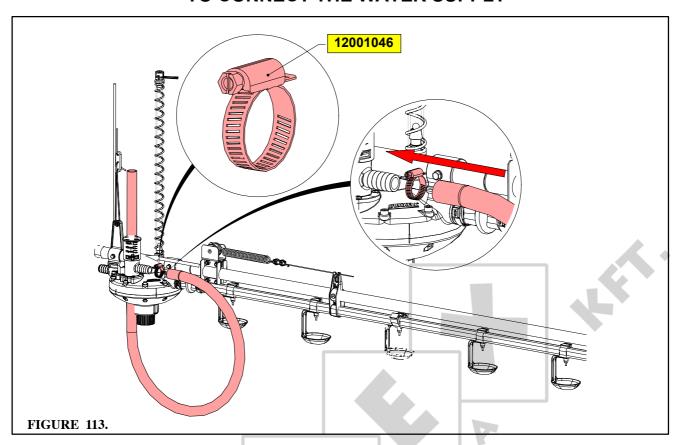


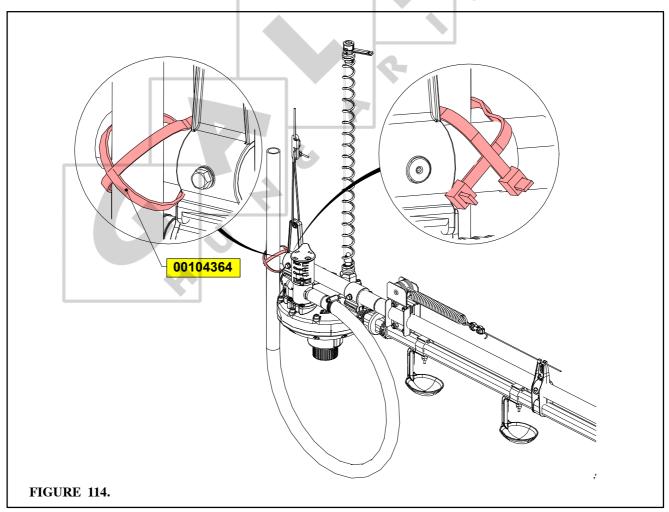


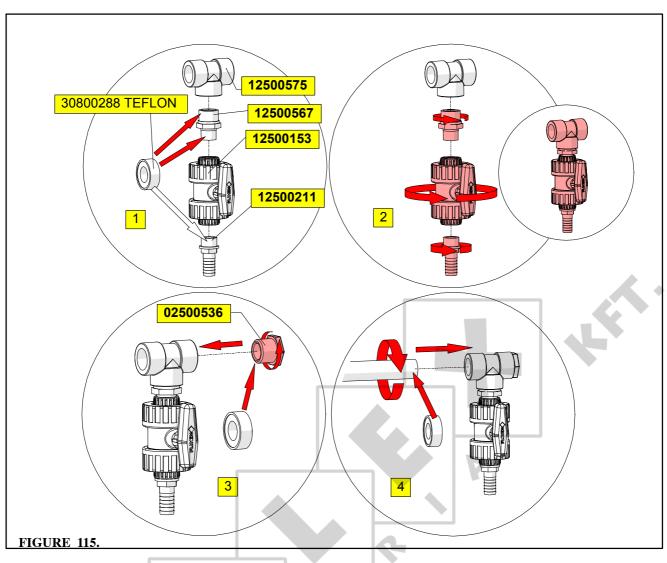


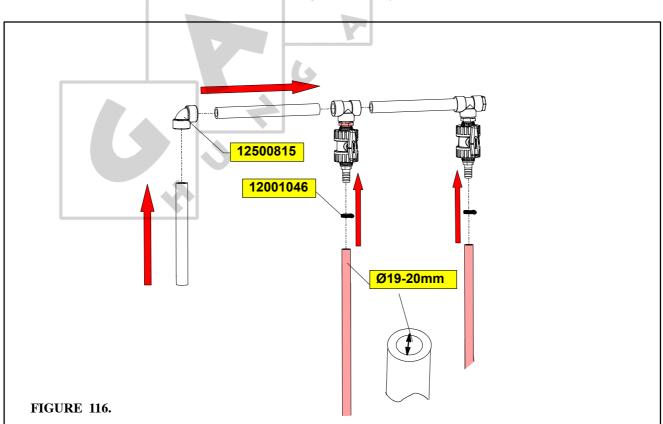


## TO CONNECT THE WATER SUPPLY

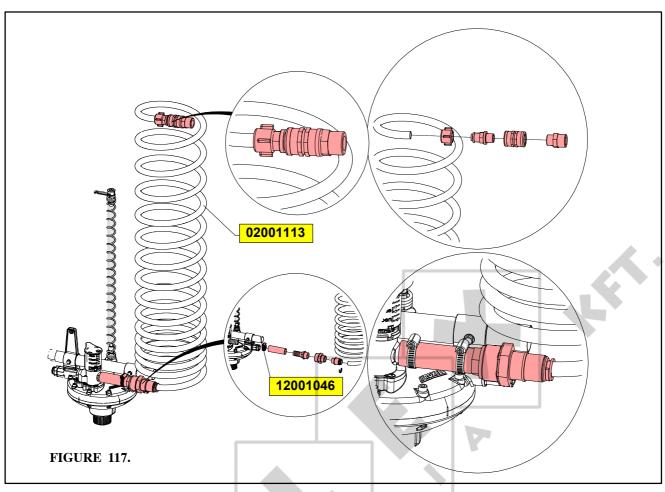


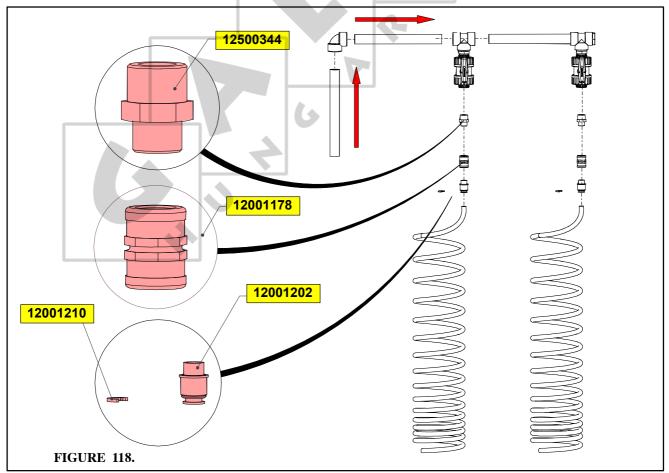




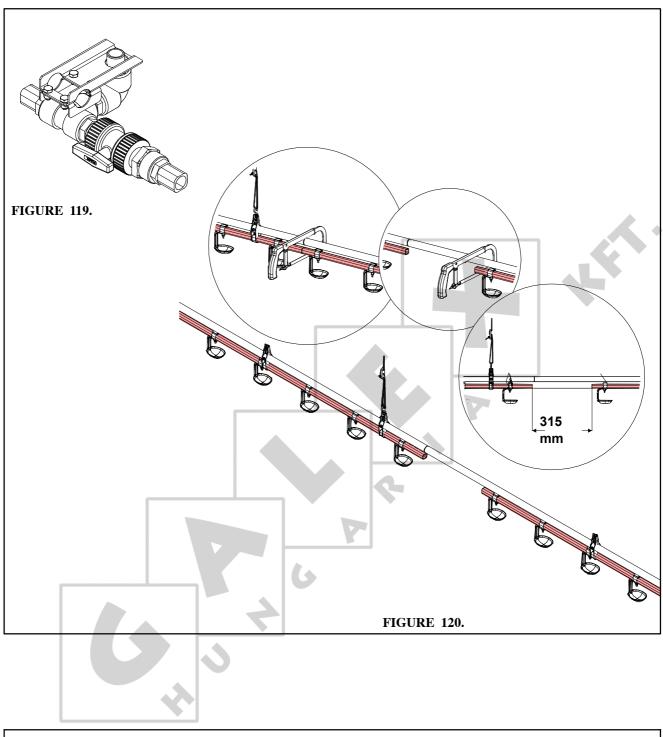


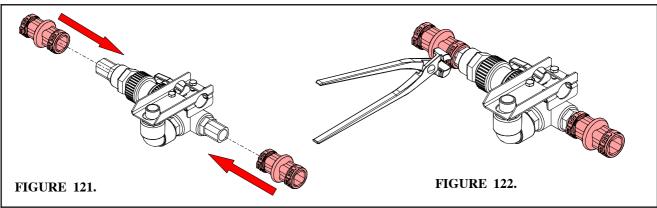
### **OPTION: SPIRAL HOSE**

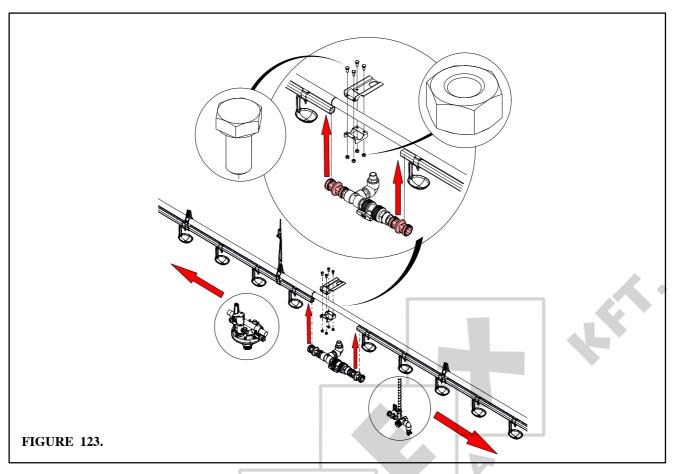


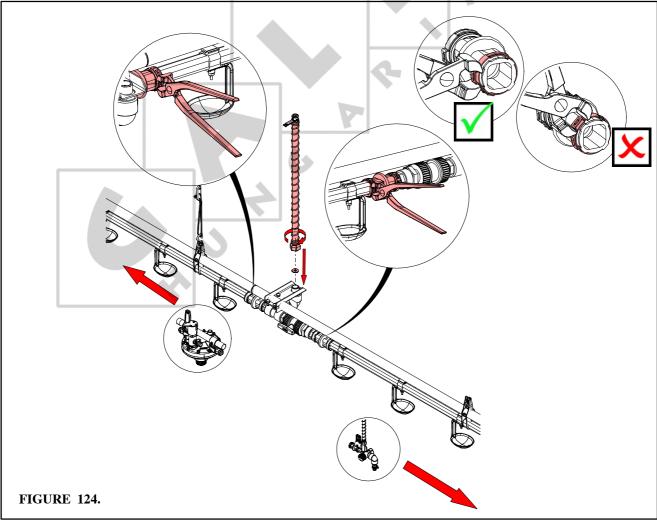


## **OPTION: MID LINE SHUT-OFF VALVE**

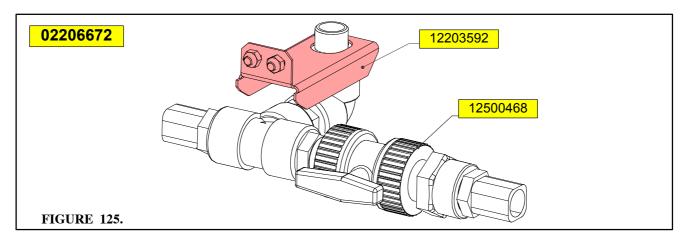


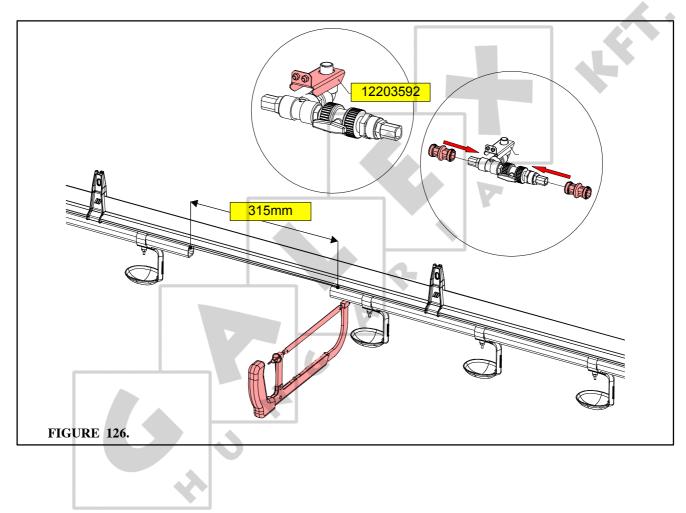




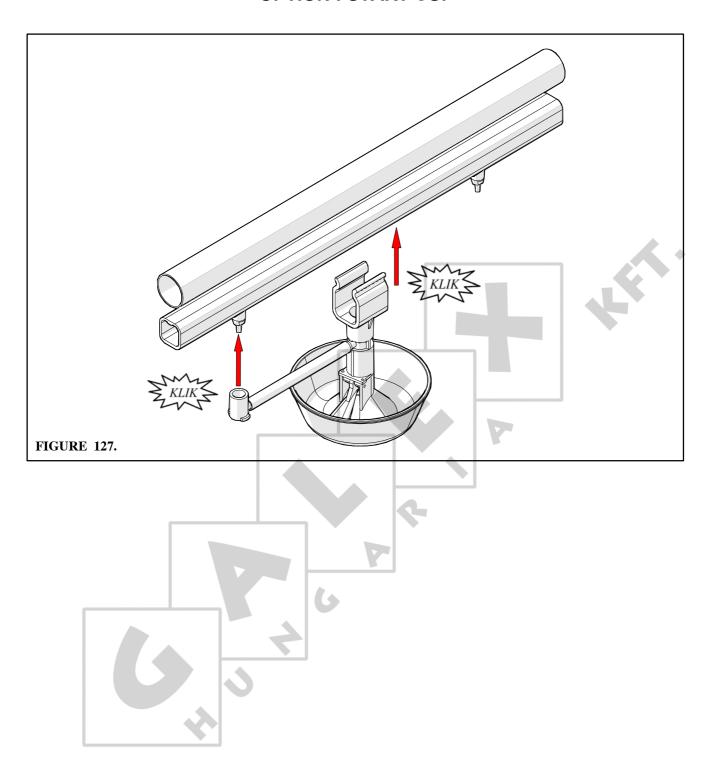


## OPTION: MID LINE SHUT-OFF VALVE - ALUMINIUM PROFILE





## **OPTION: START CUP**



## **AUTOMATIC FLUSHING FRONT**

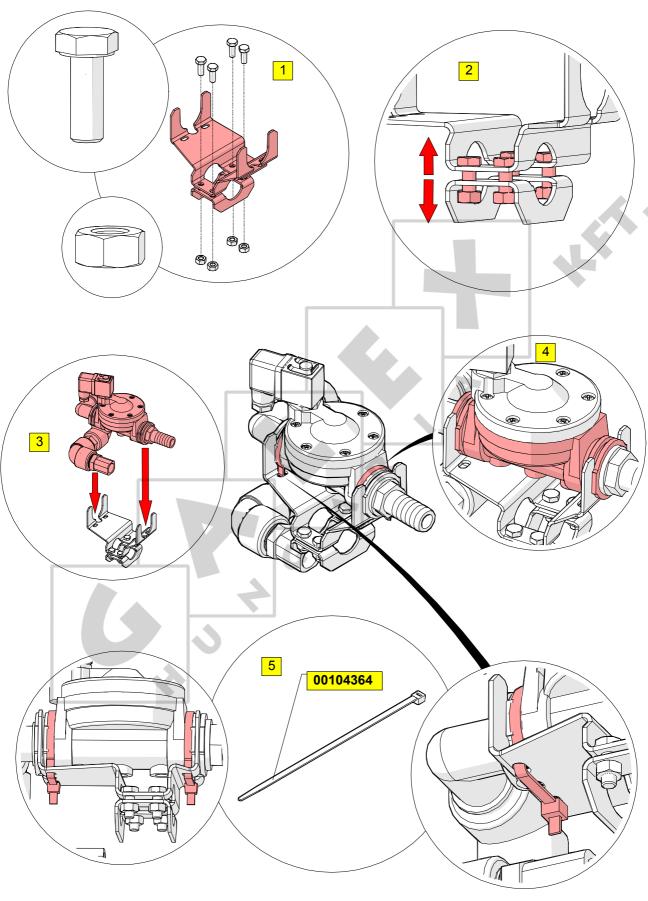
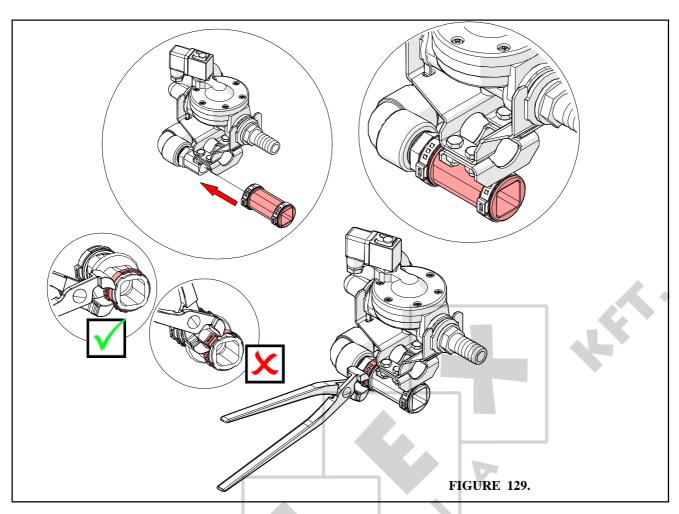
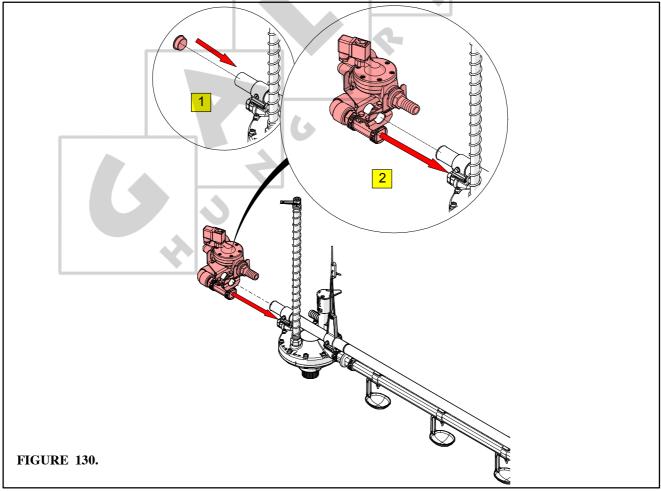
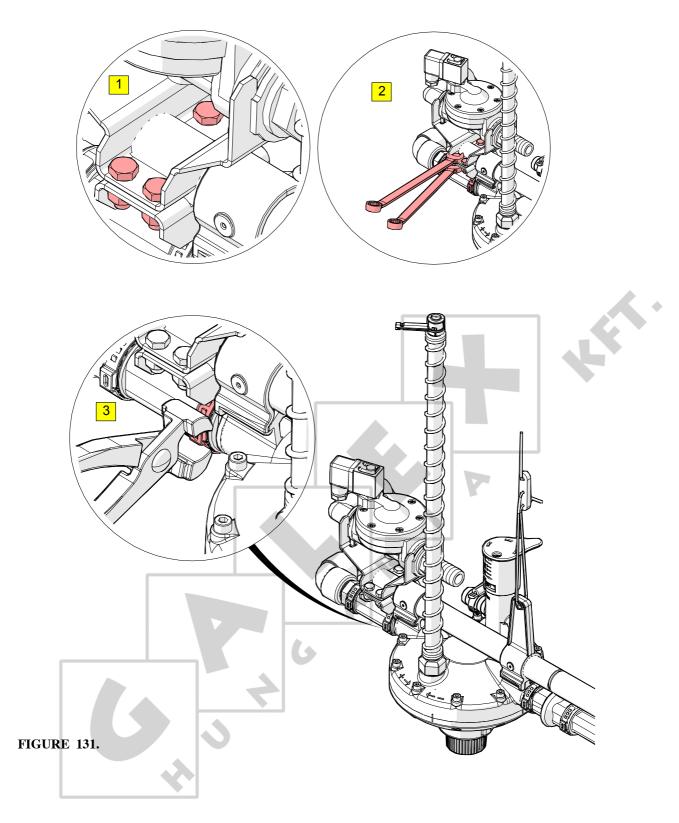
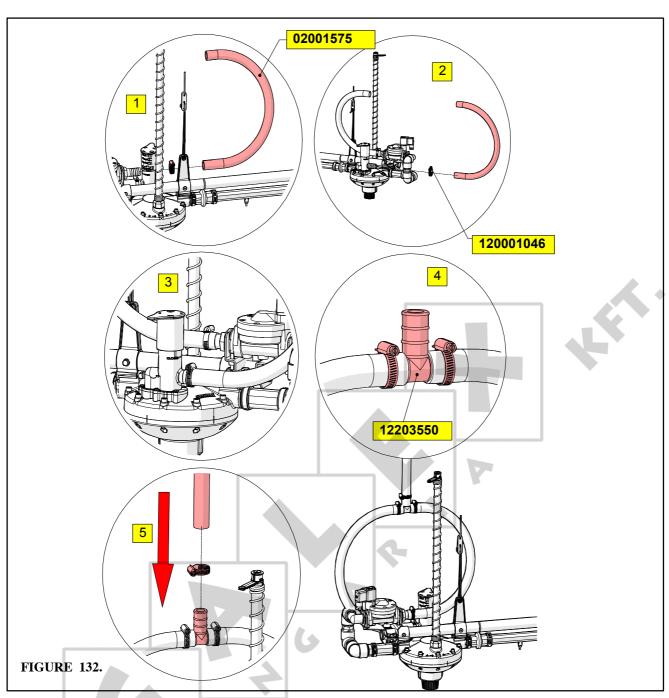


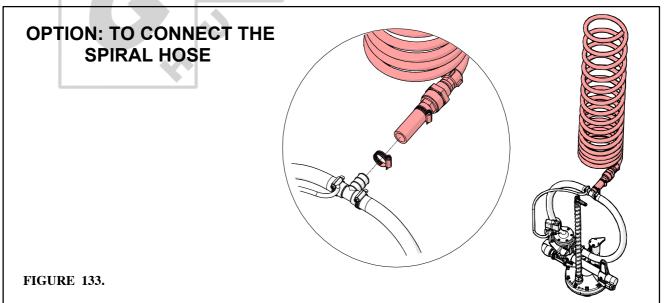
FIGURE 128.



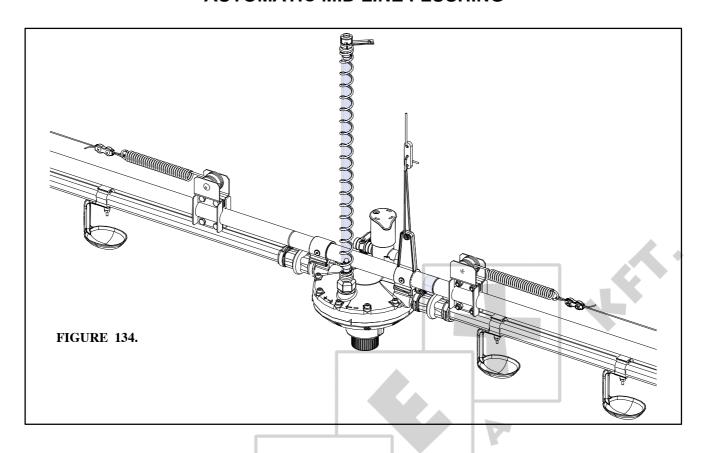


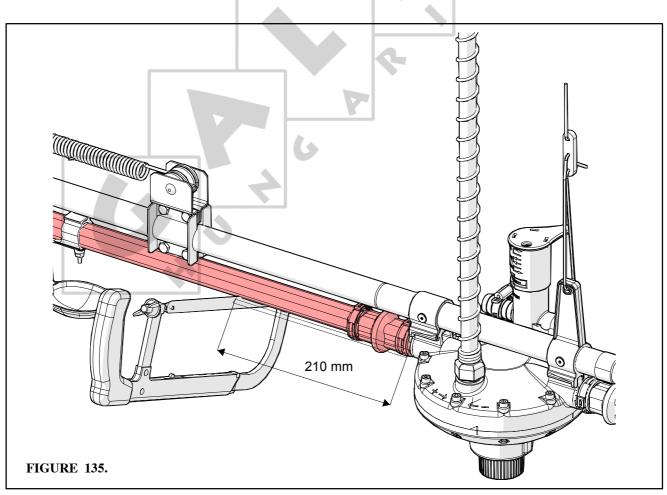


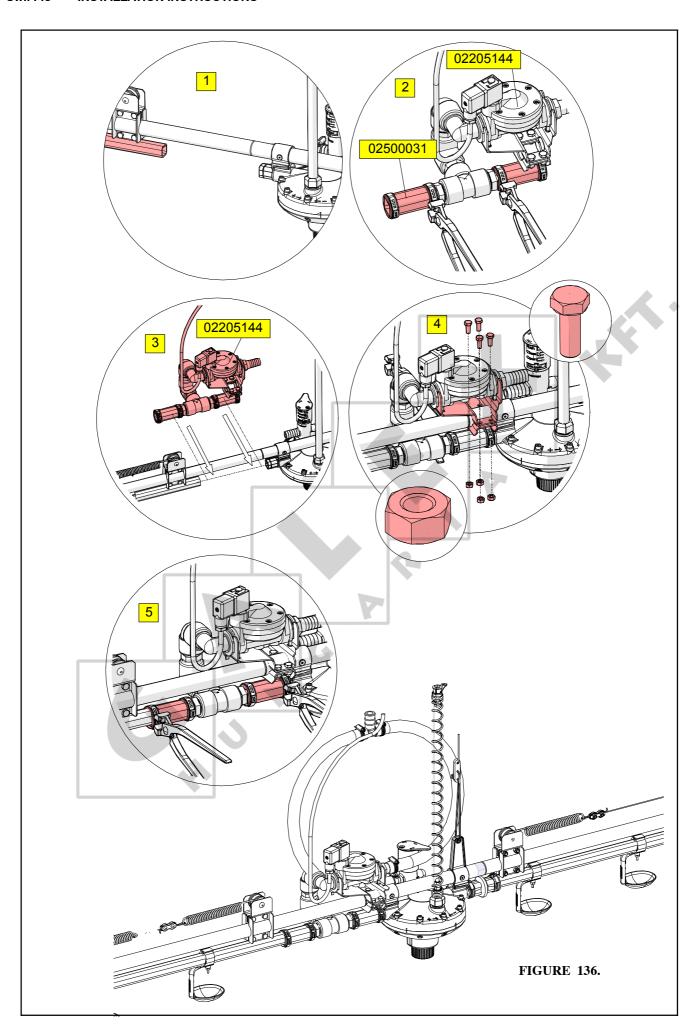




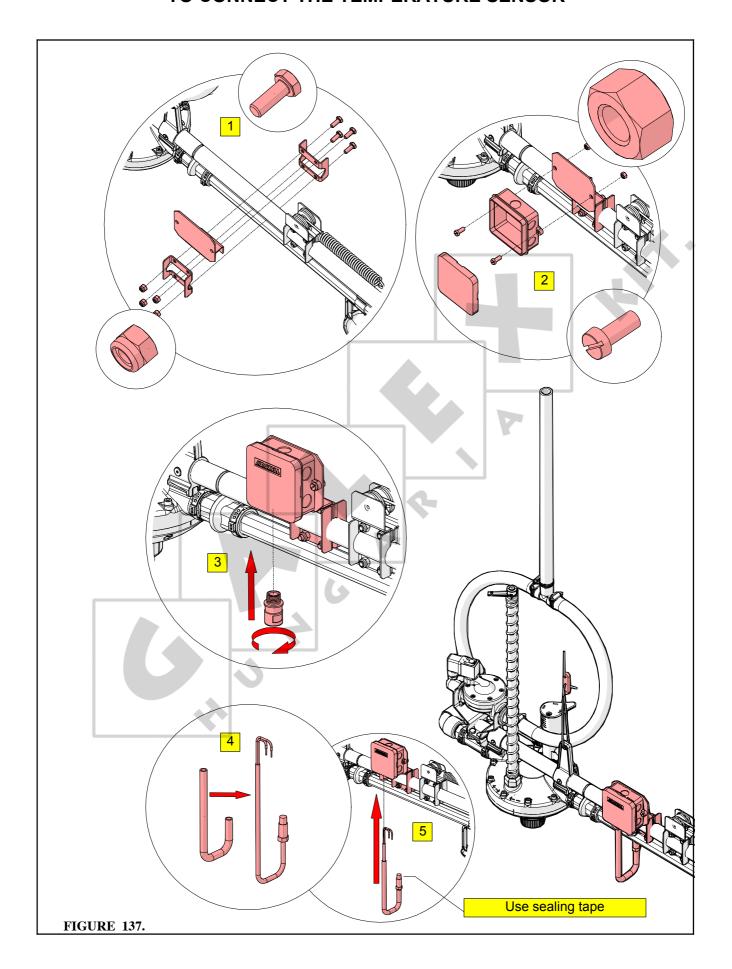
# **AUTOMATIC MID LINE FLUSHING**

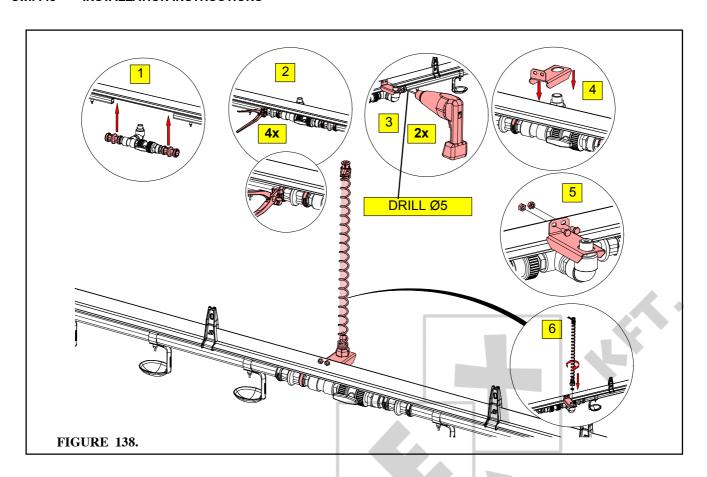




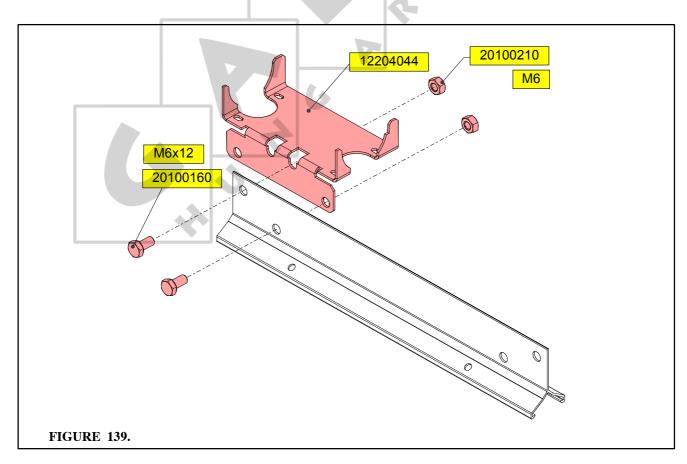


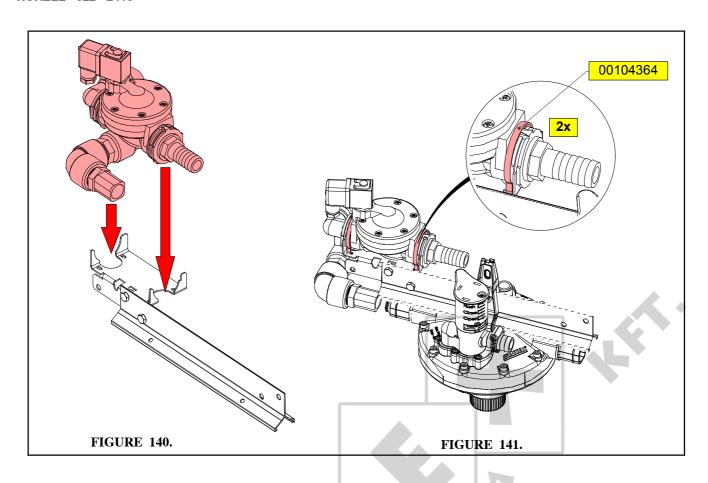
## TO CONNECT THE TEMPERATURE SENSOR

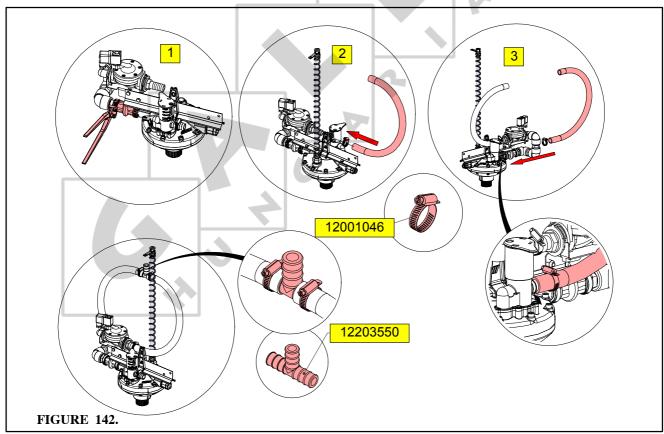




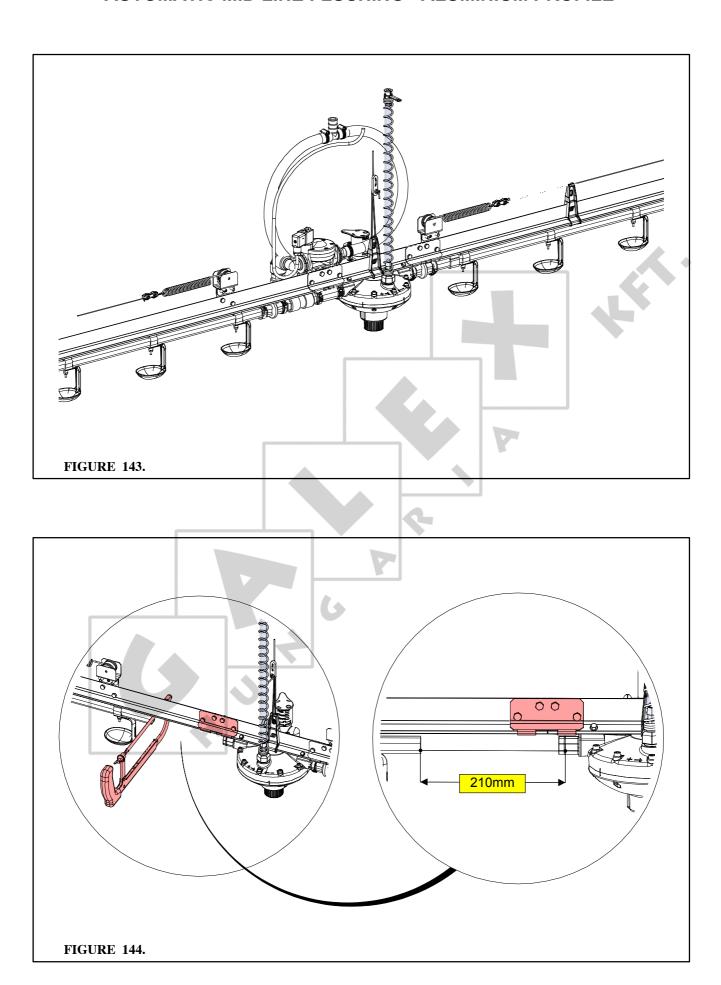
# **AUTOMATIC FLUSHING FRONT - ALUMINIUM PROFILE**

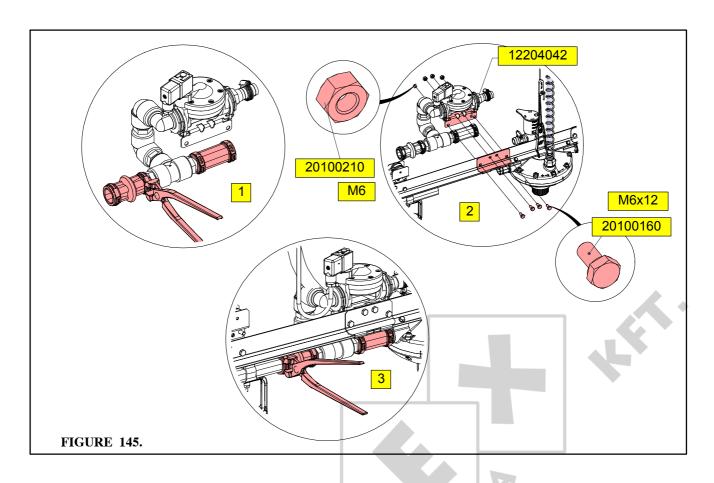


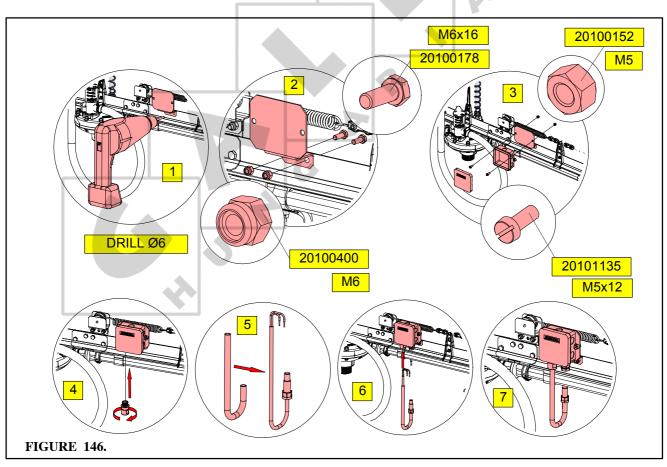


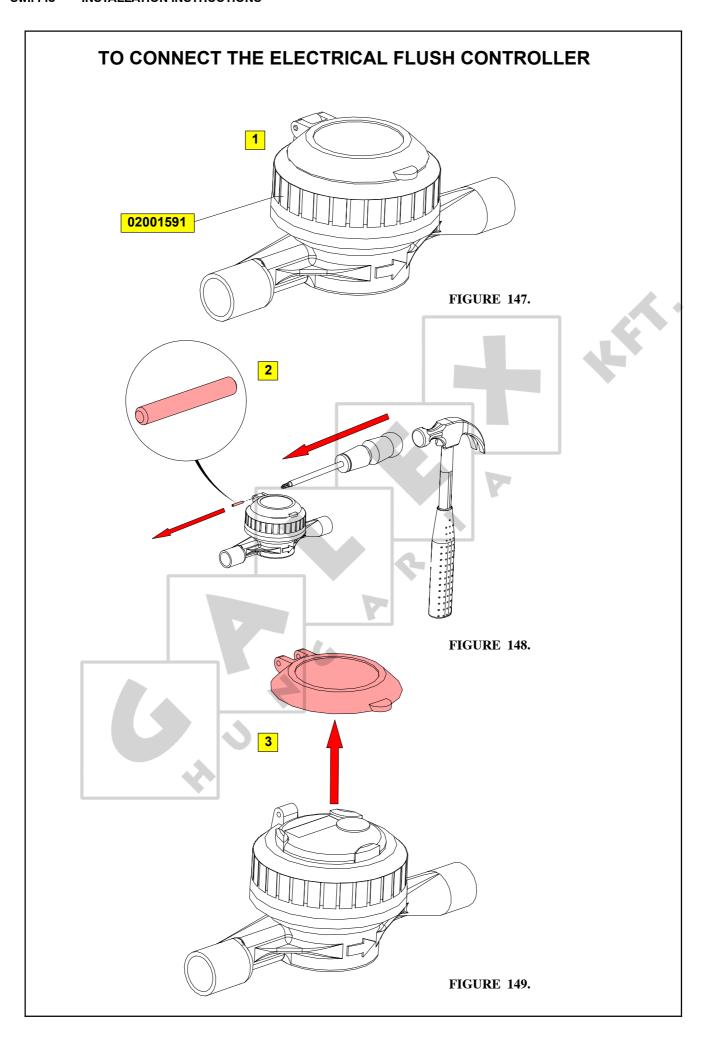


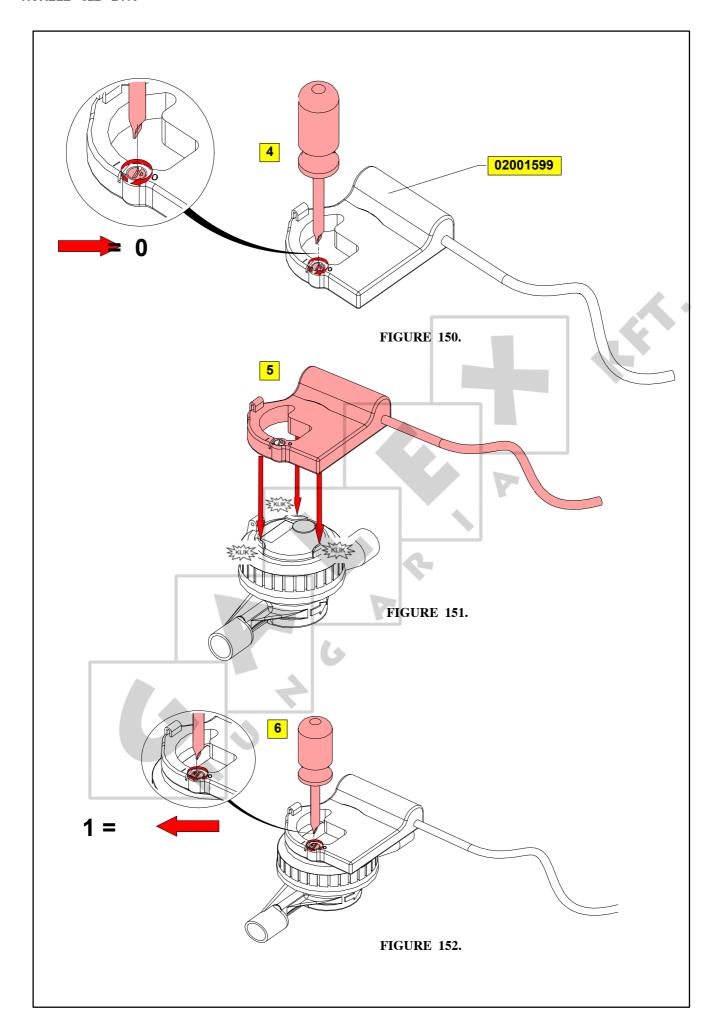
# **AUTOMATIC MID LINE FLUSHING - ALUMINIUM PROFILE**

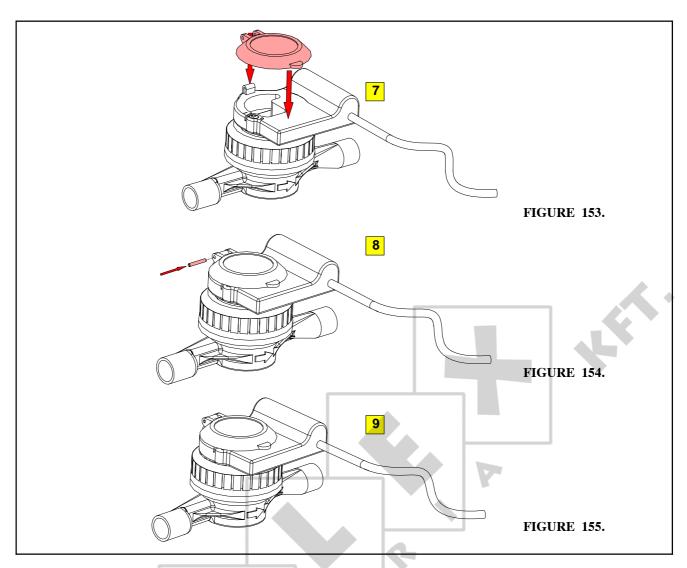


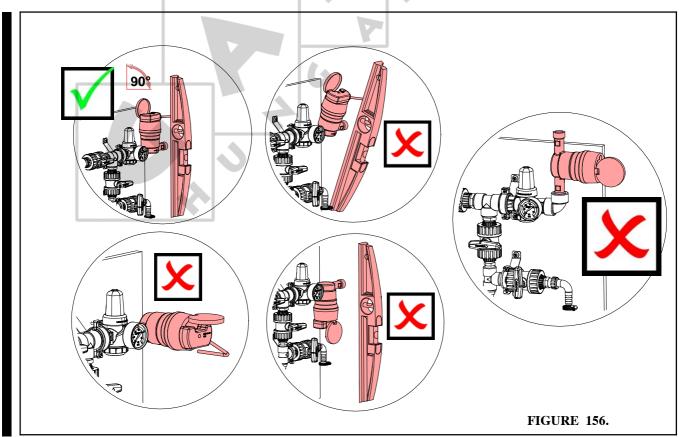


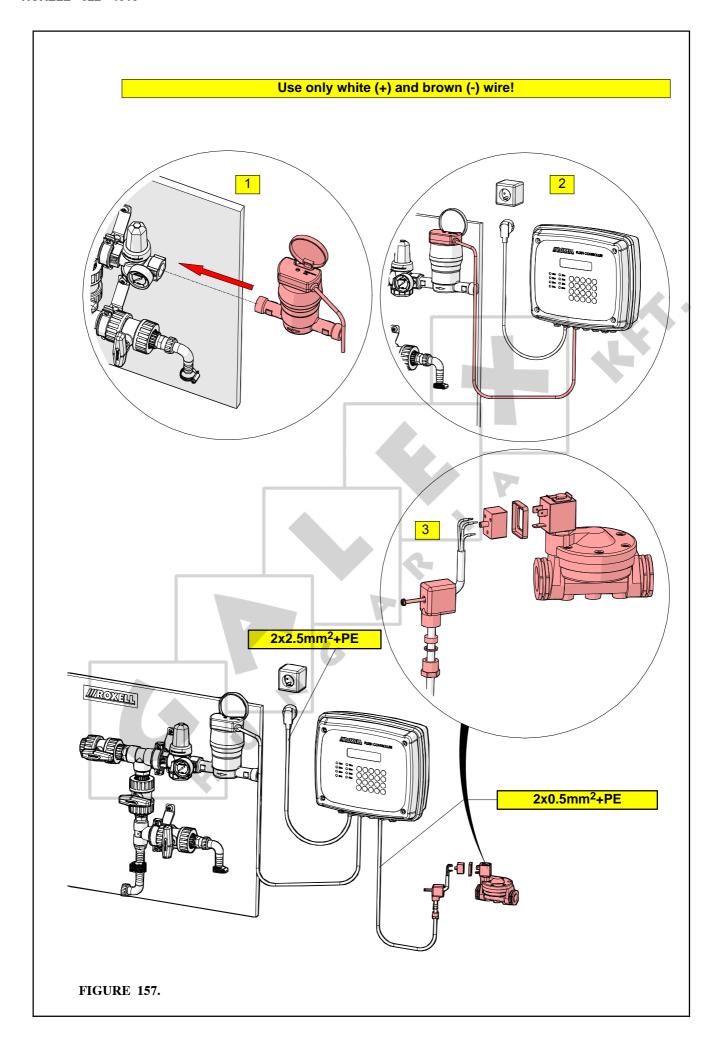












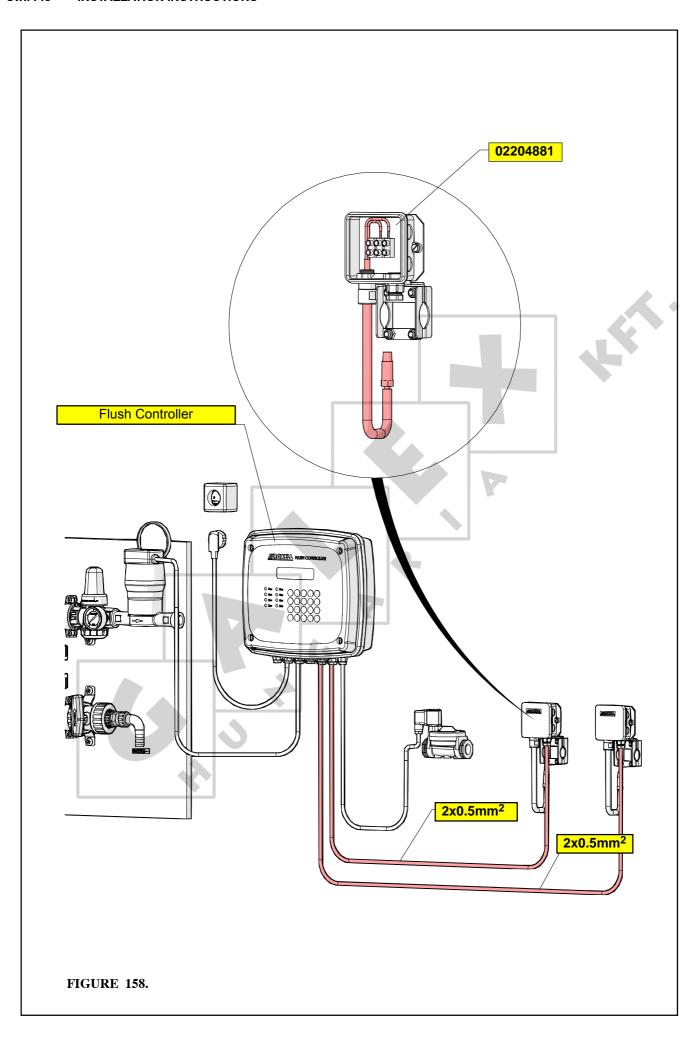
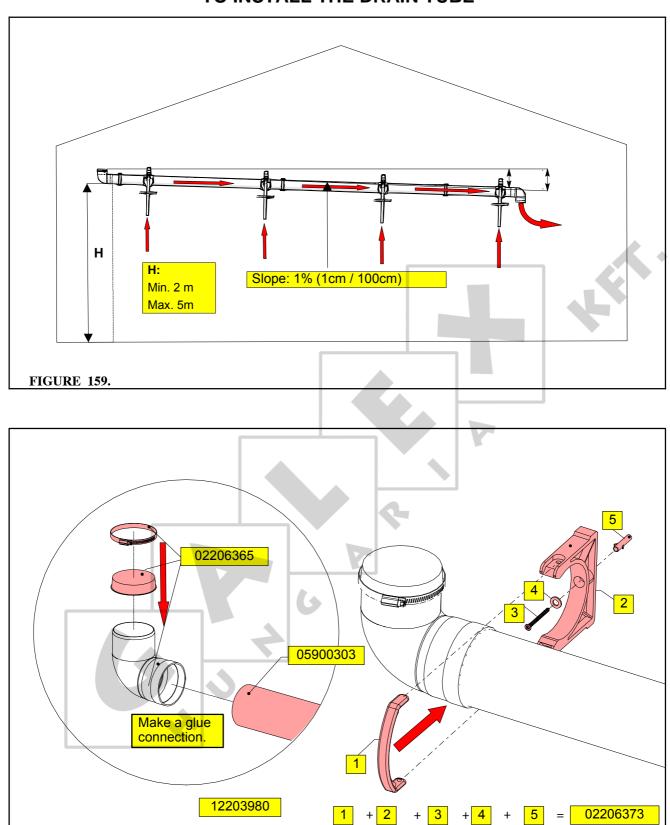
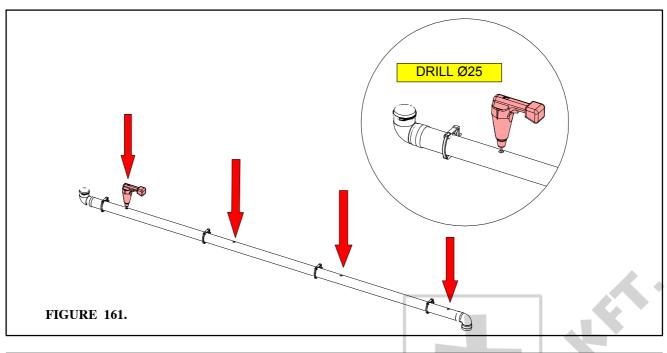
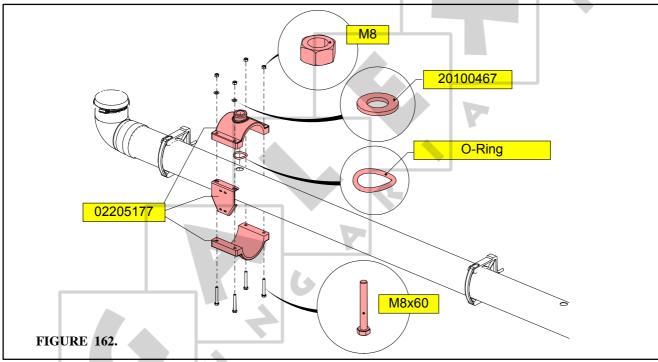


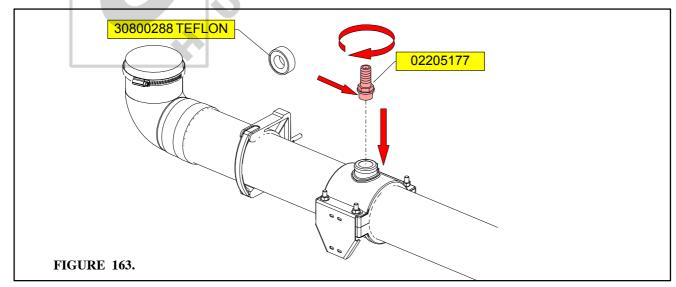
FIGURE 160.

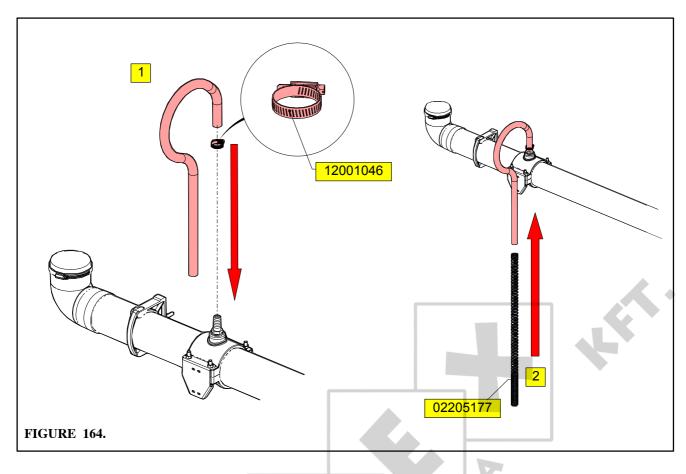
## TO INSTALL THE DRAIN TUBE

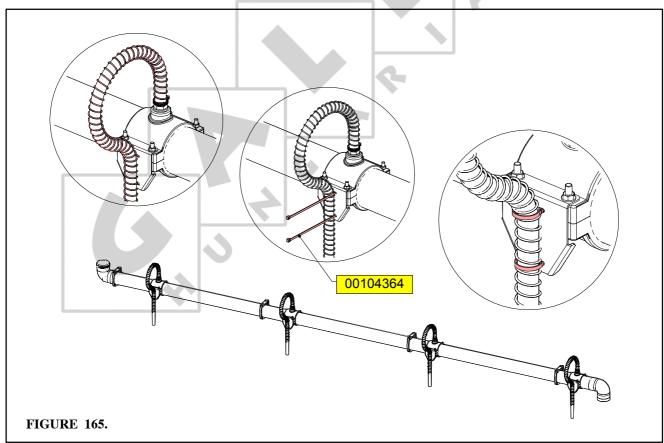




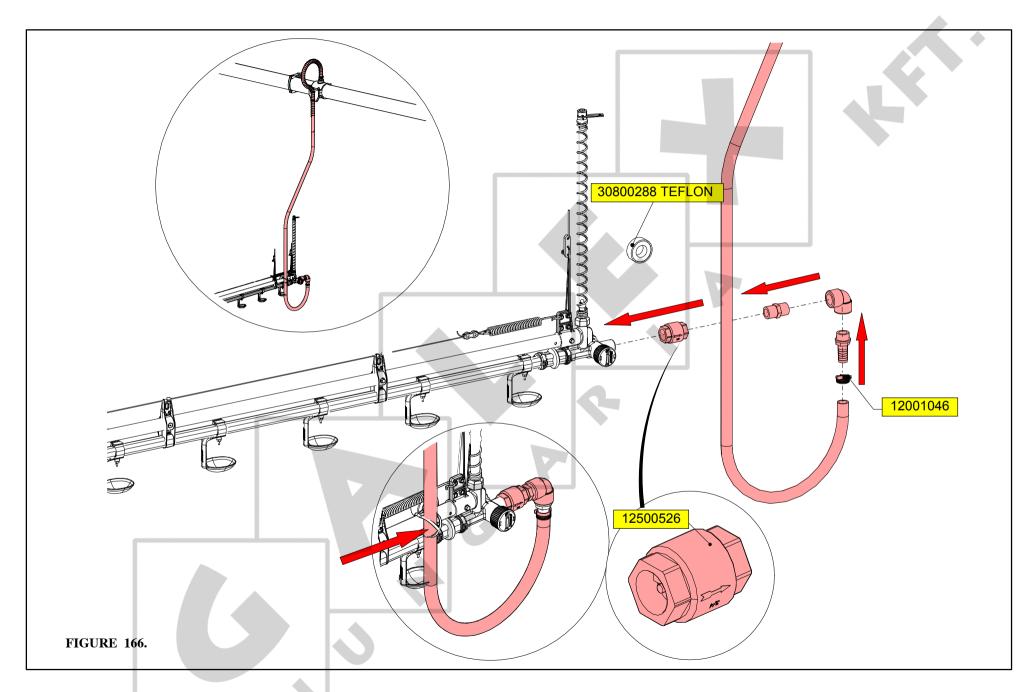


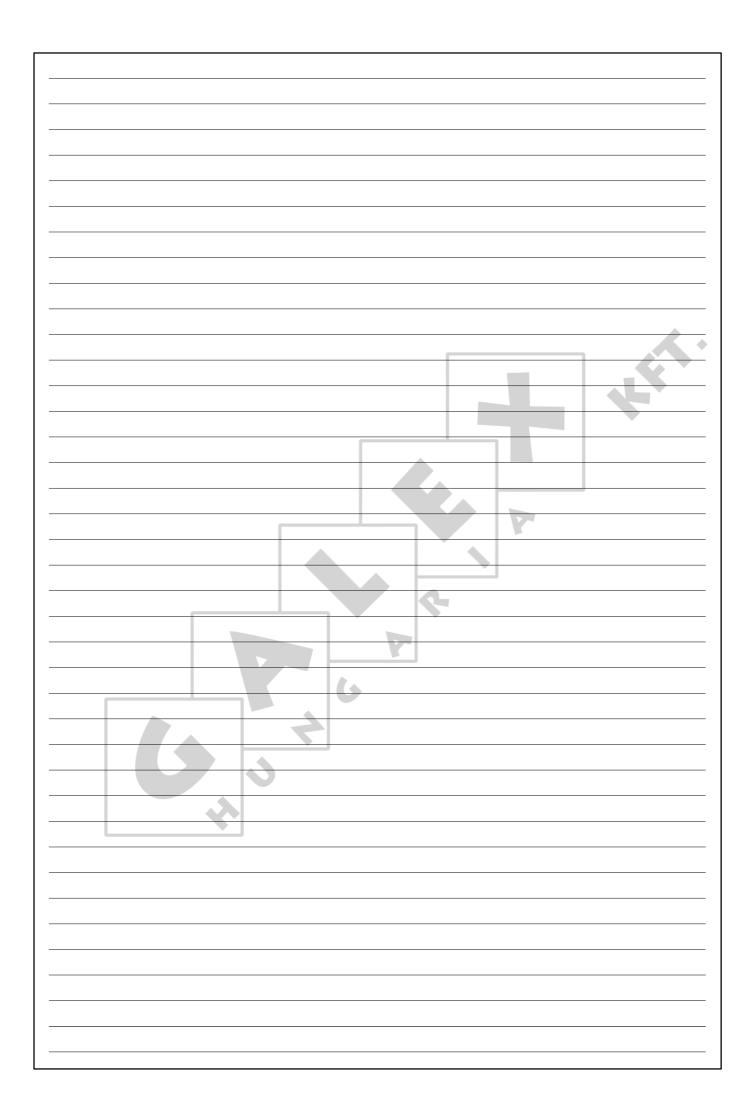


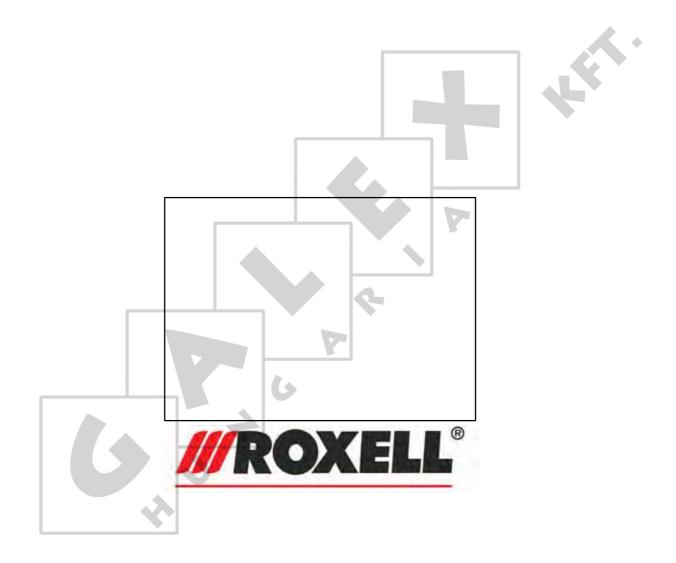




Swii'Flo - INSTALLATION INSTRUCTIONS







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