



TitanTM

Use and Assembly Guide



Original use and assembly guide

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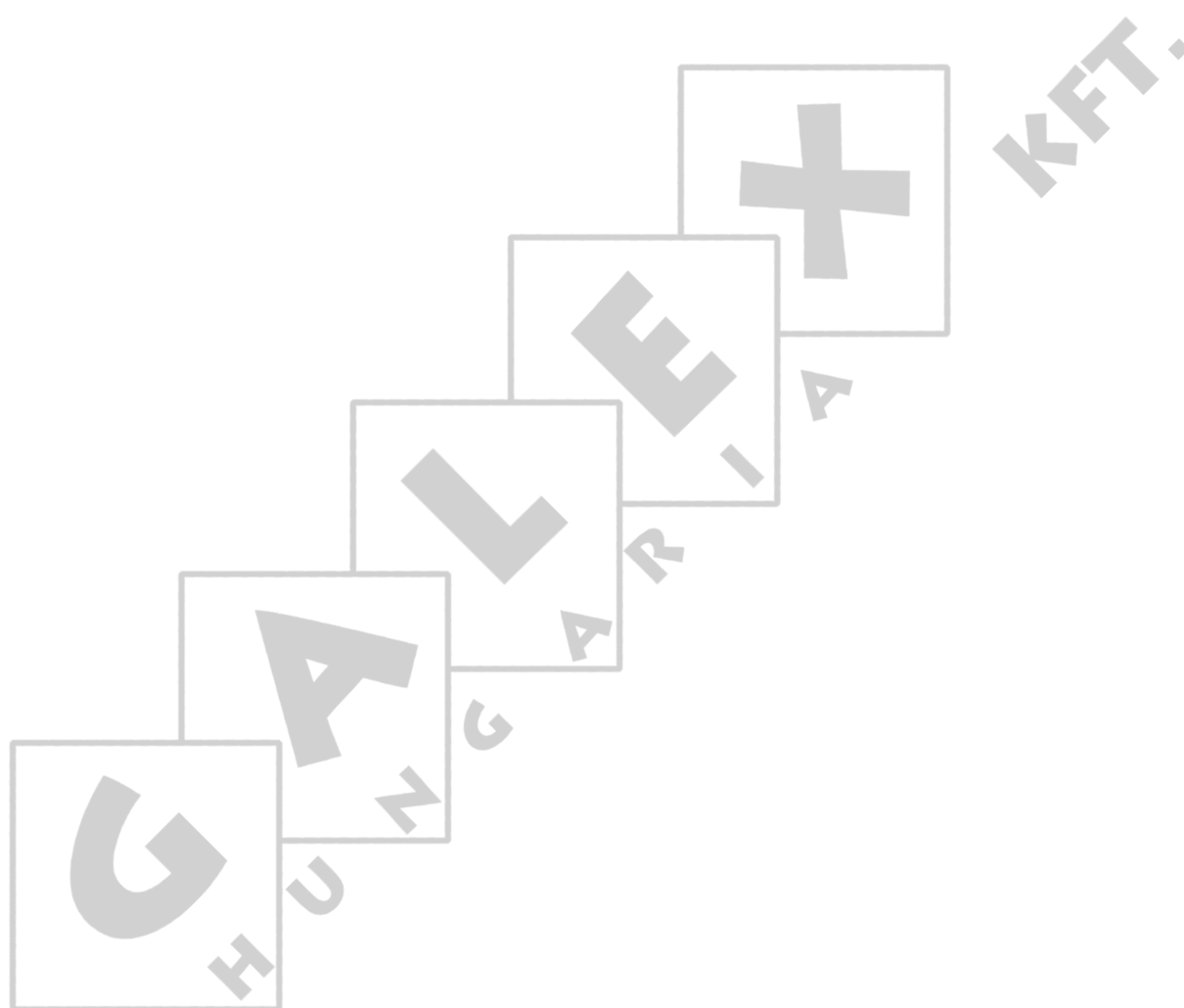
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GENERAL INFORMATION

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 done in accordance with Roxell's most current assembly, installation, connection and maintenance manuals and (ii) the electrical installation on which the Products must be connected must be done in accordance with applicable local legislation on electrical installations. Furthermore, the Products must be tested both mechanically and electrically in accordance with state of the art techniques and applicable local legislation.

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	DANGER indicates a direct imminent danger that can result in a serious or even fatal accident if the safety measures are not respected.
 WARNING	WARNING indicates a possible imminent danger that can result in a serious accident or damage to the product if the safety measures are not respected.
 CAUTION	CAUTION indicates possible, dangerous situations that can result in minor physical injury or material damage if the safety measures are not respected.
	This symbol refers to supporting information.
<div data-bbox="165 1263 220 1317"> <input checked="" type="checkbox"/> </div> <div data-bbox="236 1270 331 1299"> allowed </div> <div data-bbox="165 1330 220 1384"> <input type="checkbox"/> </div> <div data-bbox="236 1337 376 1366"> not allowed </div>	

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. You 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.

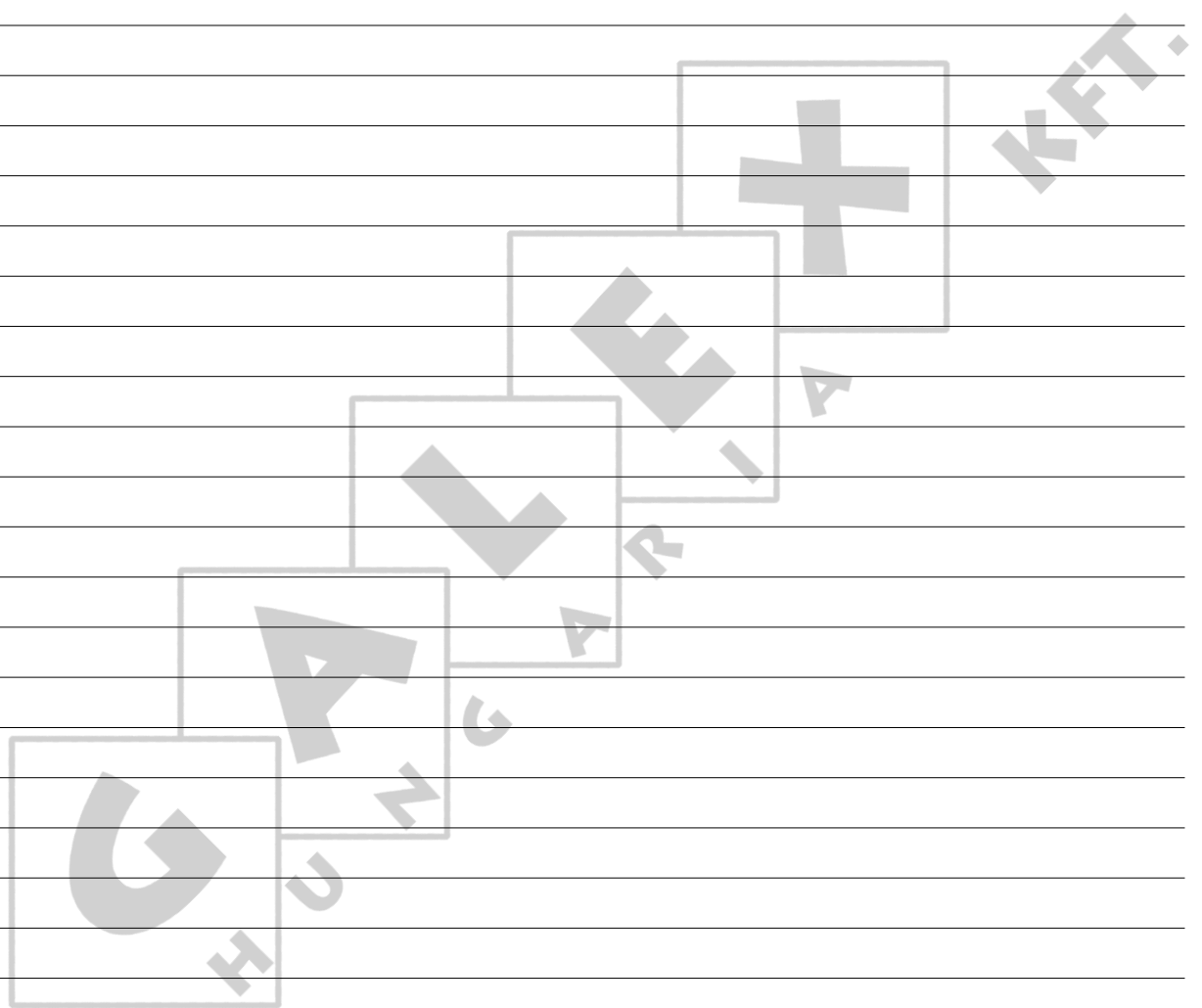
Ensure you wear personal protective equipment (gloves, dust masks...).

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.**

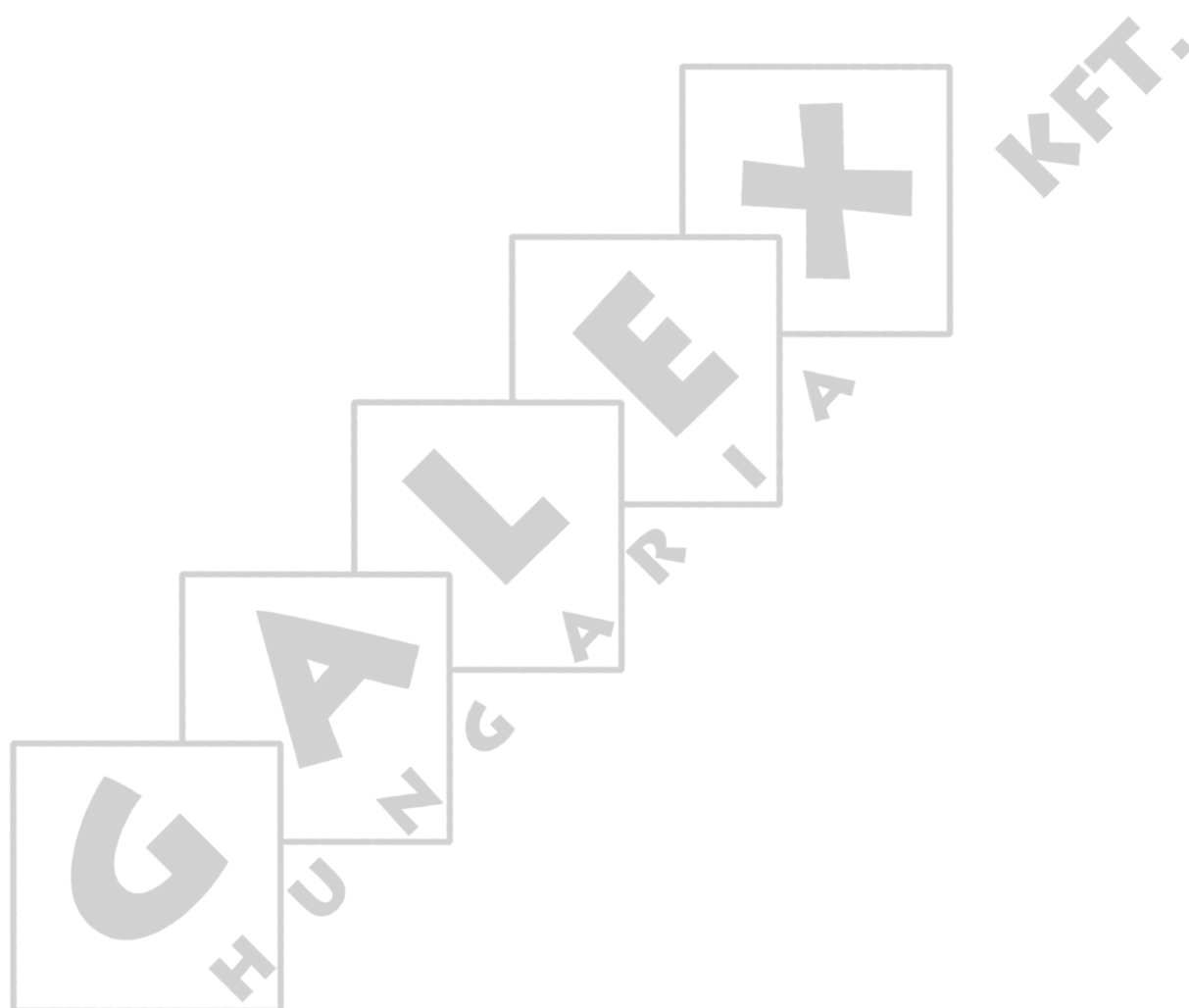
14. ELECTRICAL EQUIPMENT, CONTROL PANELS, COMPONENTS AND DRIVE UNITS

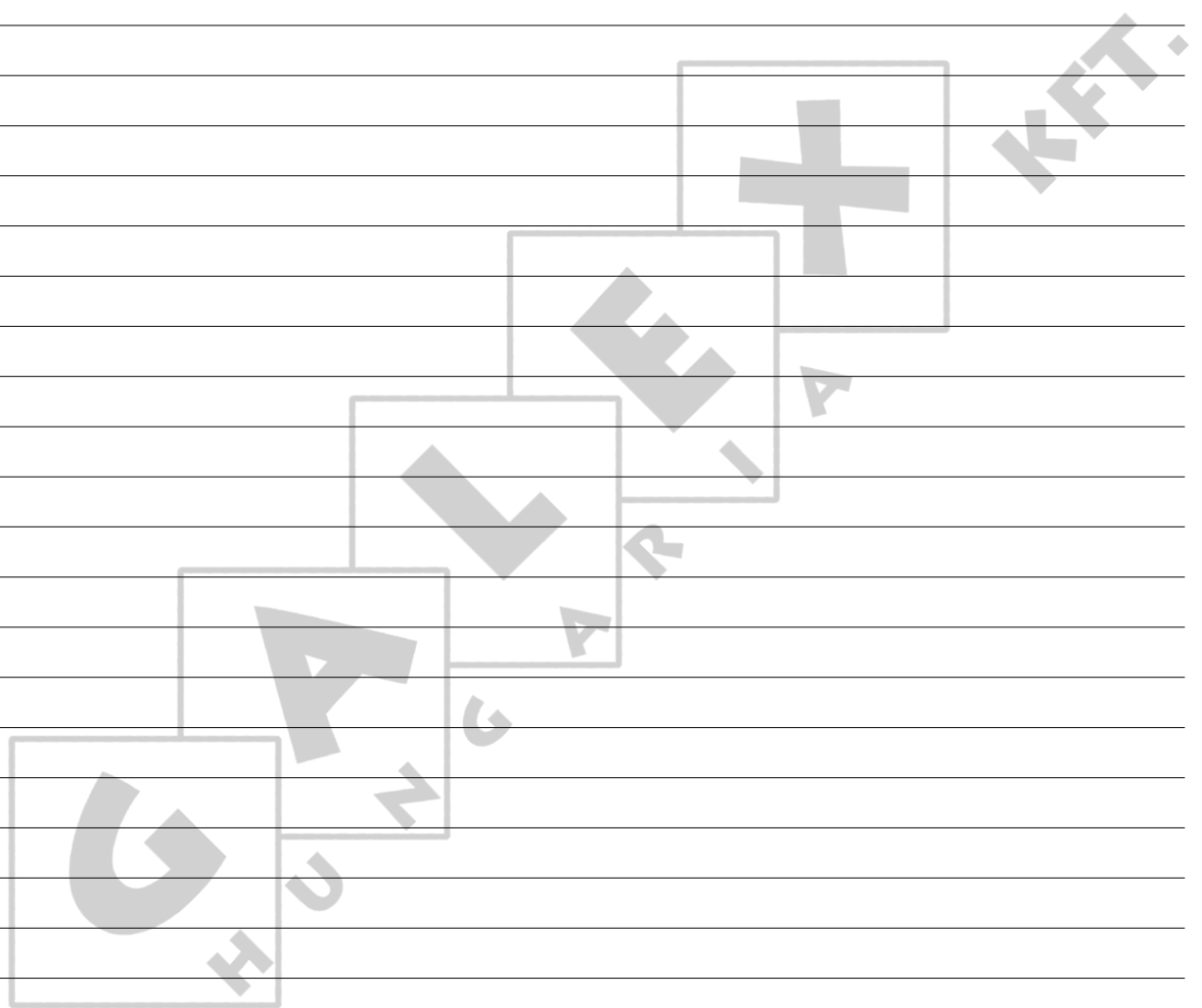
- To operate control panels, there must be **at least 70 cm of free space.**
- Control panels must **always remain closed.** The key of the control panel must be in possession of an authorized person.
- The necessary measures must be taken by the user to keep out **rats, mice and other vermin from the 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





GENERAL SAFETY RULES

Titan Nr: 004...

Automatic pan feeding system for rearing and production of turkeys

Winching system for feeding and drinking lines



DANGER

IMPORTANT

**Carefully read the following instructions before
USING the system**

- Before you do any **repair or maintenance works, always disconnect the electricity supply.**
- Ensure you wear **personal protection equipment** (gloves, dust masks).
- The system **starts automatically.**
Never use your **hands** at **dangerous locations** (feed intake boots, drive units, control units or outlet holes in the tubes) before you have **completely switched off** the transport system and made sure that **nobody** can **switch it on** without your knowledge.
- **Never** allow **unauthorized persons** to **enter the house** in your absence.
- **Be careful** when **lowering** or **winching** up the feeding lines/circuits:
 - **Stop** immediately at the slightest hitch.
 - **Never** stay **underneath** when lowering or winching up the lines/circuit.
- If the auger stalls: **immediately switch off** the system.
Carefully read the Troubleshooting Guide and strictly follow instructions.
Contact a **technically trained person.**
An auger **under tension** can **cause very serious injuries** when released.
- Regularly check the **elbow/trough and/or tube connections.** Tighten if necessary.
- Regularly check that the **control unit (pan)** and/or the **motor handy box** are properly closed.
- Ensure that the **hopper cover grill or cover** on the 100 kg hopper **closes properly.**
- The standard winching system is **only suitable for height regulation** during the flock's stay and **winching up for cleaning** (1x per flock).
For more frequent winching, use the **daily winching components.**



This **SYMBOL** will be used to draw your attention to matters that are of **GREAT IMPORTANCE** for your **SAFETY**.
It means: **WARNING** - follow the safety instructions.
Disconnect the current, re-read the safety rules.
In short: **BE ALERT.** **IGNORING** these instructions can cause **SERIOUS INJURIES** or even **DEATH**.

WINCHING SYSTEMS

GENERAL SAFETY RULES

Daily / motorized / hand-operated winch for poultry systems



IMPORTANT
**Carefully read the following instructions before
USING the system**

- **Pay attention** when **winching up** or **putting down** the poultry lines/circuits:
 - **Stop** the handling in case of any malfunctioning.
 - **Never** stand **underneath** the load when winching up or putting down the poultry lines.
- **Never allow unauthorized persons to enter** the house during your absence.
- **Don't** wear **loose** clothing.
- Only **adults** may control the winch.
- Only use the winch for **suspension of Roxell poultry lines/circuits**.
- **Always** check the **condition of the winch and the cable** before operating.
 - A **raveled, kinked or damaged cable** must be replaced **immediately**.
 - A **loose or damaged winch** must be replaced **immediately**.
- **Always** check before use, if the **cable is not damaged**.
- **Never** touch the **cable**, the **rotating parts** of the winch and the **switches** of the switch assembly for automatic winch, when operating.
- Only use the winch when **nobody** is standing **underneath the load**.
- **Always** look **at the load** while using the winch in **manual mode**.
- **Prevent** that the load makes a **shocking movement**.
- **Cover** the winch during **cleaning**.



Forbidden: Never use the winch to lift persons.



Danger: Getting jammed may cause **serious injuries**.

DIRECTIONS FOR OPERATING THE SYSTEM

PUTTING THE SYSTEM INTO USE

- The oil on the new auger and the tubes will slow up feed transport at the beginning. When using a new feeding line for the first time, fill up the hopper with 25 kg of feed.



Never put your hands into the feed intake boot while filling the pans.

DANGER

- Switch on the feeder until this feed is distributed, then repeat the procedure until the whole line is filled.
By doing this:
 - you limit the load on the motor of a long feeding line.
 - at the same time, you test the switches and make sure that the feeding line has been properly installed.
 - you become used to the system.
- **IMPORTANT:** Bring the house with the litter to the right temperature at least 24 hours before you put the birds in. Birds are sensitive to light, moisture, draught and temperature. They will shun places with an environment deviating from the average.
- The last feeder pan on the line (the control pan) is the most important one and it has to be properly adjusted (low feed level : 1 ½ - 2 cm.).
It must be emptied first because it starts the next feed supply. Take care that there are enough birds feeding from this pan. You can have more light above the control pan by installing the optional LED light kit.
- Keep the pan free of litter and manure. It has to be the most attractive pan on the line.
- Take care that temperature, moisture, ventilation are constant at this location.
- More birds will feed from the control pans if you install them somewhat further away from the end wall (3-4 m).
The same remark goes for the control pans of the outside lines (next to the side walls). Lay out the feeding lines in such a way that the biggest distance between feed and birds is about the same for all lines (L<4.5 m).
The feeding line furthest from the bin is equipped with a level switch (installed as low as possible) in the hopper. This level switch controls the feed supply from the bin.
If, for certain reasons, the last line is not enough used by the birds, you must install a level switch in the other hoppers. Take care to have a 100% drop out at each hopper switch.
- You can help to ensure that enough birds eat from the last line by taking care of:
 - ventilation
 - house structure
 - insulation
 - litter
 - distribution of feeders and drinkers.
- When planned correctly, you will have a very even spread of the birds over the whole floor area of the house.

PRACTICAL DATA FOR USING THE SYSTEM

- The edge of the feeder pan must be at a level which corresponds to the spot where the bird's back merges with the neck.
Keeping the pans at the correct level will prevent birds from scratching in the feed.
Pans are winched up gradually as birds grow.
Example: for birds weighing about 10 kg, the edges of the feeder pans will be 40-45 cm above floor level).
By keeping the pans at the correct level:
 - you limit feed waste
 - litter and dirt are kept out
 - birds can move easily between the lines.
- Under normal circumstances, there will be the least feed waste when the feed level in the pan is about 2 cm.
For debeaked birds, you need a slightly higher feed level.
The feed level can be very easily adjusted. Turn the adjustment knob in the desired position. Usually you can use position 2-3.
To maximize the feed level, you can also adjust the lower feed cone in position 2, allowing an extra 2.5 cm of feed.
- The feeding line for adult turkeys can be equipped with an intermediate control in order to use only part of the line.
Advantage: a part of the house can be shut-off or emptied to save labour, feed and energy.
- If the birds have been without feed for a considerable period, you must be very careful when filling up the feeding lines.
Spread some feed on the litter so that the birds do not rush onto the pans when the augers start.

Walk along the lines and gently disperse birds.

Another method: winch up the feeding lines so that birds can't reach the pans. Only then fill up the pans and lower the lines: but make sure that birds don't push each other under the pans as they are lowered.

Keep an eye on the feed supply.

- The suspension cable of a new system always stretches a little. Take care to have the (heavy) hopper well suspended. If necessary, change one or more links.

PROGRAMMED FEEDING

= Feeding according to a programme set on a time clock.

WHY?

To make sure that no feed is supplied during certain periods.
Pans are almost emptied between meals.

ADVANTAGES

- Better feed conversion:
 - Birds waste less feed (lower feed level).
 - Fresh feed available at several preset times = more resting periods; a better digestion; more appetite.
 - You can observe birds better during the meal. Sick birds are more easily identified.
- The system operates more regularly; birds associate the noise of the running auger with fresh feed (Pavlov effect).
- You have better control of the system's performance.

HOW?

There are many ways. The best system is to programme in such a way that pans are eaten just empty without causing any stress to the birds.

- You can start programmed feeding **only after 3 weeks** when the animals are used to the system.
- Occupation per pan and per drinker should not exceed our recommendations.
- If there is a disease problem: stop programming and do not let the system run empty.
- To get the maximum profit out of your system, you should develop your own programme according to the circumstances.

For any further advice, contact **ROXELL**.

USE OF TITAN

Capacity: males & females from 4-7 weeks up till about 15 kg: 70 birds/pan.
If end weight deviates, adapt density.

Advice: birds > 20 kg --> ø50.8 mm tube!

1. SEPARATE REARING HOUSES

With Multimax you can feed turkey males and females until max. 7 weeks. Automatic feeding from the first day.

After that, the birds move to another house where Titan is installed.

Male birds grow faster and are therefore grown on standard Titan until they reach slaughter weight.

Female birds however are smaller and are finished sooner. They are fattened on Titan with a winchable feed level tube. The feed level can be lowered gradually as the female birds grow.

2. TWO-HOUSE FARMS

This growing method assures the turkey grower of a continuous production.

Male and female birds are grown in the same house until the age of max. 7 weeks on Multimax. Then the male birds move to another house where they continue on Titan until slaughter weight.

In the meantime, the females grow further on Multimax. They are finished earlier (± 10 kg) than the male birds, which grow heavier. After the rearing period, put a collar on the Multimax pan to prevent feed waste.

This enables the grower to clean out the empty Multimax house after the females have been slaughtered.

While the male birds in the other house are still fattening, he can start again rearing males and females in the first house, on Multimax.

By the time the second house is emptied and cleaned out, a new batch of ± 7 -week-old males is ready to move in.

3. REARING ON A ONE-HOUSE FARM

Males and females are grown (separately) in one house with Titan starter pans, with winching system for the feed level rings (until max. 7 weeks).

At that moment, the Titan starter pans are replaced by the standard Titan feeder pans.

At 14-15 weeks, the females are removed for slaughter. The males use the whole house on Titan until finishing.

After that, the cycle starts again.

4. USE OF TITAN STARTER PAN

Management recommendation for use of the Titan starter pan.



FIGURE 1.

For ease of use: install the central adjustment system.



FIGURE 2.

DIRECTIONS FOR USE OF THE POULTRY PERCH GUARD

The steel cables above the lines have a double function:

- they bring the pans back into a horizontal position by spring tension;
- they serve as a poultry perch guard under charge.

The cables must be tightened in such a way that they do not touch the tubes when birds perch on the line.

Earth the feeding system by means of the wiring of the power unit or by means of a separate earth connection, so that the poultry perch guard properly functions.

The poultry perch guard must function on a separate circuit. You must have the possibility to disconnect it by a switch close to the door so that birds stay calm when you enter the house.

WHEN STARTING A NEW FLOCK

Check operation of your system before placing the birds.

More particularly, take care that:

- all feed level tubes are at the same level (always keep feed level as low as possible);
- all switches and sensors react promptly;
- the control pans are properly adjusted (low feed level);
- the poultry perch guard is still stretched (springs must be stretched 5-7 cm);
- there are no leaks in the feed supply system;
- there is no old, stale and/or tainted feed in the bin;
- **the feeding lines are well aligned. Especially the power unit and the hopper must be well aligned and at the same level.**

CLEANING

The feeding system for turkeys requires very little maintenance.

When removing the birds from the house, take care not to damage pans or other parts of the system (e.g. by machines or heavy objects).

Also remove the remaining feed from the pans and from the hoppers. This will prevent corrosion during the time the house is empty and during cleaning.

Winch up the lines about 1 m. Use the hinged pan supports to clean pans one after another by means of a high pressure cleaner, letting them rest on the floor.



FIGURE 3.



DANGER


Don't forget to cover up the control pan with plastic!

Motors and switches are protected IP55. This means that they withstand a hose, NOT a high pressure cleaner. After cleaning, remove water from the pans and if possible raise the house temperature so that pans dry quickly.

The pan, made of high quality polypropylene, resists practically all cleansers and disinfectants. If you want to use an aggressive product (*) first contact your supplier.

Hang the **House Chart** at a spot inside the house where it catches the eye.

(*) P.S. Gaseous formaldehyde (formalin), liquid caustic soda or solution of caustic soda, hypochlorite or chlorine water cresols are very corrosive and they will quickly affect the installation.

MAINTENANCE INSTRUCTIONS				
 DANGER	Switch off the main switch first. Use personal protective equipment. Up to 300 kg/line!	3-monthly	6-monthly	Yearly
ACTIONS IN GREY BACKGROUND MUST BE DONE BY A TECHNICALLY TRAINED PERSON.				
Power unit				
- Make fan dust-free				X
- Check possible damages to electrical wiring				X
Poultry intake boot with sensor				
- Check sensor				X
100 kg hopper				
- Check level switch				X
Suspension				
- Check operation of (central) winch		X		
- Check operation of (central) winch. Grease after cleaning.				X
- Check connection of cable		X		
- Check connection of pulleys		X		
- Check suspension of tubes and motors		X		
- Keep suspension cord/cable in tension		X		
Poultry perch cable above the tubes/elbows				
- Check cable				X
Sensors/switches				
- Check operation of safety switch or sensor.			X	
- Check electrical wiring				X
Lines/circuits				
- Check screws and bolts in the system after the first month and after each batch . Tighten if necessary.		X		
- Keep tubes level.		X		
- Remove all feed from the system when the system will be out of use for a period.		X		

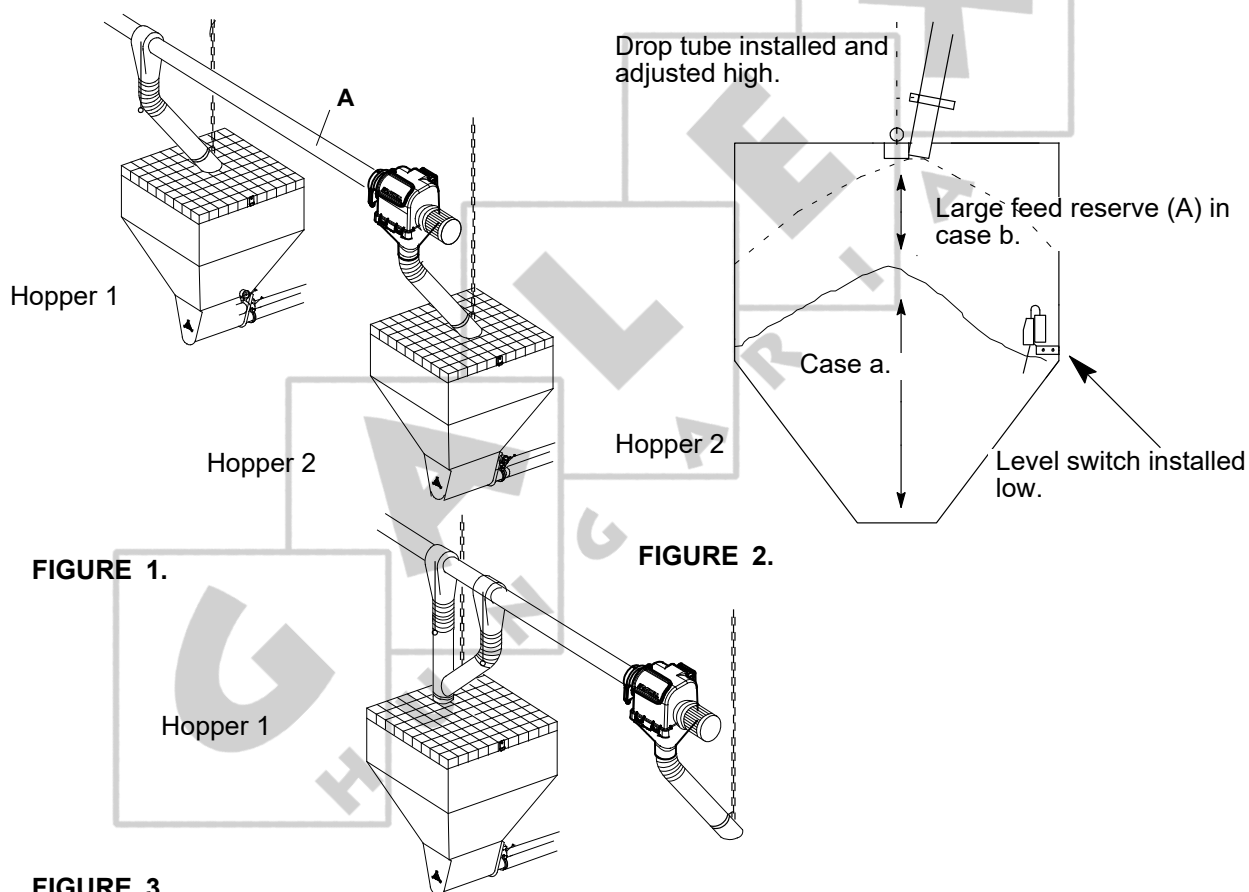
**DANGER**

TROUBLE SHOOTING GUIDE

Switch off the main switch first.
Use personal protective equipment.
Up to 300 kg/line!

ACTIONS IN GREY BACKGROUND MUST BE DONE BY A TECHNICALLY TRAINED PERSON.		
PROBLEM	CAUSE	CORRECTIVE ACTION
None of the feeder lines run.	No current.	Replace defective fuses or reset circuit breakers. Check current supply to the house.
	Defective time clock.	Replace defective clock.
	Time clock not properly set.	Readjust tabs.
One/more lines do not run. Pans are empty	Wires from motor damaged.	Measure current in motor wires. Replace wires if defective.
	Motor protection switched off.	Reset motor overload button.
	Defective sensor in the control unit, or sensor not properly adjusted.	Check the good operation of the sensor. Replace if necessary.
	Control unit not functioning properly.	Install the optional LED light kit. Check temperature. Control unit must be the most attractive one, especially the control unit of the feeder line below the Flex-Auger control unit.
	Defective sensor/minimum switch control unit or 100 kg hopper.	Check control unit sensor or switch. Replace if necessary.
Motor is often overloaded.	Oil on auger overloads the motor.	Clean the auger by running repeatedly 25 kg of feed through the line.
	Not enough current supply to the motors.	Check current supply at motor location. Start the motor. Measure start current on motors. Wiring must be thick enough to guarantee good operation of the system.
	Object blocks the auger. Motor runs, then stalls. Feed sticks to the tubes.	Check if there are no objects in the boot, the control unit and the drop holes of the feeder pans. Remove any objects.
Auger stalls.	Anchor bearing worn out or broken.	Replace bearing. Gently slide auger back into the tubes. Don't let it jump back: your finger or the bearing could be damaged .
	Auger not enough stretched.	Shorten the auger.
	Object blocks the auger.	Remove the object.
Tubes / boot wear rapidly, much noise when system runs.	Auger kinked or bent at the wear point. Auger end overlaps the anchor end.	Make sure not to kink the auger when using gripping pliers. Auger must not overlap the anchor end.
Not enough feed supplied to fill up the lines.	Flex-Auger drop holes are too small or point upwards.	Make holes wider/turn tubes with holes downwards.
	Flow regulator in boot of feed supply system blocks passage of the feed.	Adjust flow regulator to get a higher capacity.
	Flex-Auger capacity is too low.	Check the capacity of the Flex-Auger according the specifications. Check the installation of the Flex-Auger.
	Not enough time set on the time clock.	Extend operation time per meal.
Feed drops directly on the adjuster ring of the grill.	Pan not installed over the hole.	Remove the top support. Install the pan ass'y over the hole and the lips.

Hopper 1 is empty while the feed level in the second hopper corresponds with the position of the level switch.	Birds massively move to one side of the house, i.e. depending upon the position of the sun.	<p><u>The problem occurs sporadically:</u></p> <p>You can solve the problem by changing the round hole in the Flex-Auger tube above hopper 1 into a rectangular one. Install two outlet drops above hopper 1 (see fig. 3.) if necessary, so that more feed drops into hopper 1. Install the level switch low in hopper 2 (see fig. 2.). Install and adjust drop tubes to all hoppers high enough.</p> <p><u>The problem occurs regularly:</u></p> <p>Install a level switch high in each hopper. Install the level switch low in the last hopper. Install and adjust the drop tube high, so that the feed in tube A (over switch level) is carried to hopper 2.</p>
Feed level in the pans is too high/low.	Feed level setting is not correct. Mounted in the wrong position.	Adjust the feed level with the adjustment knob. If the maximum/minimum level is reached, mount the cone in the high or low position.
The cone drops out.	Adjustment knob is set in mounting position.	Remount the cone. Make sure that the adjustment knob is not set in the mounting position.



DAILY WINCHING

TROUBLESHOOTING GUIDE

**DANGER**

Not respecting above-mentioned instructions can cause physical injury or material damage.

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

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

**DANGER**

See to it that you first remove each element which can obstruct a safe operation of the system!

PROBLEM	CAUSE	CORRECTIVE ACTION
Sensor doesn't work.	Defect of sensor.	Replace the sensor.
	No power supply to sensor.	Restore power supply. When not ok, please ask a technically trained person.
	The housing is dirty.	Clean the motorized winch dry. When not ok, please ask a technically trained person.
Winching up doesn't work.	Load is too heavy.	Limit the load till max. 300 kg.
	Cable to load is blocked somewhere.	Release the cable.
	Motor is broken.	Replace motor.
	Weight assembly is touching cleaning switch.	Winch can only go down.
	Drop tubes to circuits are full.	Empty drop tubes manually.
Putting down the load doesn't work.	Cable to load is blocked somewhere.	Release the cable.
	Feeding switch is touched.	Winch can only go up.
Motor doesn't work.	Motor is overloaded.	Check CCP/motor.
	Motor is too warm.	Check motor.
Cable is damaged.	Cable touches material.	Replace the cable and prevent wearing over hard material.
	Suspension should be done with single/double diversion.	Change suspension.

MAINTENANCE INSTRUCTIONS

**DANGER**

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

Remove all dirt and dust after each batch or at least every 6 months.
See to it that the winch turns fluently on the screw thread of the main shaft.
Don't use water to clean the motorized winch.
Use grease to grease moving parts.
Check suspension cable each batch or every 6 months.
Check the feed/fill/clean switches of the switch assembly.
Grease switch assembly and sliding plate.
Remove dust and dirt from the switch assembly for motorized winching.

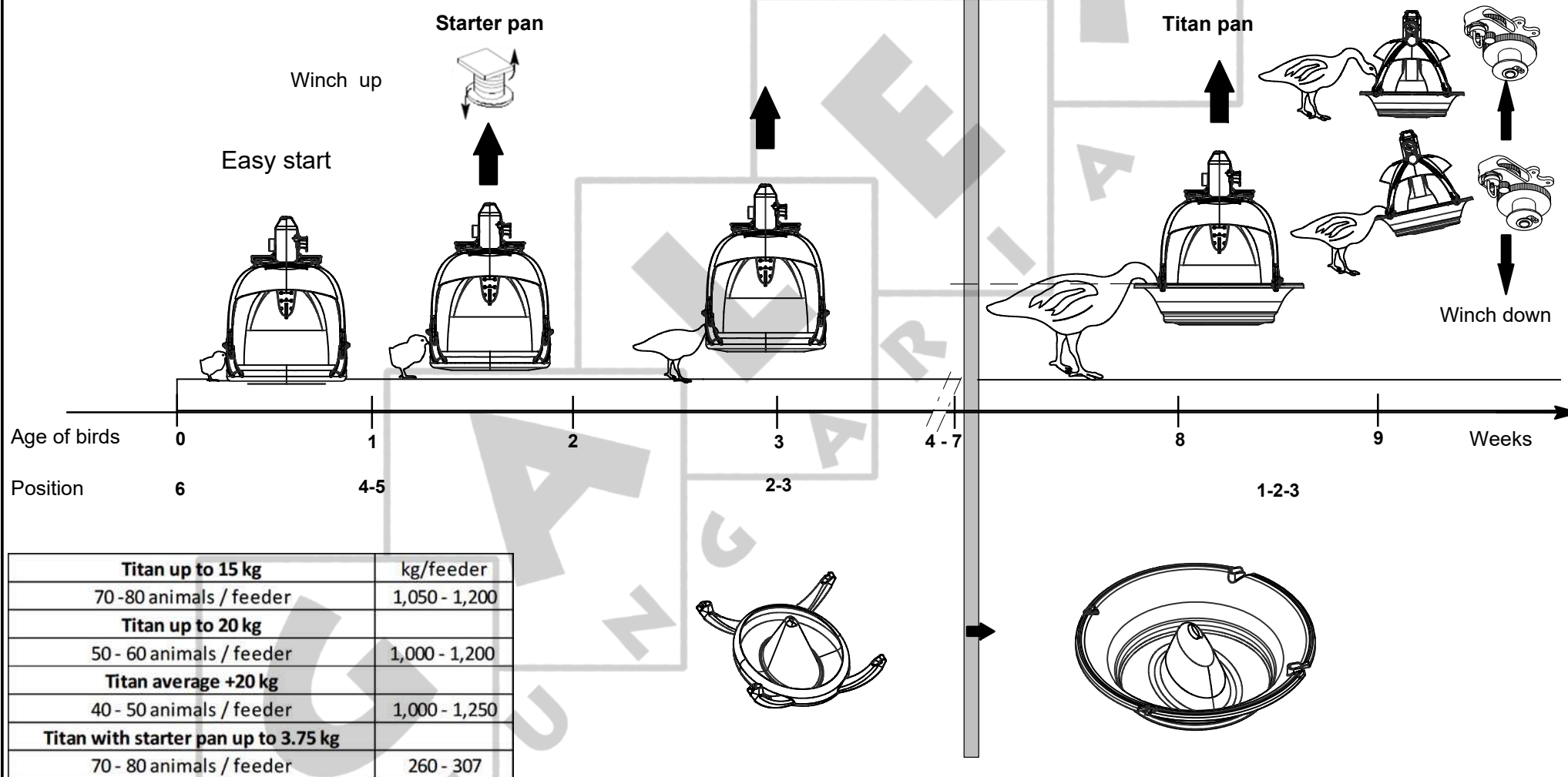
For floor feeding for turkeys up to 25 kg.

Avoid feed wastage = adjust height feeding line

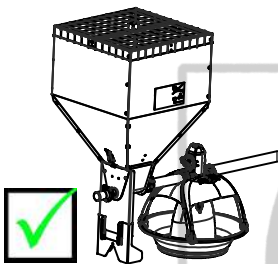
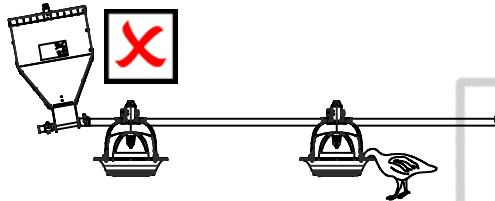
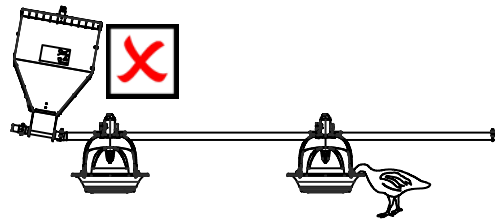
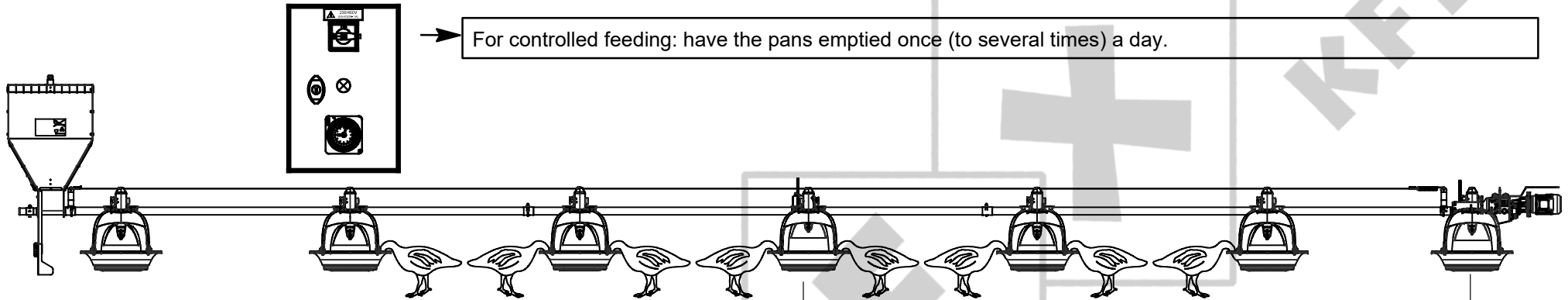
1 house

2-house system

Separate rearing farms



HOUSE CHART



(Fixed intermediate) control pan
(for partial brooding)

- Avoid draughts.
- Avoid darkness.
- = The most used pan.
- Check the suspensions of the 100 kg hopper and the control unit after heating up the building. Both suspensions must be well stretched.

CLEANING

- * The last day: run the tubes empty and let the birds empty the pans as much as possible.
- * Remove possible feed residues by turning the pans a couple of times 180 degrees around the tubes or by removing the pans from the grills.
- * Protect electrical components against water.
- * Clean the whole system by means of a high-pressure cleaner (max. 100 bar).
- * When using aggressive detergents or disinfectants, consult your supplier.



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:

MultiMax/OptiMax/Titan Nr: 004...
Automatisch pannen voedersysteem voor opfok en productie van kalkoenen.
Automatic pan feeding system for rearing and production of turkeys.

Waarop deze verklaring betrekking heeft, in overeenstemming is met:

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

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

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

(NL)

Relating to this declaration is in accordance with

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

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

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

(EN)

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

00402800

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

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

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

Wij/We
(naam installateur/name fitter)

(volledig adres en land/complete address)

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

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

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

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

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

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



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; EN ISO 12100; gemotoriseerd: EN 60204-1; EN 61439-1; EN 61439-2

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 in accordance with

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

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, 01/01/2020

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

PART II

COMPONENTS

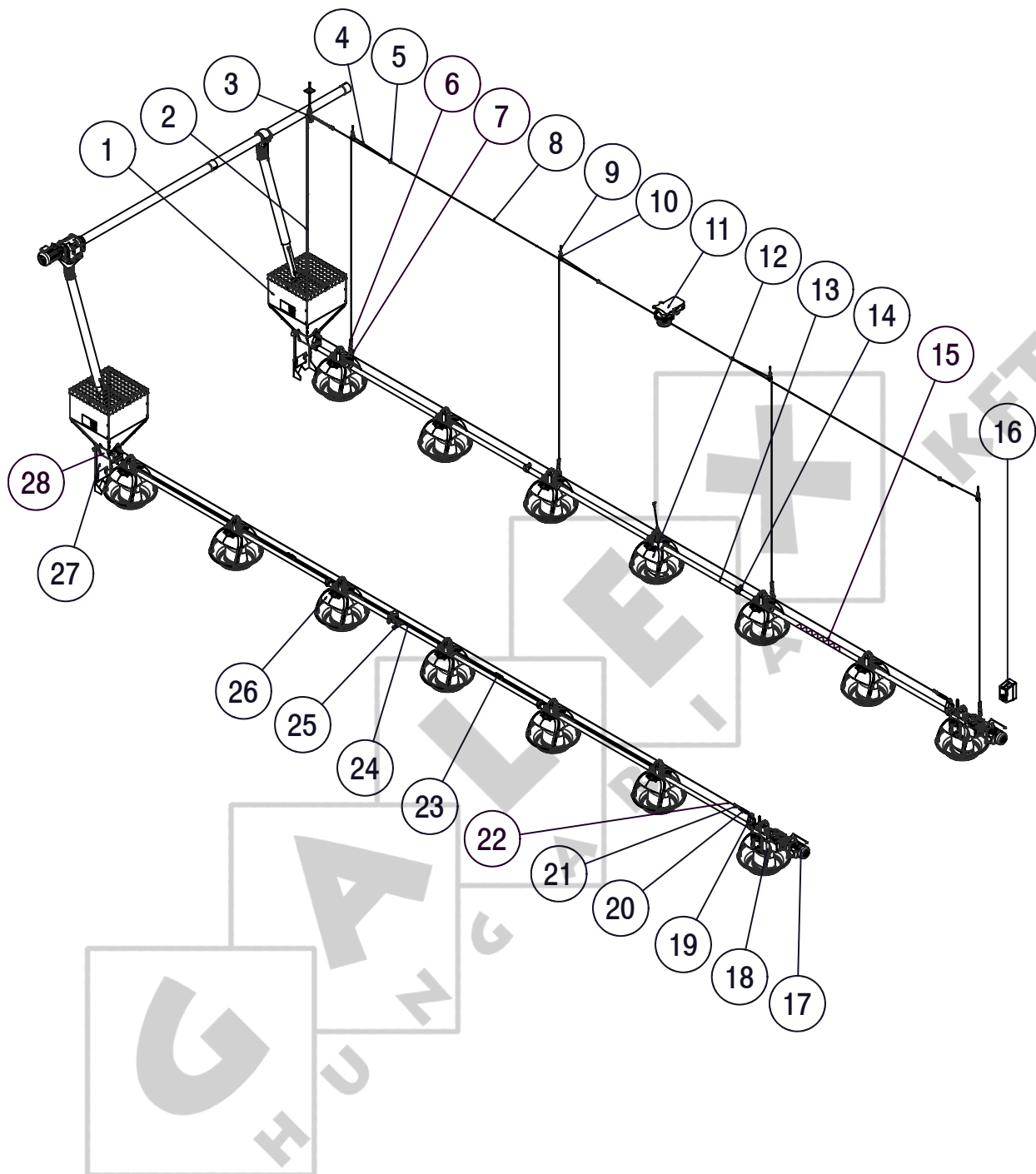
Environmentally-friendly design

The motors comply with the Ecodesign legislation.

Communication

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

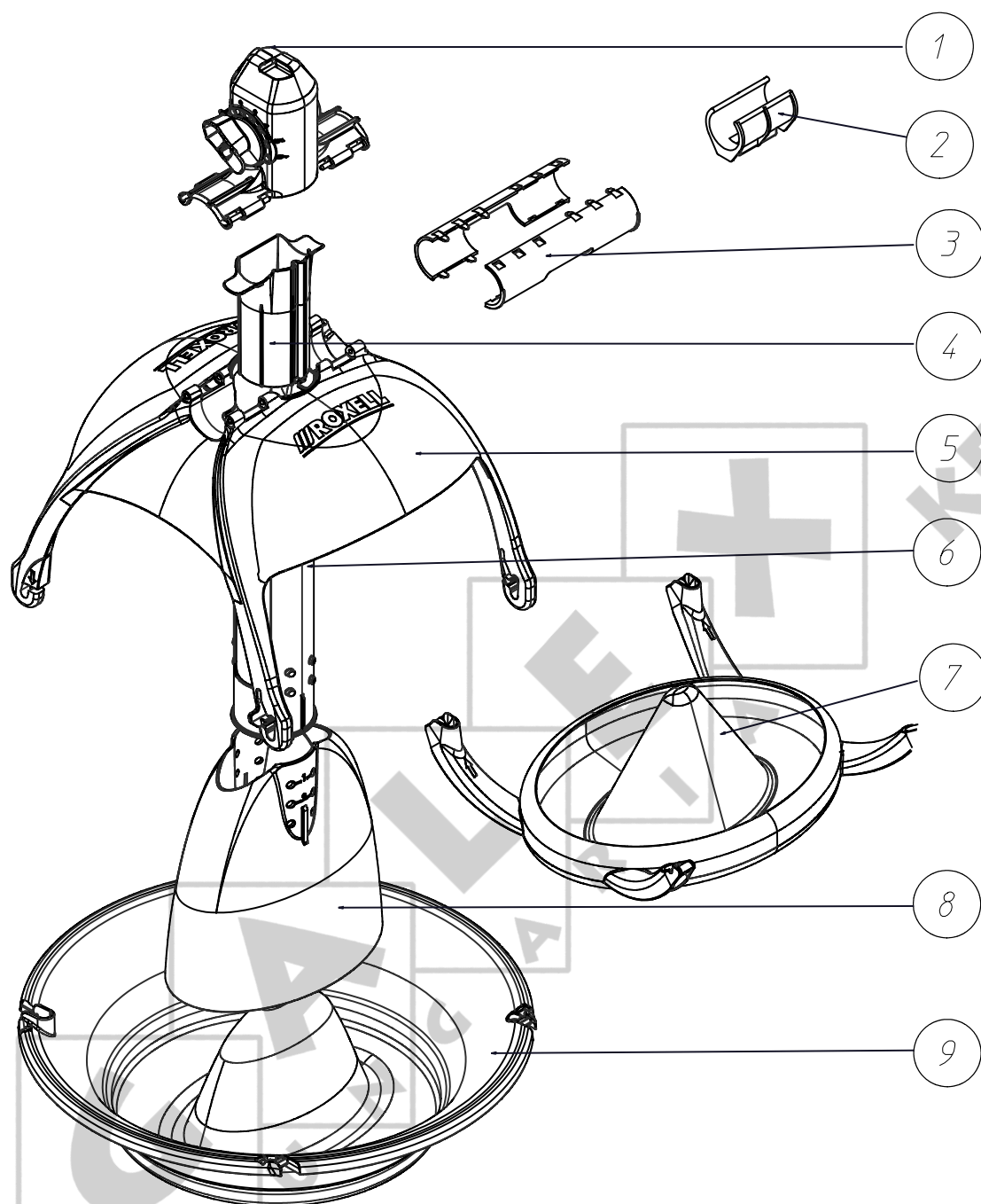
GENERAL LAYOUT



COMPONENT NUMBERS

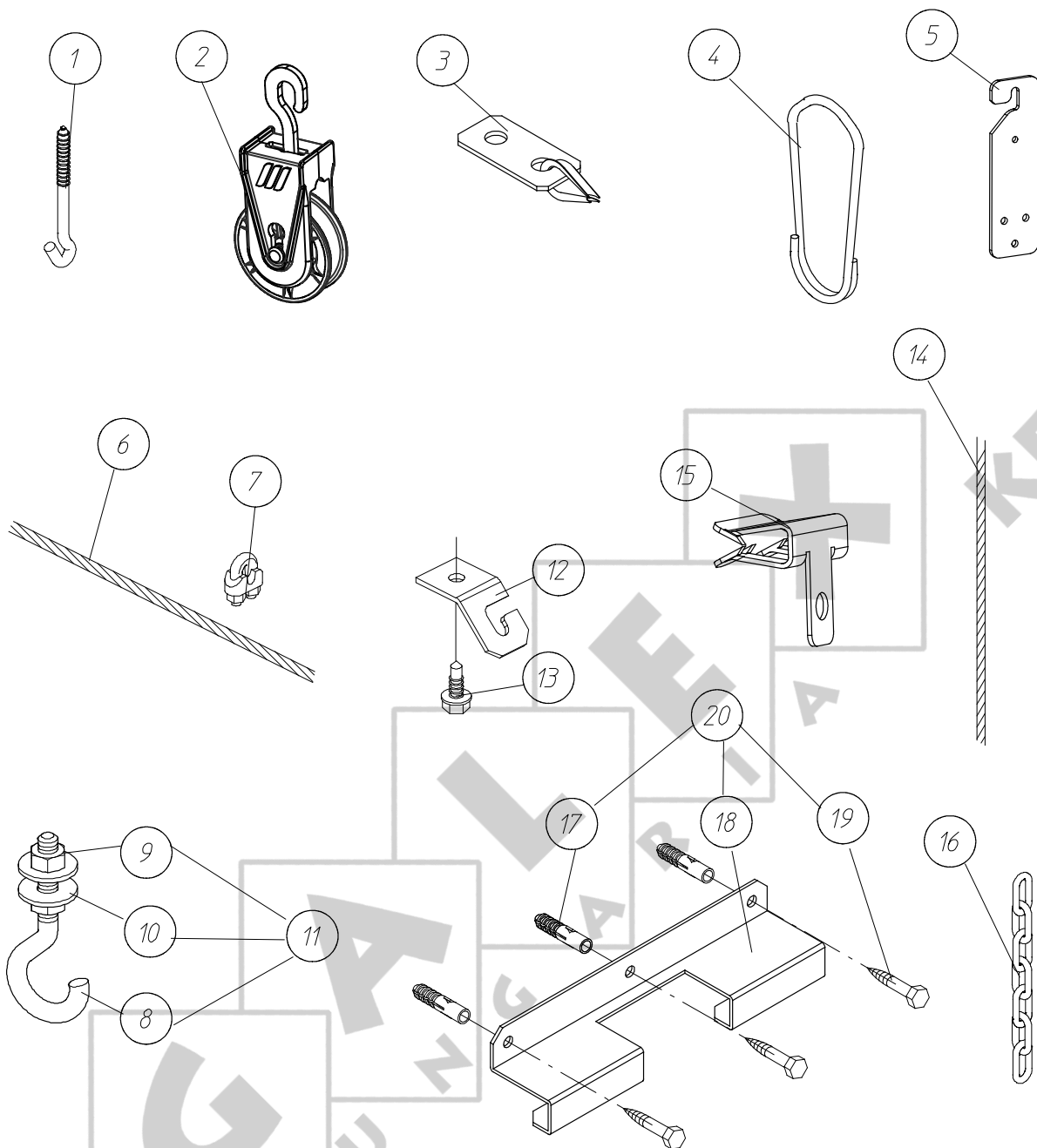
Key	Name	Part Nr.
1	100 KG HOPPER	00100602
2	CHAIN DIA. 3.5 MM	00100750
3	HEAVY DUTY PULLEY	00100412
4	CABLE 3/32" - \varnothing 2.5 MM - 250M	00106887
	CABLE 3/32" - \varnothing 2.5 MM - 500M	00106895
5	CABLE CLAMP NO. 5	00100545
6	ADJUSTMENT LEVELER	00602060
7	HANGER LTF	00403942
8	CABLE \varnothing 5MM - 3/16" - (7x7)	00100388
9	SCREW HOOK 90 MM	05000872
10	PLASTIC PULLEY \varnothing 45MM W/ ST.ST. HOOK	00107198
11	HAND OPERATED CENTRAL WINCH	00102368
12	INTERM. CU W. SENS. LTF W/O PAN	00403861
13	TUBE 3.05M LTF W/2 HOLES \varnothing 50.8	00400044
	TUBE 3.05M LTF W/1 HOLE \varnothing 50.8	00403918
	TUBE 3.05M LTF 1 HOLE \varnothing 50.8/2M	00403926
	TUBE 3.05M W/2 RECTANGULAR HOLES	00102285
*	TUBE 3.05M W/2 RECTANGULAR HOLES	00402388
	TUBE 3.05M W/1 RECTANGULAR HOLE	00102277
*	TUBE 3.05M W/1 RECTANGULAR HOLE	00402370
	TUBE 2.9M W/2 RECTANGULAR HOLES	00204065
	TUBE 2.9M W/1 RECTANGULAR HOLE	00204057
	TUBE 2.90 M WITHOUT HOLES	00500074
*	OPTIONAL W. 1 OR 2 HOLES EVERY 2M	
14	TUBE CLAMP \varnothing 54MM	00400085
	TUBE CLAMP ASSEMBLY \varnothing 45 MM	00102921
	TUBE CLAMP \varnothing 45MM	00104372
15	AUGER PF/ATF	00100974
16	MOTOR STARTER	SEVERAL
17	POWER UNIT	SEVERAL
18	CONTROL UNIT 50.8MM LTF W/O PAN	00403837
	CONTR. U. W. SENS. LTF W/O PAN	00403821
19	ANCHOR BRACKET LTF	00403934
20	SPRING	00400077
21	DUPLEX CABLE CLAMP ST.ST. - 3 MM	00106945
22	CABLE F. PERCH GUARD - 50 M	00106847
	CABLE F. PERCH GUARD - 100 M	00106855
23	U-CONNECTOR (SET OF 5PCS)	00403958
24	ROD F/CENTRAL ADJUSTMENT SYSTEM	00403950
25	FEED REG. KIT C.A.S. 50.8MM	00403966
	FEED REG. KIT C.A.S. 44.5MM	00403974
26	TITAN ASSEMBLY	II-4
27	SUPPORT F. HOPPER IN LINE LTF	00404118
28	BOOT ASS'Y - LTF	00400390
	FEED INTAKE BOOT POULTRY	00106500

PARTS TITAN PAN

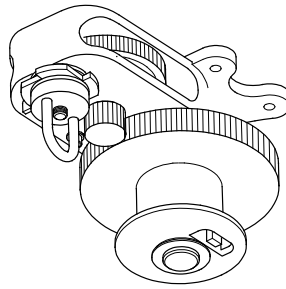
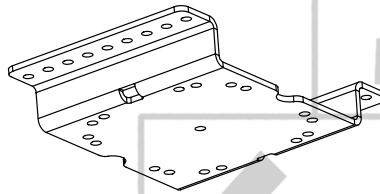
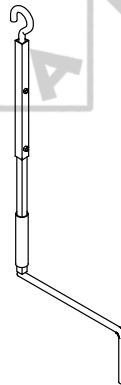


Key	Name	Part Nr.	Qt.
1	TOP CAP ASS'Y MAN.- LTF	00403797	1
	TOP CAP ASS'Y CENTR.- LTF	00403805	1
*+**2	SHUT-OFF SHELL	00105262	1
*3	ADAPTOR SHELL LTF	00403789	2
4	GUIDING TUBE LTF	00403781	1
5	PAN SHIELD LTF	00403741	1
6	UPPER FEED CONE LTF	00403773	1
7	OVAL PAN LTF	00403757	1
8	LOWER FEED CONE LTF	00403765	1
9	ROUND PAN LTF	00403749	1
*	ONLY FOR 44.5 MM TUBE		
**	OPTION		

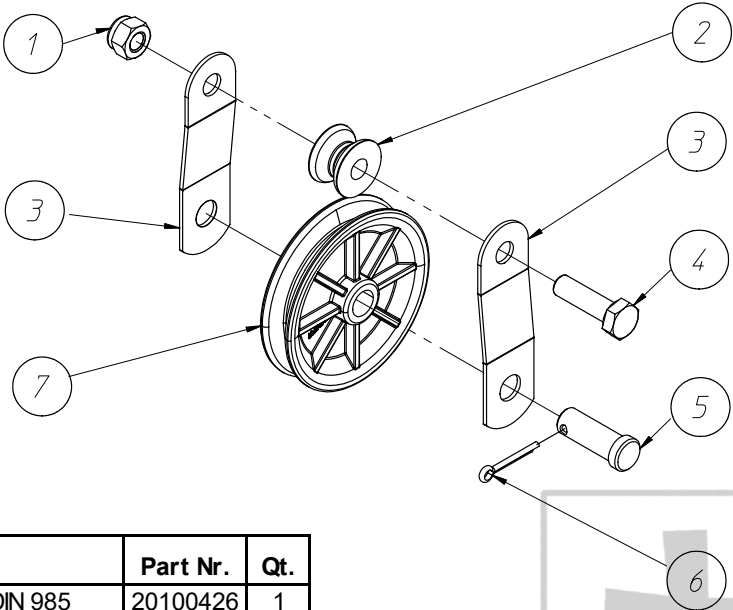
SUSPENSION COMPONENTS



Key	Name	Part Nr.	Key	Name	Part Nr.
1	SCREW HOOK 90 MM	05000872	12	SUSPENSION PLATE	00103069
	SCREW HOOK 160 MM	05000237	13	SELF DRILLING SCREW 6.3X25	00103077
2	PLASTIC PULLEY Ø45MM W/ ST.ST. HOOK	00107198	14	CABLE 3/32" - Ø2.5 MM - 250M	00106887
3	CABLE CONNECTION ASSEMBLY	00102699		CABLE 3/32" - Ø2.5 MM - 500M	00106895
4	HANGER LTF	00403942	15	CADDY CLIPS TYPE 4H58	20104220
5	ADJUSTMENT LEVELER	00602060	16	CHAIN DIA. 3.5 MM	00100750
6	CABLE Ø 5MM - 3/16" - (7x7)	00100388		SCREW HOOK 160 MM	05000237
7	CABLE CLAMP NO. 5	00100545	*17	PLUG DIA. 10 MM - NYLON	20102034
8	SCREW HOOK M6 X 60	20103156	*18	WALL BRACKET FOR HOPPER	10107878
9	NUT M6 - DIN 934	20100210	*19	HEXAG. WOOD SCREW 6X40-DIN 571	20102026
10	WASHER 6.4x18x1.5-DIN 9021	20100756	*20	KIT WITH WALL BRACKET FOR HOPPER	00104331
11	SUSPENSION HOOK M6x60	05000302	*	OPTION	

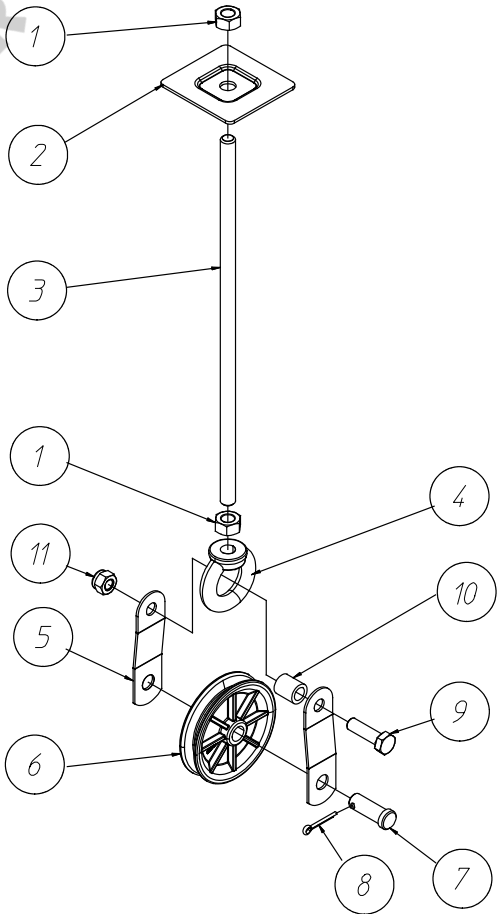
HAND OPERATED CENTRAL WINCH - 00102368**MOUNTING PLATE F/HAND-OPERATED CENTRAL WINCH - 02001188****TELESCOPICAL WINCH DRIVE ASSEMBLY - 00102962**

SINGLE EYE PULLEY - 00100420



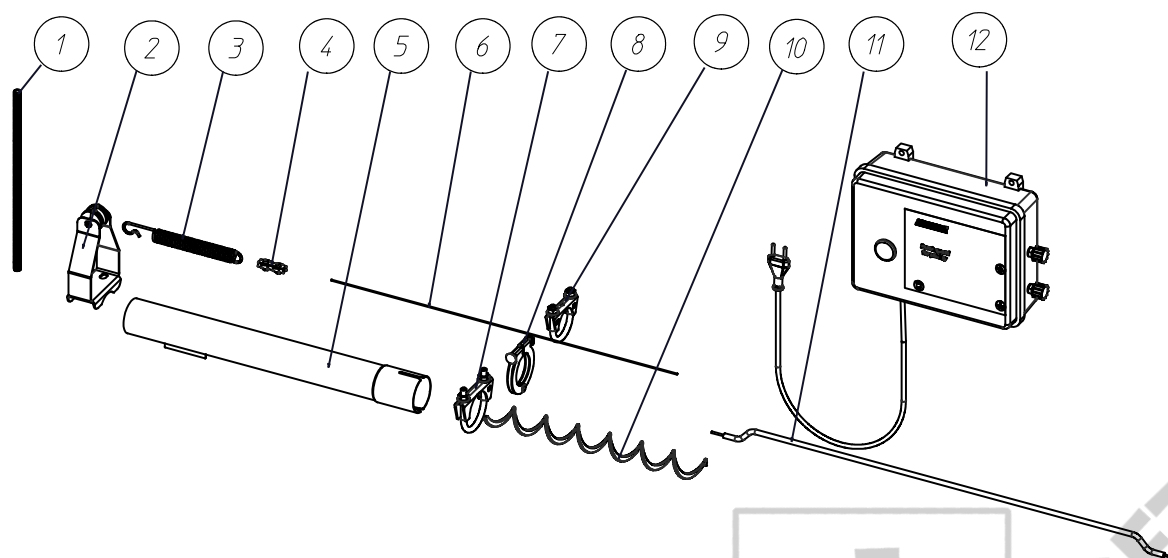
Key	Name	Part Nr.	Qt.
1	LOCKNUT M10-DIN 985	20100426	1
2	CABLE GUIDE WHEEL	10111417	1
3	PULLEY SIDE PLATE (SE)	10111391	2
4	BOLT M10X35-DIN 933	20102190	1
5	CLEVIS PIN	10101723	1
6	SPLIT PIN 3x25-DIN 94	20100533	1
7	PULLEY WHEEL	10101707	1

HEAVY DUTY PULLEY - 00100412



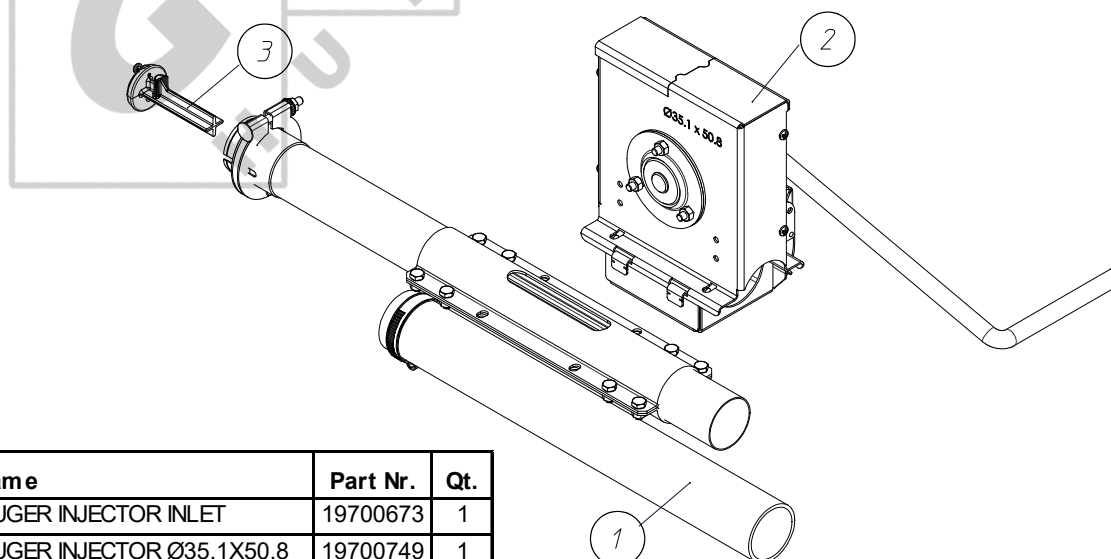
Key	Name	Part Nr.	Qt.
1	NUT M12-DIN 934	20100582	2
2	FOOT	10101657	1
3	SCREW SPINDLE M12 x 350	10107530	1
4	EYENUT M12	20104279	1
5	PULLEY SIDE PLATE (SE)	10111391	2
6	PULLEY WHEEL	10101707	1
7	CLEVIS PIN	10101723	1
8	SPLIT PIN 3x25-DIN 94	20100533	1
9	BOLT M10X35-DIN 933	20102190	1
10	SPACER	10101715	1
11	LOCKNUT M10-DIN 985	20100426	1

FEEDING LINE COMPONENTS



Key	Name	Part Nr.	Key	Name	Part Nr.
1	SWITCH CORD GUARD	13104518	6	CABLE 1/16" - 1.5 MM - 500 M	00106831
2	ANCHOR BRACKET LTF	00403934		CABLE 1/16" - 1.5 MM - 250 M	00106839
3	SPRING	00400077	7	TUBE CLAMP ø54MM	00400085
4	DUPLEX CABLE CLAMP ST.ST. - 3 MM	00106945	8	TUBE CLAMP ASSEMBLY Ø45 MM	00102921
5	TUBE 3.05M ATF W/2 HOLES ø50.8	00400044	9	TUBE CLAMP ø45MM	00104372
	TUBE 3.05M ATF W/1 HOLE ø50.8	00403918	10	AUGER PF/LTF	00100974
	TUBE 3.05M ATF 1 HOLE ø50.8/2M	00403926	11	CABLE F. PERCH GUARD - 50 M	00106847
	TUBE 3.05M W/2 RECTANGULAR HOLES	00102285		CABLE F. PERCH GUARD - 100 M	00106855
*	TUBE 3.05M W/2 RECTANGULAR HOLES	00402388	12	POULTRY PERCH GUARD	00105692
	TUBE 3.05M W/1 RECTANGULAR HOLE	00102277			
*	TUBE 3.05M W/1 RECTANGULAR HOLE	00402370			
	TUBE 2.9M W/1 RECTANGULAR HOLE	00204057			
	TUBE 2.90 M WITHOUT HOLES	00500074			
*	OPTIONAL W. 1 OR 2 HOLES / 2 M				

OPTION: AUGER INJECTOR KIT - 09701905



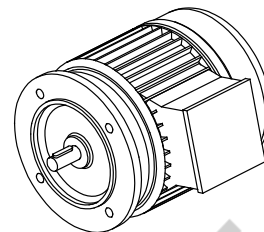
Key	Name	Part Nr.	Qt.
1	AUGER INJECTOR INLET	19700673	1
2	AUGER INJECTOR Ø35.1X50.8	19700749	1
3	AUGER GUIDE	19700780	1

System	WINCH
Gearbox With Key	10106136
Motor Shaft	Ø14
Ratio	315
Output speed 50Hz	4.5
Output speed 60Hz	5.4
Construction size	71
Motor speed 50Hz(RPM)	1500
Motor speed 60Hz(RPM)	1800
3x230/400V 50Hz IE1	
Motor IE1	11111978 (0,25kW)
3x200/346V 50Hz	
Motor	11100476 (0,25kW)
1x230V 50Hz	
Motor	00102061 (0,25kW)
3x220-230/380-400V 60Hz	
Motor	00102343 (0,3kW)
3x200/346V 60Hz	
Motor	11102779 (0,3kW)
3x254/440V 60Hz	
Motor	11900842 (0,3kW)
1x220V 60Hz	
Motor	10103554 (0,37kW)

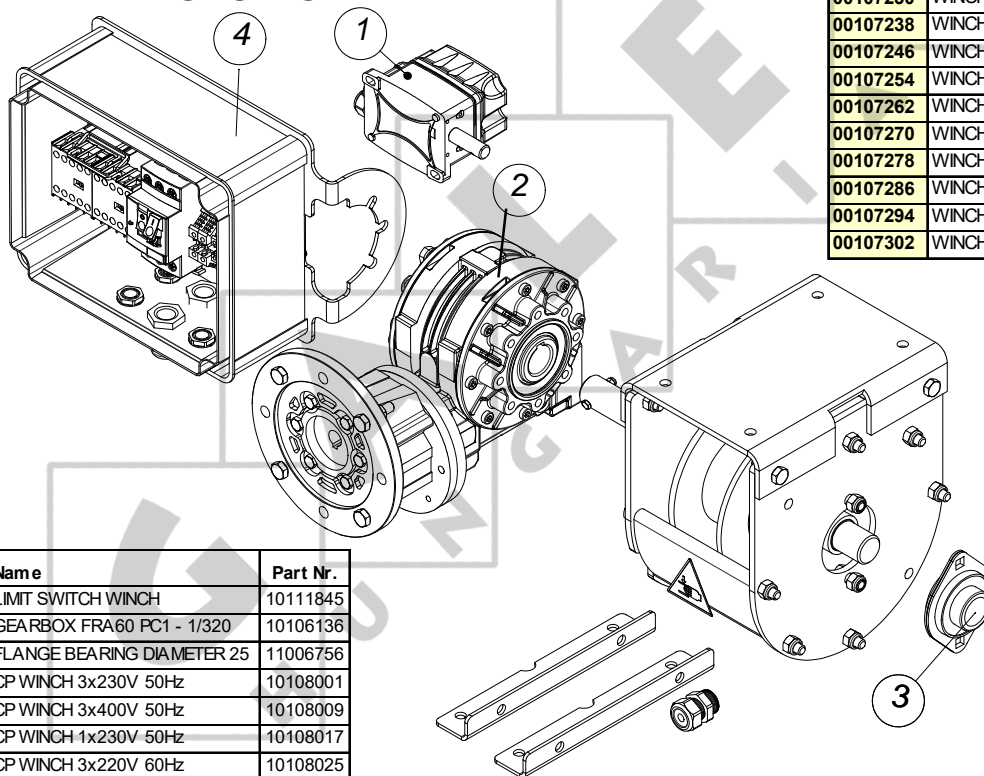
Capacitor 1 phase motor	
09802330	RUN CAPACITOR 10 µF
09802338	RUN CAPACITOR 12,5 µF
09802346	RUN CAPACITOR 18 µF
09802354	RUN CAPACITOR 20 µF
09802362	RUN CAPACITOR 25 µF
09802370	RUN CAPACITOR 30 µF
09802378	RUN CAPACITOR 45 µF
09802386	RUN CAPACITOR 50 µF
09802394	START CAPACITOR 12,5 µF
09802402	START CAPACITOR 14 µF
09802410	START CAPACITOR 16 µF
09802418	START CAPACITOR 20 µF
09802426	START CAPACITOR 25 µF
09802442	START CAPACITOR 36-43 µF
09802450	START CAPACITOR 56-63 µF
09802458	START CAPACITOR 108-130 µF

MOTOR

FOR CENTRAL WINCH -
MOTOR-OPERATED



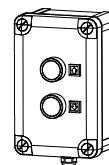
WINCH W/SWITCH + CP - MOTOR-OPERATED



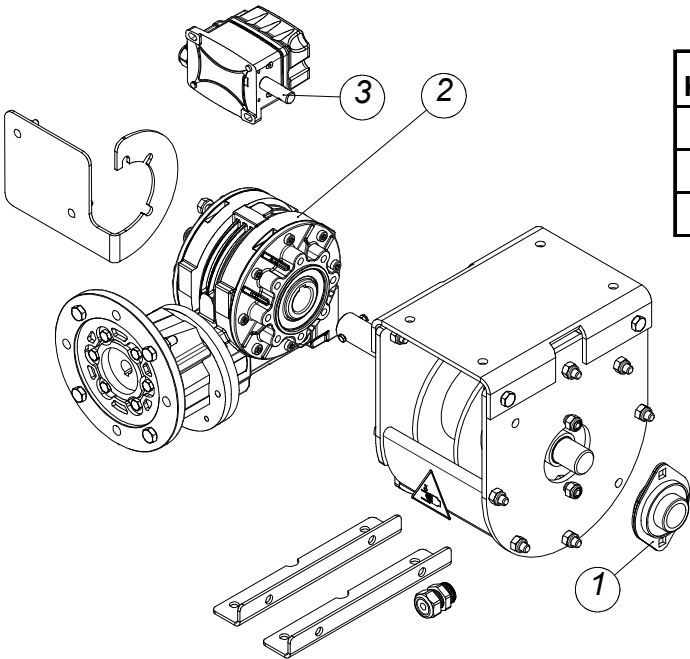
00107214	WINCH W/SWITCH+CP 3x230V 50Hz
00107222	WINCH W/SWITCH+CP 3x400V 50Hz
00107230	WINCH W/SWITCH+CP 1x230V 50Hz
00107238	WINCH W/SWITCH+CP 3x220V 60Hz
00107246	WINCH W/SWITCH+CP 3x230V 60Hz
00107254	WINCH W/SWITCH+CP 3x380V 60Hz
00107262	WINCH W/SWITCH+CP 3x400V 60Hz
00107270	WINCH W/SWITCH+CP 1x220V 60Hz
00107278	WINCH W/SWITCH+CP 3x254V 60Hz
00107286	WINCH W/SWITCH+CP 3x440V 60Hz
00107294	WINCH W/SWITCH+CP 3x200V 60Hz
00107302	WINCH W/SWITCH+CP 3x346V 60Hz

Key	Name	Part Nr.
1	LIMIT SWITCH WINCH	10111845
2	GEARBOX FRA60 PC1 - 1/320	10106136
3	FLANGE BEARING DIAMETER 25	11006756
4	CP WINCH 3x230V 50Hz	10108001
	CP WINCH 3x400V 50Hz	10108009
	CP WINCH 1x230V 50Hz	10108017
	CP WINCH 3x220V 60Hz	10108025
	CP WINCH 3x230V 60Hz	10108033
	CP WINCH 3x380V 60Hz	10108041
	CP WINCH 3x400V 60Hz	10108049
	CP WINCH 1x220V 60Hz	10108057
	CP WINCH 3x254V 60Hz	10108065
	CP WINCH 3x440V 60Hz	10108073
	CP WINCH 3x200V 60Hz	10108081
	CP WINCH 3x346V 60Hz	10108089

STANDARD: CONTROL SWITCH FOR WINCH - 00107206



WINCH W/SWITCH - MOTOR OPERATED - 00107190



Key	Name	Part Nr.
1	FLANGE BEARING DIAMETER 25	11006756
2	GEARBOX FRA60 PC1 - 1/320	10106136
3	LIMIT SWITCH WINCH	10111845

OPTION : CONTROL PANEL FOR CENTRAL WINCH



WARNING

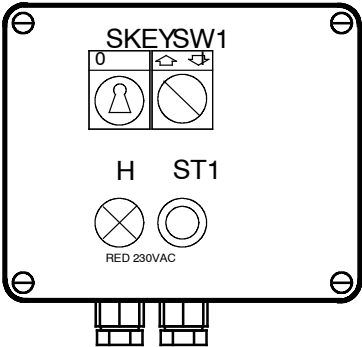
Do not use the winch control panel to directly switch motor currents. Only use the winch control panel to switch control currents up to 3 A at 240 V on an AC-15 load.

The motor must be protected against short circuits and overcurrents, in accordance with local regulations. You can use a motor starter to switch and protect the motor.

Always ensure solid earthing!



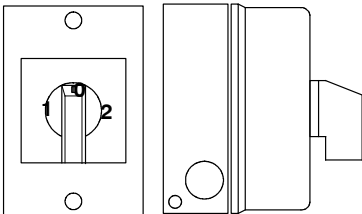
Used in combination with single-phase motors.



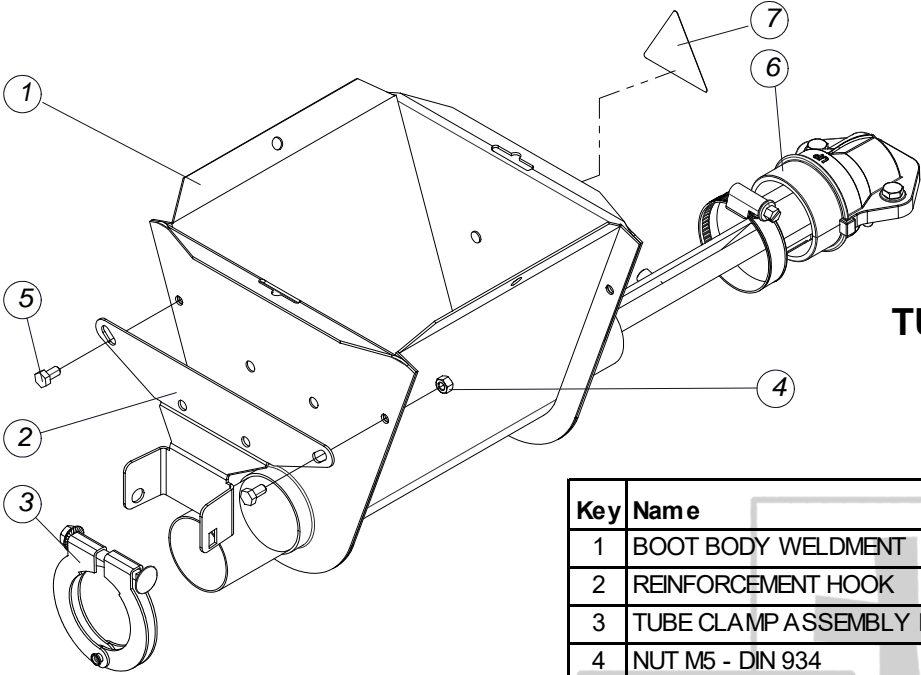
00101030	CONTROL PANEL FOR 1 WINCH MOTOR
00101048	CONTROL PANEL FOR 2 WINCH MOTORS
00101055	CONTROL PANEL FOR 3 WINCH MOTORS
00101063	CONTROL PANEL FOR 4 WINCH MOTORS
00101071	CONTROL PANEL FOR 5 WINCH MOTORS
00101089	CONTROL PANEL FOR 6 WINCH MOTORS

OPTION: CONTROL SWITCH FOR WINCH - 00102327

(IN COMBINATION WITH THREE PHASE MOTORS)

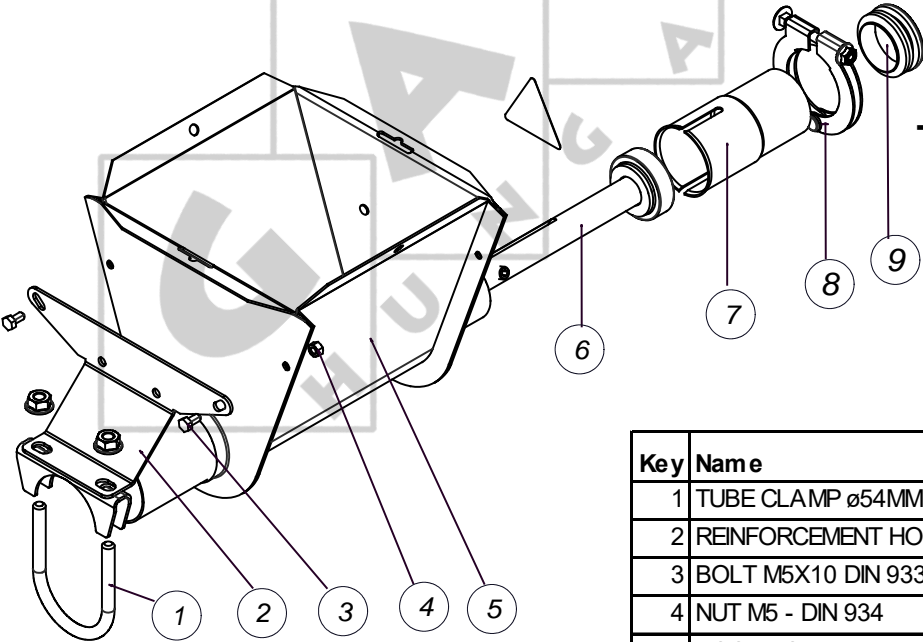


FEED INTAKE BOOT - 00106500



Key	Name	Part Nr.	Qt.
1	BOOT BODY WELDMENT	10102192	1
2	REINFORCEMENT HOOK	10107597	1
3	TUBE CLAMP ASSEMBLY DIA. 45 MM	00102921	1
4	NUT M5 - DIN 934	20100152	2
5	BOLT M5X10 DIN 933	20100111	2
6	ANCHOR & BEARING ASS'Y	10111441	1
7	DECAL - HANDS WARNING	13106596	1

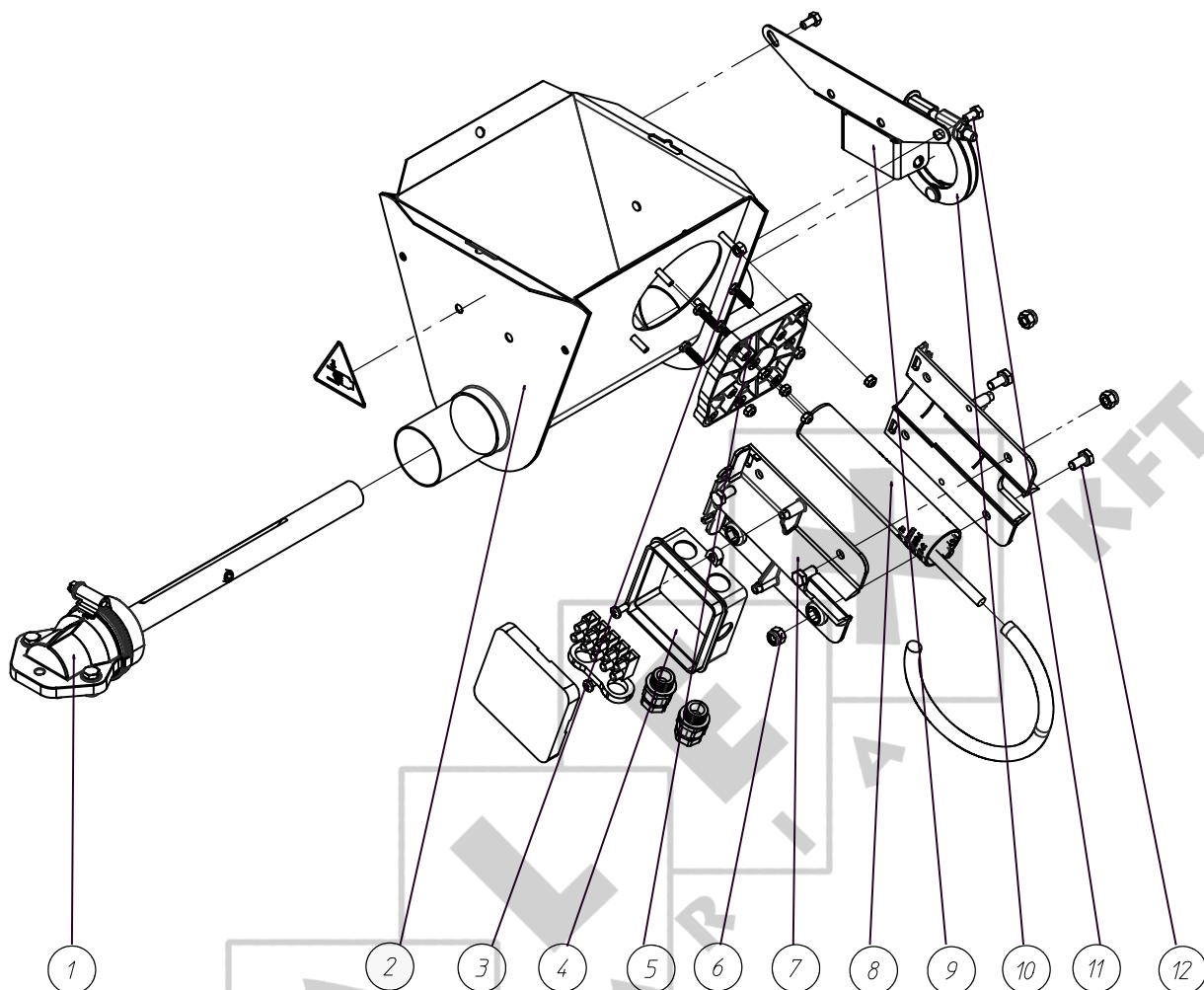
FEED INTAKE BOOT LTF - 00400390



Key	Name	Part Nr.	Qt.
1	TUBE CLAMP Ø54MM	00400085	1
2	REINFORCEMENT HOOK	10403800	1
3	BOLT M5X10 DIN 933	20100111	2
4	NUT M5 - DIN 934	20100152	1
5	BOOT BODY WELDMENT	10400125	2
6	ANCHOR & BEARING ASS'Y	10202802	1
7	OUTLET TUBE	10100261	1
8	TUBE CLAMP ASSEMBLY Ø45 MM	00102921	1
9	RUBBER STOP 45 TYPE GL	10102374	1

*** POULTRY INTAKE BOOT WITH SENSOR - 230 V AC - 00108952**

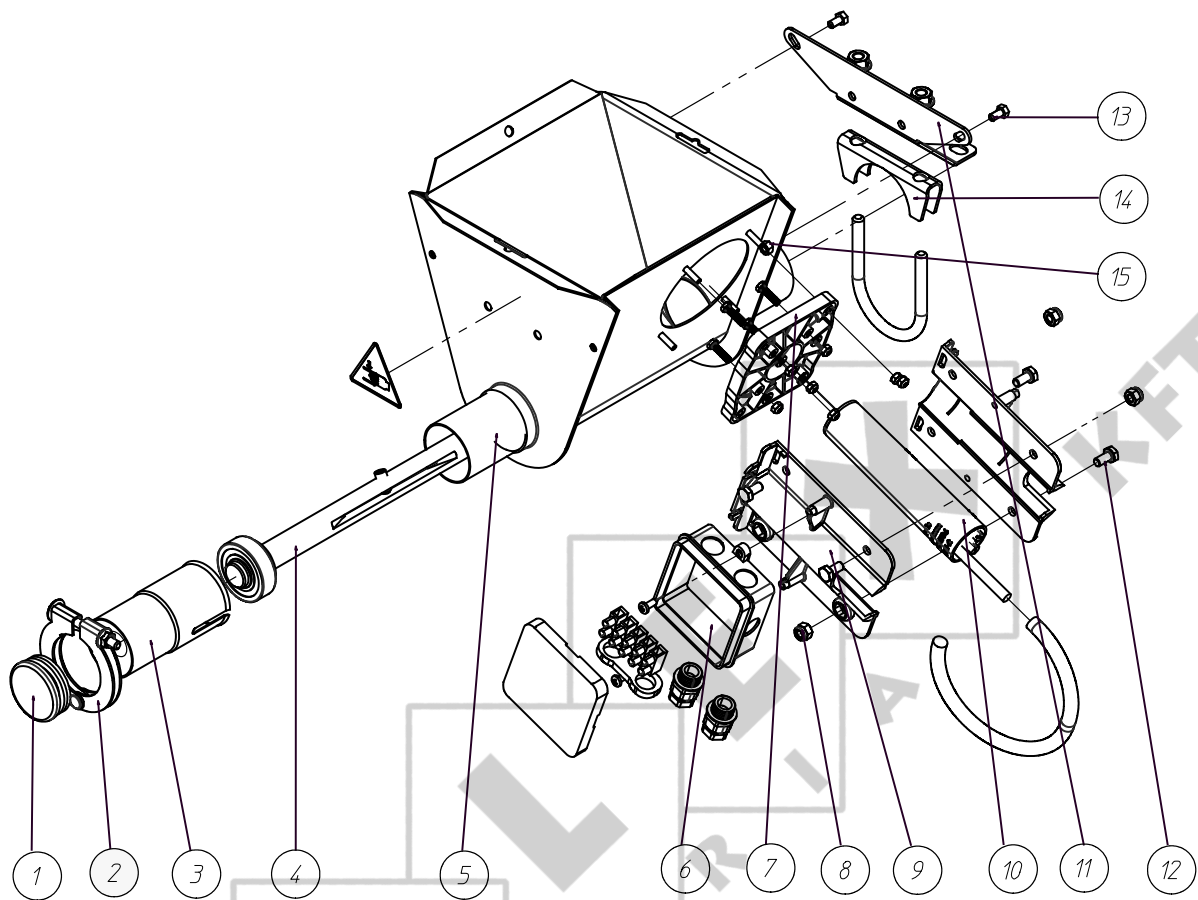
**** POULTRY INTAKE BOOT WITH SENSOR - 24 V DC - 00108950**



Key	Name	Part Nr.	Qt.
1	ANCHOR & BEARING ASS'Y	10111441	1
2	BOOT BODY WELDM F/SENSOR	10112428	1
3	NUT M5 - DIN 934	20100152	2
4	HANDY BOX OBO A8	15000037	1
5	SENSOR DISTANCE PIECE 80 MM	10112436	1
6	LOCKNUT M6 - DIN 985	20100400	4
7	SENSOR HOLDER	13000443	2
*8	SENSOR VC12RT230106821 S3 D1	03103678	1
**8	SENSOR VC12 RTM24106821-2 24-230VAC/DC	03104586	1
9	REINFORCEMENT HOOK	10107597	1
10	TUBE CLAMP ASS'Y ø45	10112037	1
11	BOLT M5X10 DIN 933	20100111	2
12	BOLT M6X12 - DIN 933-8.8	20100160	4

*** POULTRY INTAKE BOOT WITH SENSOR - 50.8 MM -
230 V AC - 00407136**

**** POULTRY INTAKE BOOT WITH SENSOR - 50.8 MM -
24 V DC - 00407134**

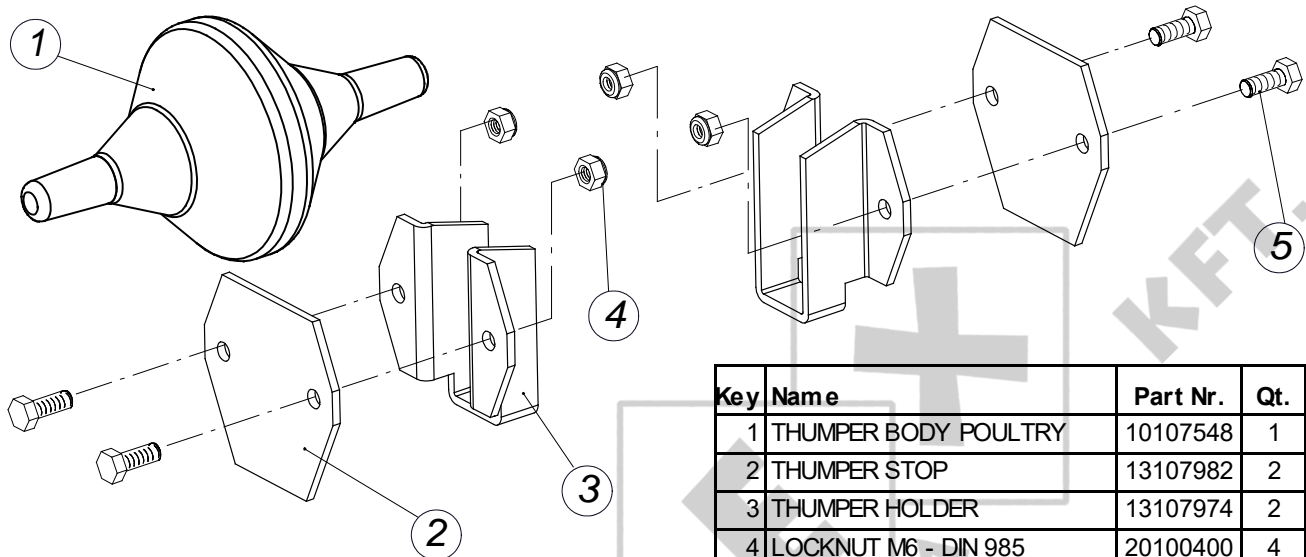


Key	Name	Part Nr.	Qt.
1	RUBBER STOP 45 TYPE GL	10102374	1
2	TUBE CLAMP ASS'Y Ø45	10112037	1
3	OUTLET TUBE	10100261	1
4	ANCHOR & BEARING ASS'Y	10202802	1
5	BOOT BODY WELDMENT Ø50.8MM	10403824	1
6	HANDY BOX OBO A8	15000037	1
7	SENSOR DISTANCE PIECE 80 MM	10112436	1
8	LOCKNUT M6 - DIN 985	20100400	4
9	SENSOR HOLDER	13000443	2
*10	SENSOR VC12RT230106821 S3 D1	03103678	1
**10	SENSOR VC12 RTM24106821-2 24-230VAC/DC	03104586	1
11	REINF. HOOK F/ BOOT 50.8MM	10403800	1
12	BOLT M6X12 - DIN 933-8.8	20100160	4
13	NUT M5 - DIN 934	20100152	2
14	TUBE CLAMP Ø54MM	00400085	1
15	BOLT M5X10 DIN 933	20100111	2

OPTION: CANNON BALL - 00102228

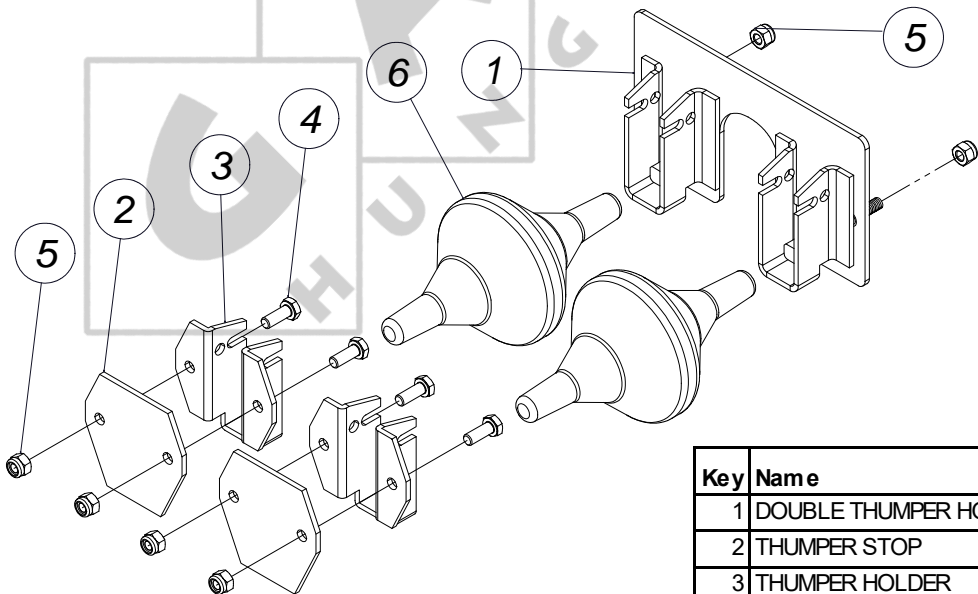


OPTION: THUMPER ASSEMBLY - 00103036



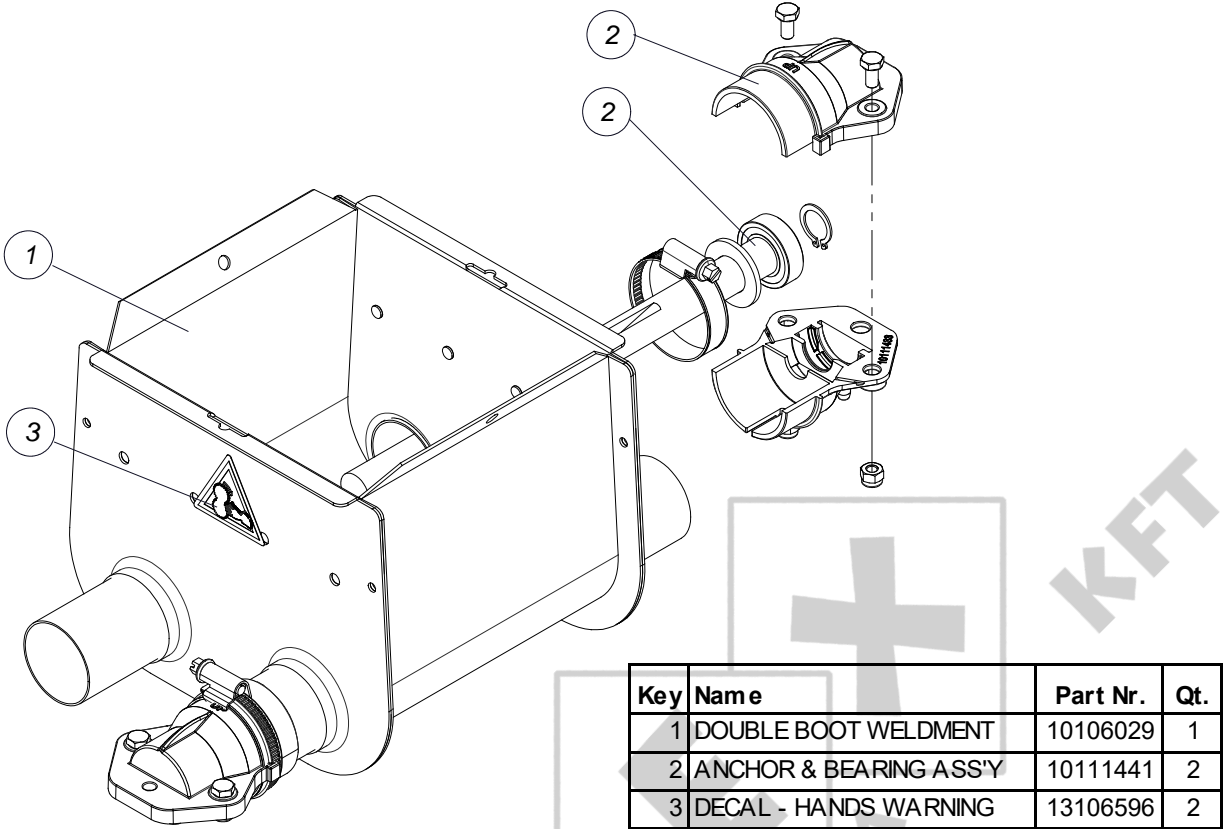
Key	Name	Part Nr.	Qt.
1	THUMPER BODY POULTRY	10107548	1
2	THUMPER STOP	13107982	2
3	THUMPER HOLDER	13107974	2
4	LOCKNUT M6 - DIN 985	20100400	4
5	BOLT M6 X 16 - DIN 933 - 8.8	20100178	4

OPTION: THUMPER KIT FOR DOUBLE INTAKE BOOT - 00106765

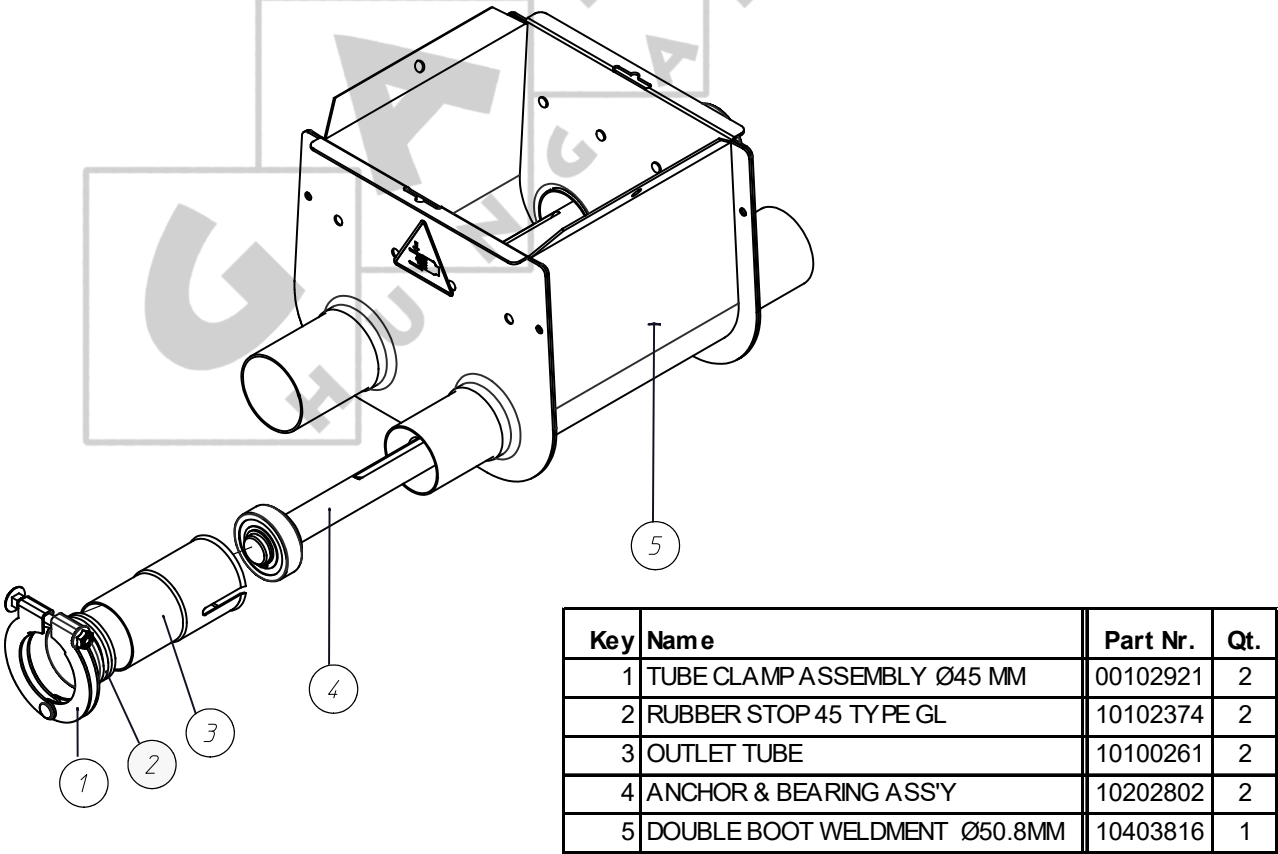


Key	Name	Part Nr.	Qt.
1	DOUBLE THUMPER HOLDER	10111805	2
2	THUMPER STOP	13107982	2
3	THUMPER HOLDER	13107974	2
4	BOLT M6 X 16 - DIN 933 - 8.8	20100178	2
5	LOCKNUT M6 - DIN 985	20100400	2
6	THUMPER BODY POULTRY	10107548	2

OPTION: DOUBLE FEED INTAKE BOOT - 00106518

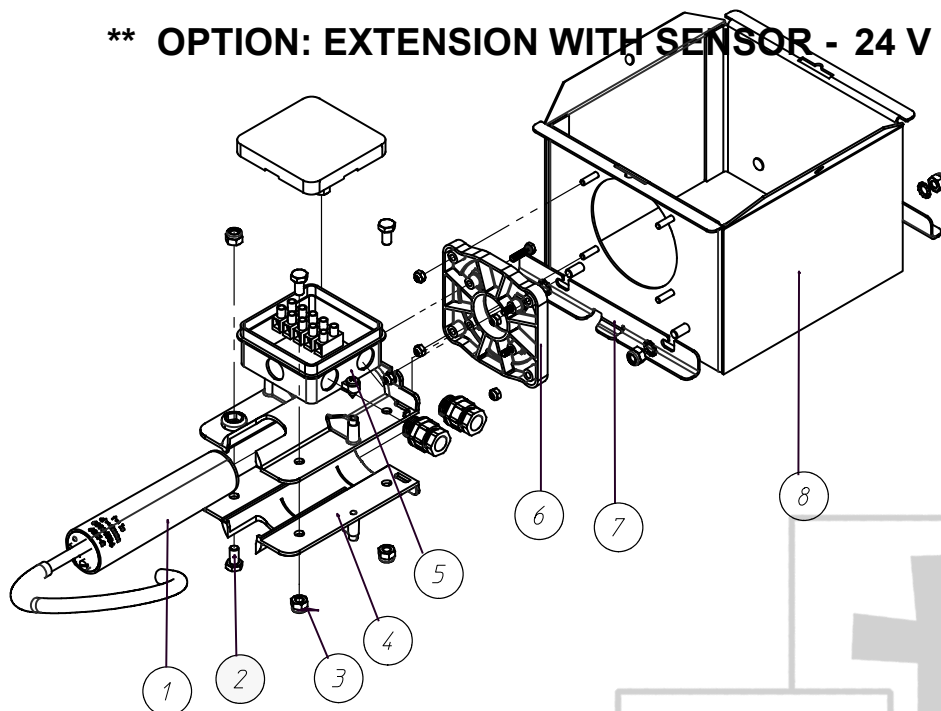


OPTION: DOUBLE FEED INTAKE BOOT - 50.8 MM - 00404374

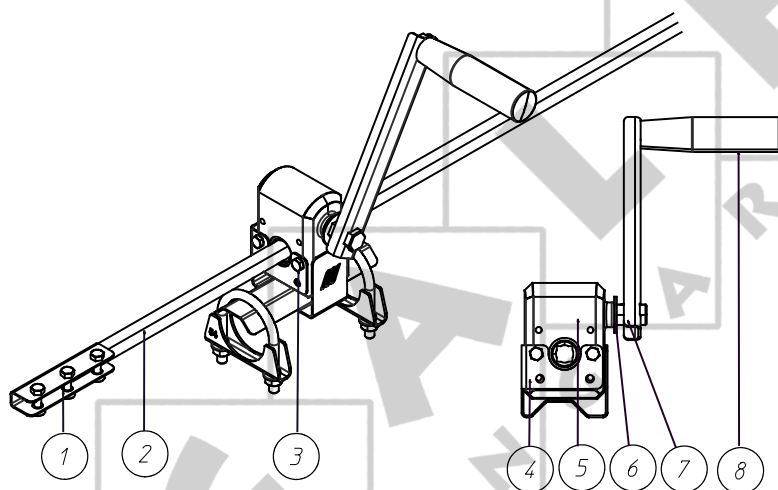


* **OPTION: EXTENSION WITH SENSOR - 230 V AC - 03000901**

** **OPTION: EXTENSION WITH SENSOR - 24 V DC - 03000899**

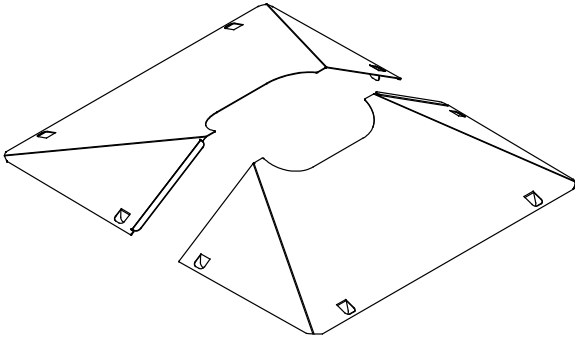


OPTION: PARTS FOR CENTRAL ADJUSTMENT SYSTEM

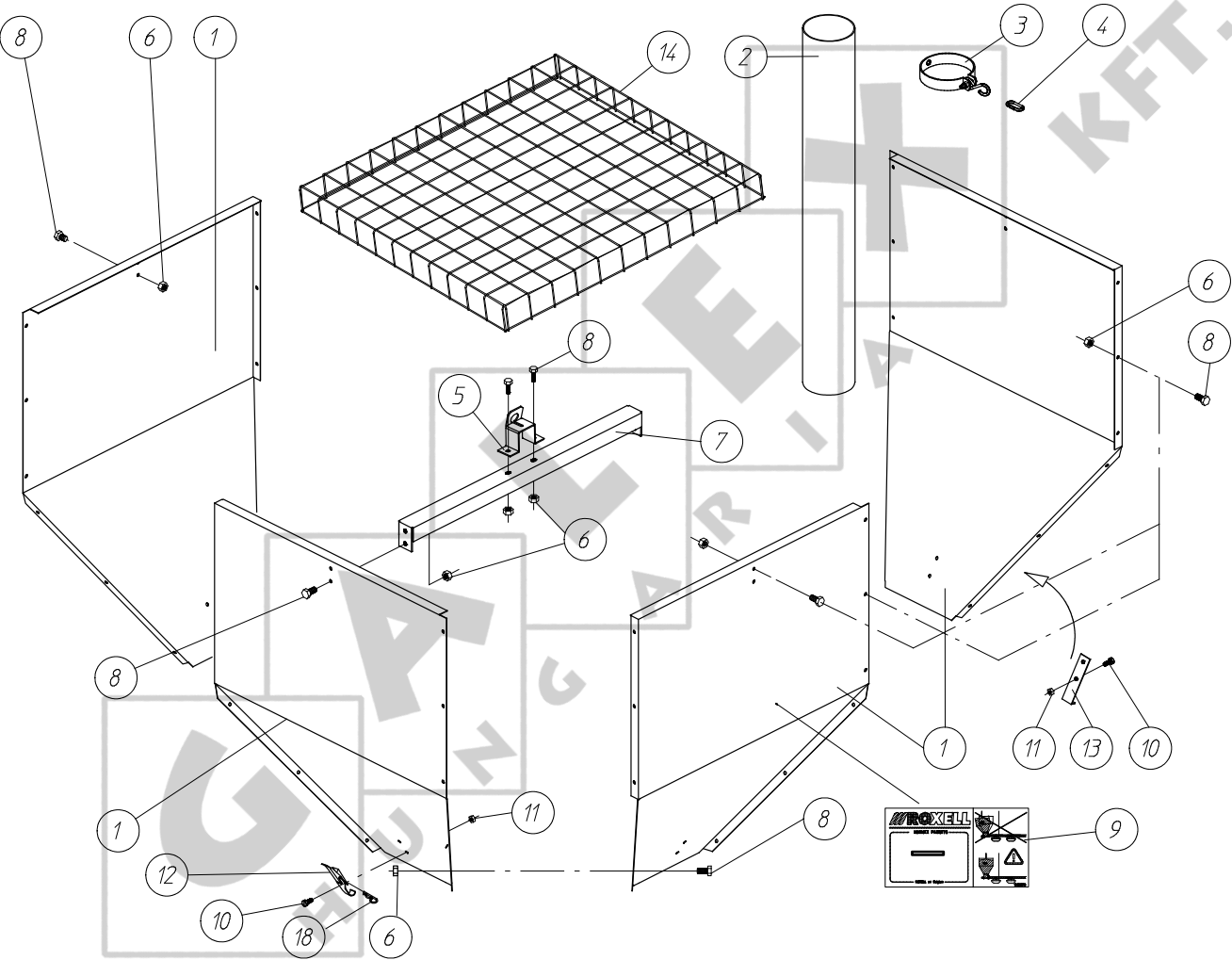


Key	Name	Part Nr.
1	U-CONNECTOR (SET OF 5PCS)	00403958
2	ROD F/CENTRAL ADJUSTMENT SYSTEM	00403950
3	FEED REG. KIT C.A.S. 50.8MM	00403966
	FEED REG. KIT C.A.S. 44.5MM	00403974
4	GEARBOX KIT F/ CENTRAL ADJUSTMENT SYSTEM	10403720
5	GEARBOX 1/16	10403728
6	WASHER Ø30XØ10.5MM ST. ST.	10403744
7	HEXAGON PIECE 17MM ST. ST.	10403736
8	HANDLE FOR GEARBOX C.A.S.	10403704

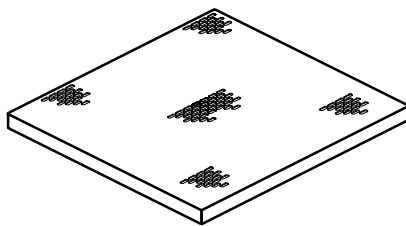
COVER HALF FOR 100 KG HOPPER - 10102267



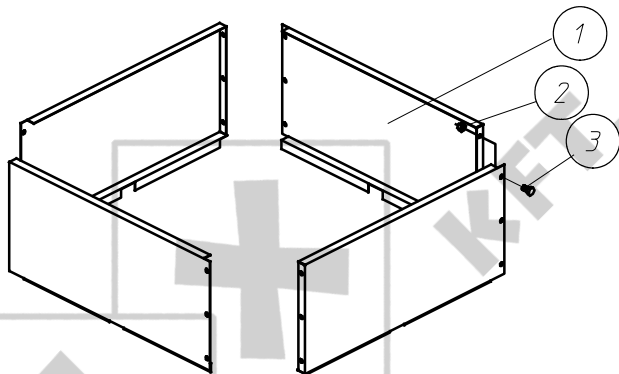
100 KG HOPPER - 00100602



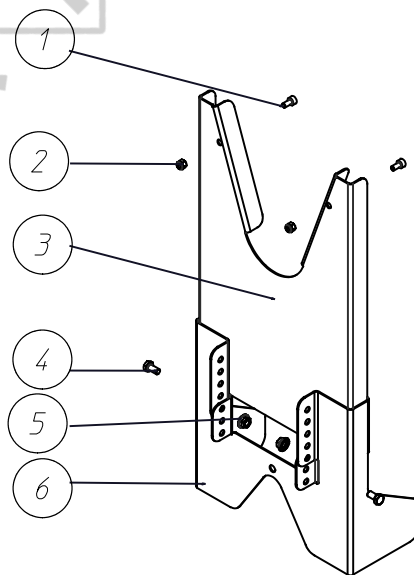
Key	Name	Part Nr.	Qt.	Key	Name	Part Nr.	Qt.
1	HOPPER SIDE	10102259	4	9	PATENT DECAL COM-ATF-MINIMAX	10103893	1
2	PVC TUBE DIAM. 90 - L = 700 MM	10102382	1	*10	SCREW M4x10-DIN 84 - 4.8	20100806	8
*3	TUBE SUPPORT ASS'Y	10102390	1	*11	NUT M4	20100681	8
*4	SCREW LINK DIA. 3.5	10203156	1	*12	FASTENER 30-1056 MSZN	10201697	1
*5	HOPPER HOOK	10105393	1	*13	FASTENING HOOK	10102200	1
*6	NUT M6 - DIN 934	20100210	34	14	HOPPER COVER GRILL	10103075	1
7	HANGER	10102291	1	*18	SPRING COTTER ø2	20100749	1
*8	BOLT M6 X 12 - DIN 933-8.8	20100160	34	*	HARDWARE KIT	10102341	1

OPTION: STRAINER FOR 100 KG HOPPER- 00100982**OPTION: HOPPER EXTENSION 50 KG - 00101238**

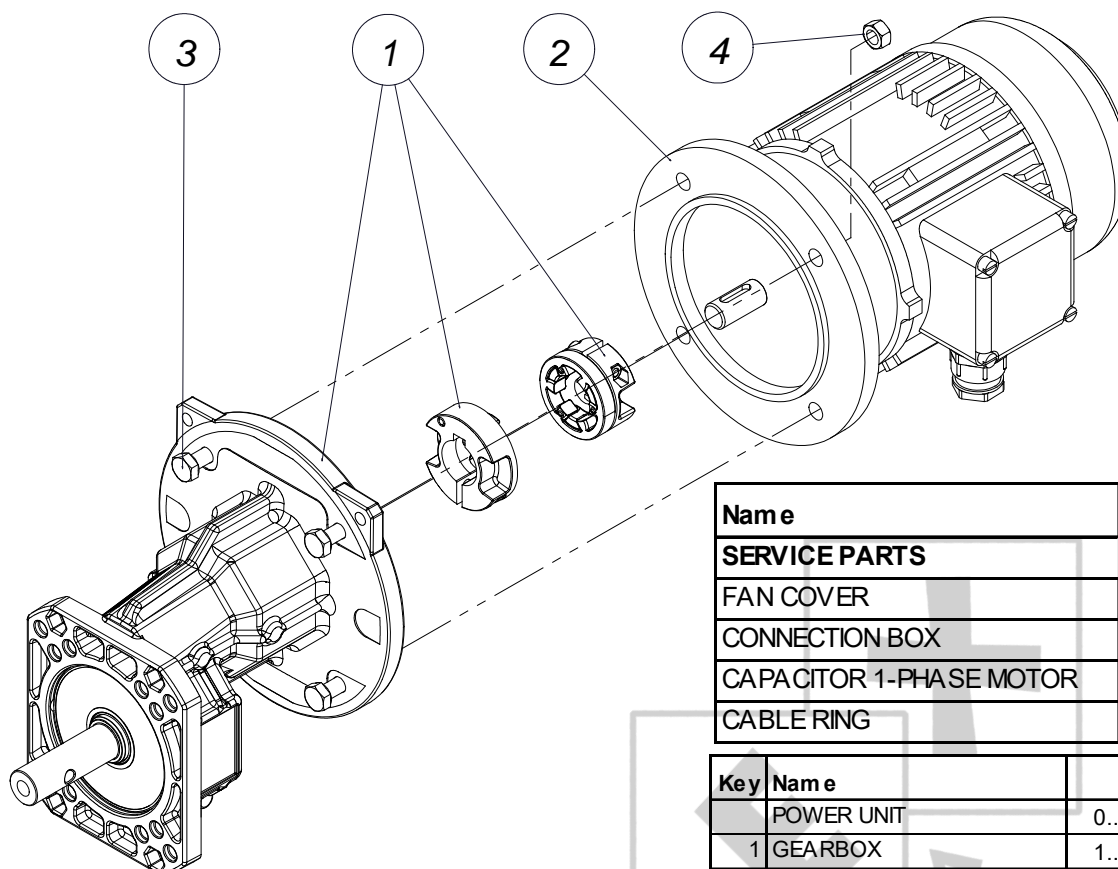
Key	Name	Part Nr.	Qt.
1	HOPPER EXTENSION SIDE	10104719	4
2	NUT M6 - DIN 934	20100210	12
3	BOLT M6 X 12 - DIN 933-8.8	20100160	12

**OPTION: SUPPORT FOR HOPPER IN LINE LTF - 00404118**

Key	Name	Part Nr.
1	SOCKET CAP SCREW M5x10-DIN 912	20103149
2	LOCKNUT M5-DIN 985	20100392
3	UPPER PART SUPPORT BOOT LTF	10403520
4	BOLT M6X12 - DIN 933-8.8	20100160
5	HEX. NUT W/FLANGE - M6 - DIN 6923	20104105
6	LOWER PART SUPPORT BOOT	10112061



POWER UNIT



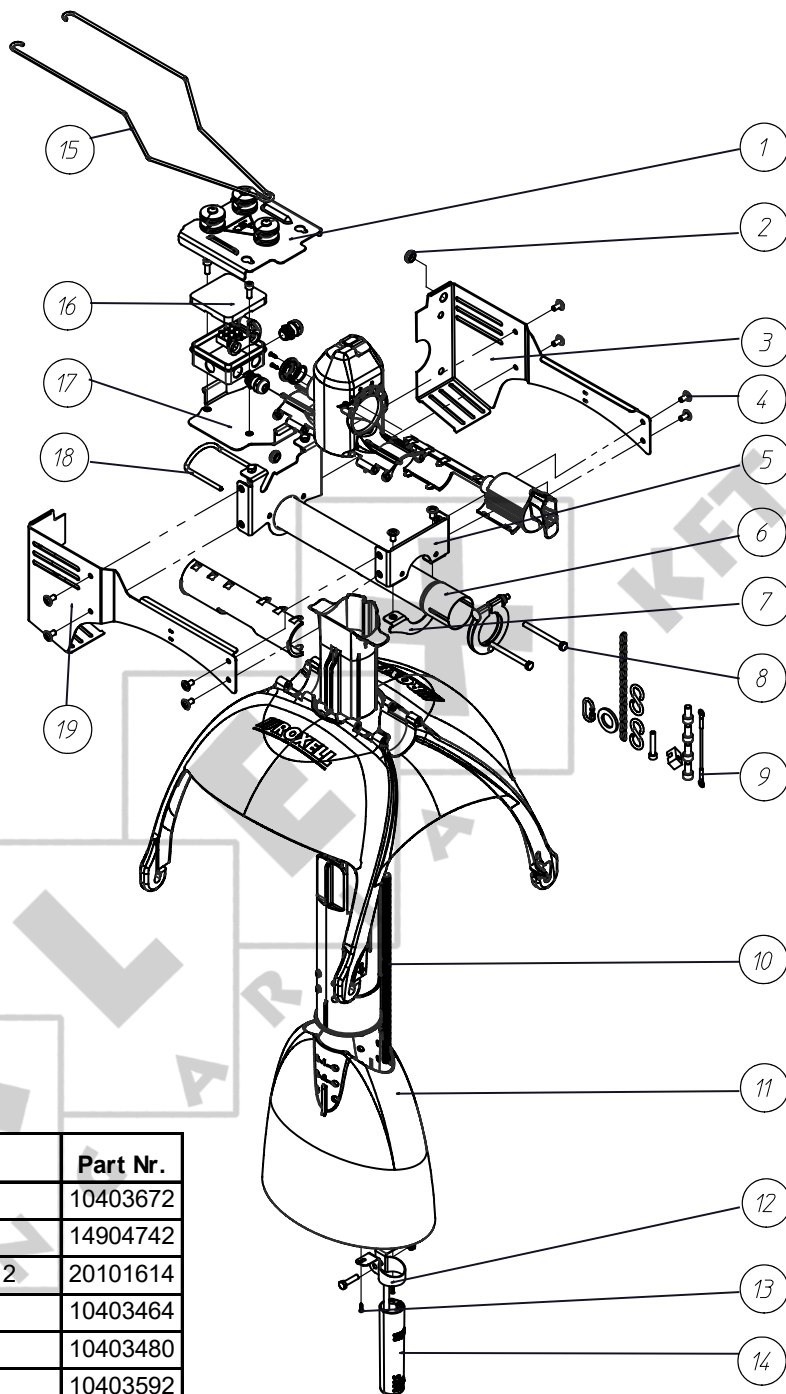
Name	Part Nr.
SERVICE PARTS	On Demand
FAN COVER	On Demand
CONNECTION BOX	On Demand
CAPACITOR 1-PHASE MOTOR	See table
CABLE RING	On Demand

Key	Name	Part Nr.	Qt.
	POWER UNIT	0..(See table)	1
1	GEARBOX	1..(See table)	1
2	MOTOR	1..(See table)	1
3	BOLT M8X30-DIN 933-8.8	20100244	4
4	NUT M8 - DIN 934	20200028	4

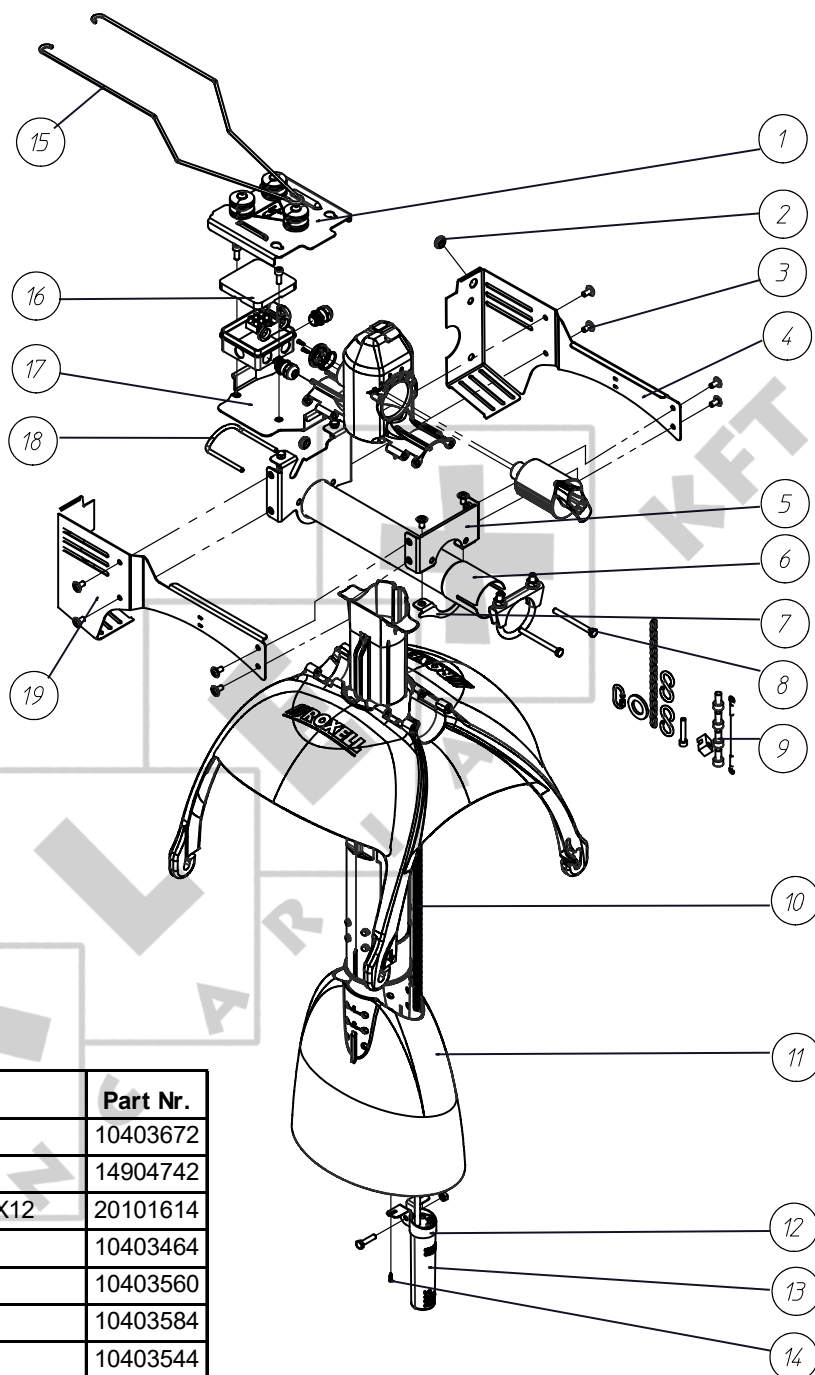
System	Titan (50 Hz)	Titan (60 Hz)
Gearbox With Key	10106441	
Gearbox With F-Coupling alu	10111821	10112317
Type Elastic Coupling Set (CS 71-80-90)	CS71 13204180	CS71 13204180
Motor Shaft	Ø14	Ø14
Ratio	3.867	4.73
Output speed 50 Hz	350	NA
Output speed 60 Hz	NA	360
Construction size	71	71
Motor speed 50 Hz (RPM)	1500	NA
Motor speed 60 Hz (RPM)	NA	1800
Feed capacity kg	520	520
Drive 3x230/400V 50Hz IE1	00107092	
Motor IE1	10106482 (0,37kW)	
Drive 3x200/346V 50Hz	00107100	
Motor	10104487 (0,37kW)	
Drive 1x230V 50Hz	00107108	
Motor	10106656 (0,37kW)	
Drive 3x220-230/380-400V 60Hz		00108784
Motor		10106482 (0,37kW)
Drive 3x200/346V 60Hz		00108808
Motor		10104487 (0,37kW)
Drive 1x220V 60Hz		00108800
Motor		10106656 (0,37kW)

Capacitor 1 phase motor	
09802330	RUN CAPACITOR 10 µF
09802338	RUN CAPACITOR 12,5 µF
09802346	RUN CAPACITOR 18 µF
09802354	RUN CAPACITOR 20 µF
09802362	RUN CAPACITOR 25 µF
09802370	RUN CAPACITOR 30 µF
09802378	RUN CAPACITOR 45 µF
09802386	RUN CAPACITOR 50 µF
09802394	START CAPACITOR 12,5 µF
09802402	START CAPACITOR 14 µF
09802410	START CAPACITOR 16 µF
09802418	START CAPACITOR 20 µF
09802426	START CAPACITOR 25 µF
09802442	START CAPACITOR 36-43 µF
09802450	START CAPACITOR 56-63 µF
09802458	START CAPACITOR 108-130 µF

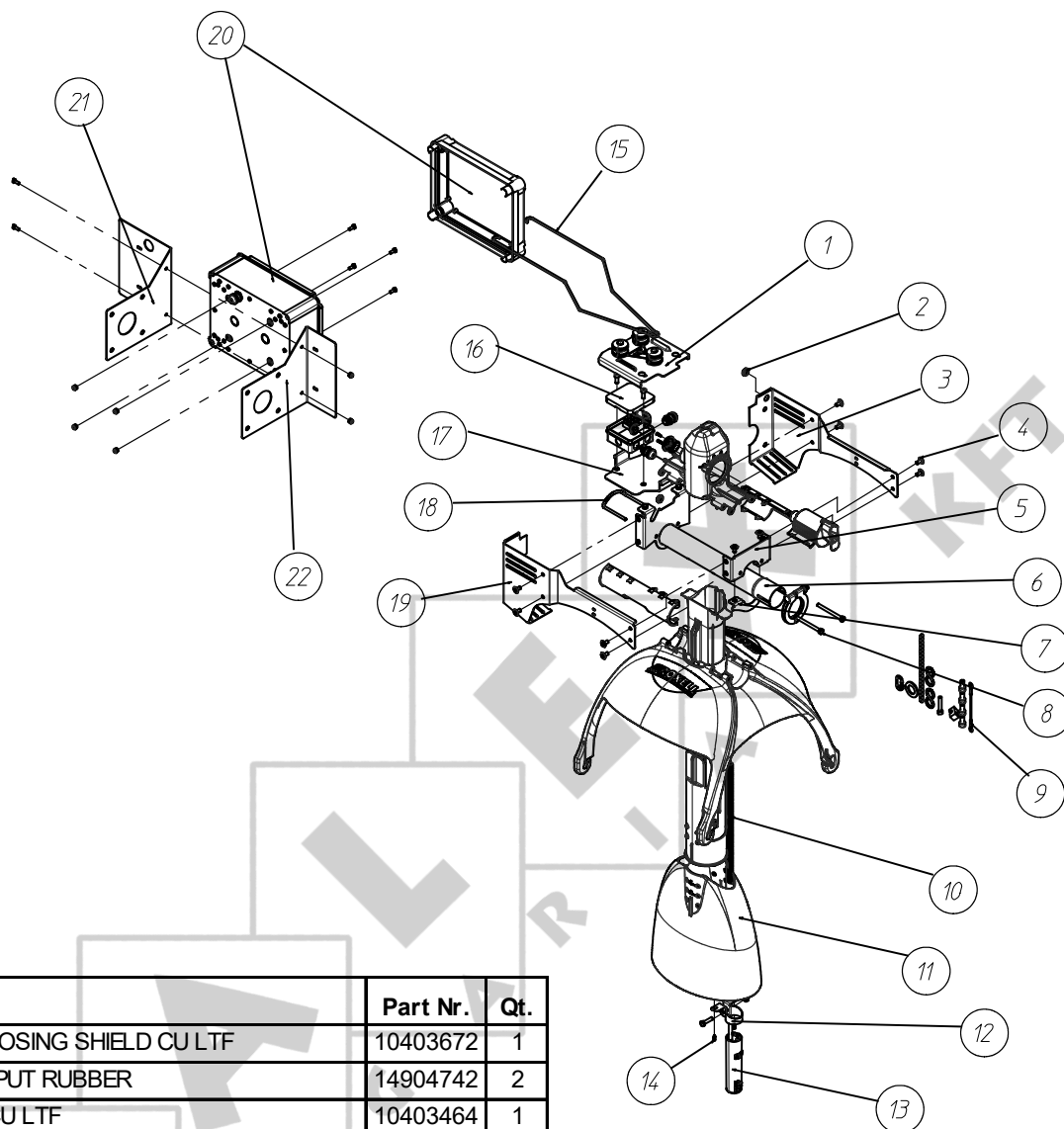
CONTROL UNIT WITH SENSOR LTF WITHOUT PAN - 00403821



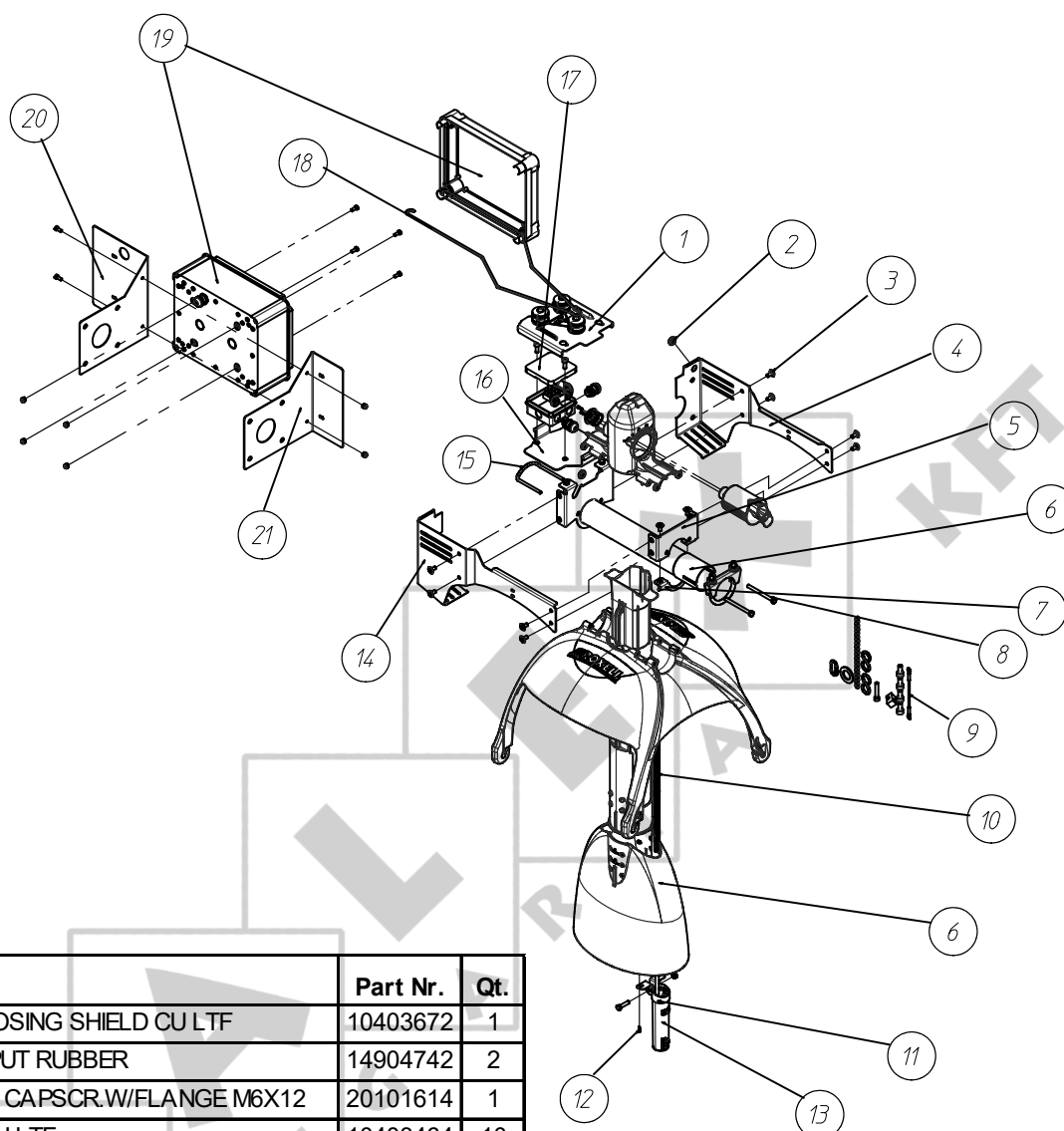
Key	Name	Part Nr.
1	ASS'Y CLOSING SHIELD CU LTF	10403672
2	CABLE INPUT RUBBER	14904742
3	BUT HEAD CAPSCR.W/FLANGE M6X12	20101614
4	PART L. CU LTF	10403464
5	FRONT PL. CU. UPPER P. LTF	10403480
6	TUBE BRACKET CU LTF	10403592
7	FRONT PL. CU LOWER P. LTF	10403488
8	BOLT M6X70-DIN 933-8.8	20103792
9	HARDWARE KIT	10900322
10	SWITCH CORD GUARD	13104518
11	TRANSP. LOWER PART CONE LTF	10403600
12	CLAMP SENSOR LTF	10403576
13	SENSOR VC12 RT230106821 OFF DELAY	03101185
14	THREAD FORMING SCREW Ø3*10 Dk5	20110575
15	ANTI ROOST GUARD	10400455
16	HANDY BOX OBO A8	15000037
17	SUPPORT PL. E. BOX LTF	10403552
18	CLOSING BRACKET LTF	10403440
19	PART R. CU LTF	10403456

CONTROL UNIT 50.8 MM WITH SENSOR LTF WITHOUT PAN - 00403837

Key	Name	Part Nr.
1	ASS'Y CLOSING SHIELD CU LTF	10403672
2	CABLE INPUT RUBBER	14904742
3	BUT HEAD CAPSCR.W/FLANGE M6X12	20101614
4	PART L. CU LTF	10403464
5	FRONT PL. CU UPP. P. LTF 50.8MM	10403560
6	TUBE BRACKET CU LTF 50.8MM	10403584
7	FR.PL.CU LOWER P. LTF 50.8MM	10403544
8	BOLT M6X70-DIN 933-8.8	20103792
9	HARDWARE KIT	10900322
10	SWITCH CORD GUARD	13104518
11	TRANSP. LOWER PART CONE LTF	10403600
12	CLAMP SENSOR LTF	10403576
13	SENSOR VC12 RT230106821 OFF DELAY	03101185
14	THREAD FORMING SCREW Ø3*10 Dk5	20110575
15	ANTI ROOST GUARD	10400455
16	HANDY BOX OBO A8	15000037
17	SUPPORT PL. E. BOX LTF	10403552
18	CLOSING BRACKET LTF	10403440
19	PART R. CU LTF	10403456

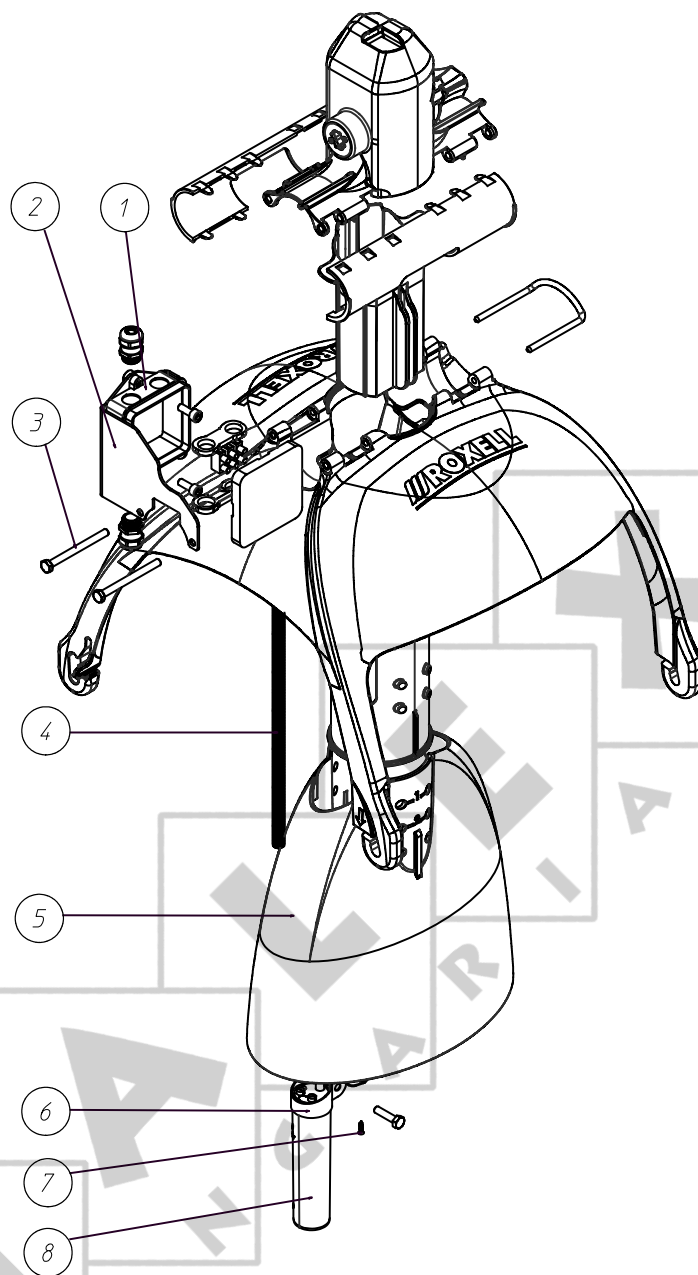
CONTROL UNIT WITH RELAY LTF WITHOUT PAN - 00407126**FOR US ONLY**

Key	Name	Part Nr.	Qt.
1	ASS'Y CLOSING SHIELD CU LTF	10403672	1
2	CABLE INPUT RUBBER	14904742	2
3	PART L. CU LTF	10403464	1
4	BUT HEAD CAPSCR.W/FLANGE M6X12	20101614	10
5	FRONT PL. CU. UPPER P. LTF	10403480	1
6	TUBE BRACKET CU LTF	10403592	1
7	FRONT PL. CU LOWER P. LTF	10403488	1
8	BOLT M6X70-DIN 933-8.8	20103792	2
9	HARDWARE KIT	10900322	1
10	SWITCH CORD GUARD	13104518	1
11	TRANSP. LOWER PART CONE LTF	10403600	1
12	CLAMP SENSOR LTF	10403576	1
13	SENSOR VC12 RT230106821 OFF DELAY	03101185	1
14	THREAD FORMING SCREW Ø3*10 Dk5	20110575	4
15	ANTI ROOST GUARD	10400455	1
16	HANDY BOX OBO A8	15000037	1
17	SUPPORT PL. E. BOX LTF	10403552	1
18	CLOSING BRACKET LTF	10403440	1
19	PART R. CU LTF	10403456	1
20	SENSOR RELAY BOX 20A	10112460	1
21	SUPPORT PLATE RELAY BOX RIGHT	10112452	1

CONTROL UNIT 50.8 MM WITH RELAY LTF WITHOUT PAN - 00407118**FOR US ONLY**

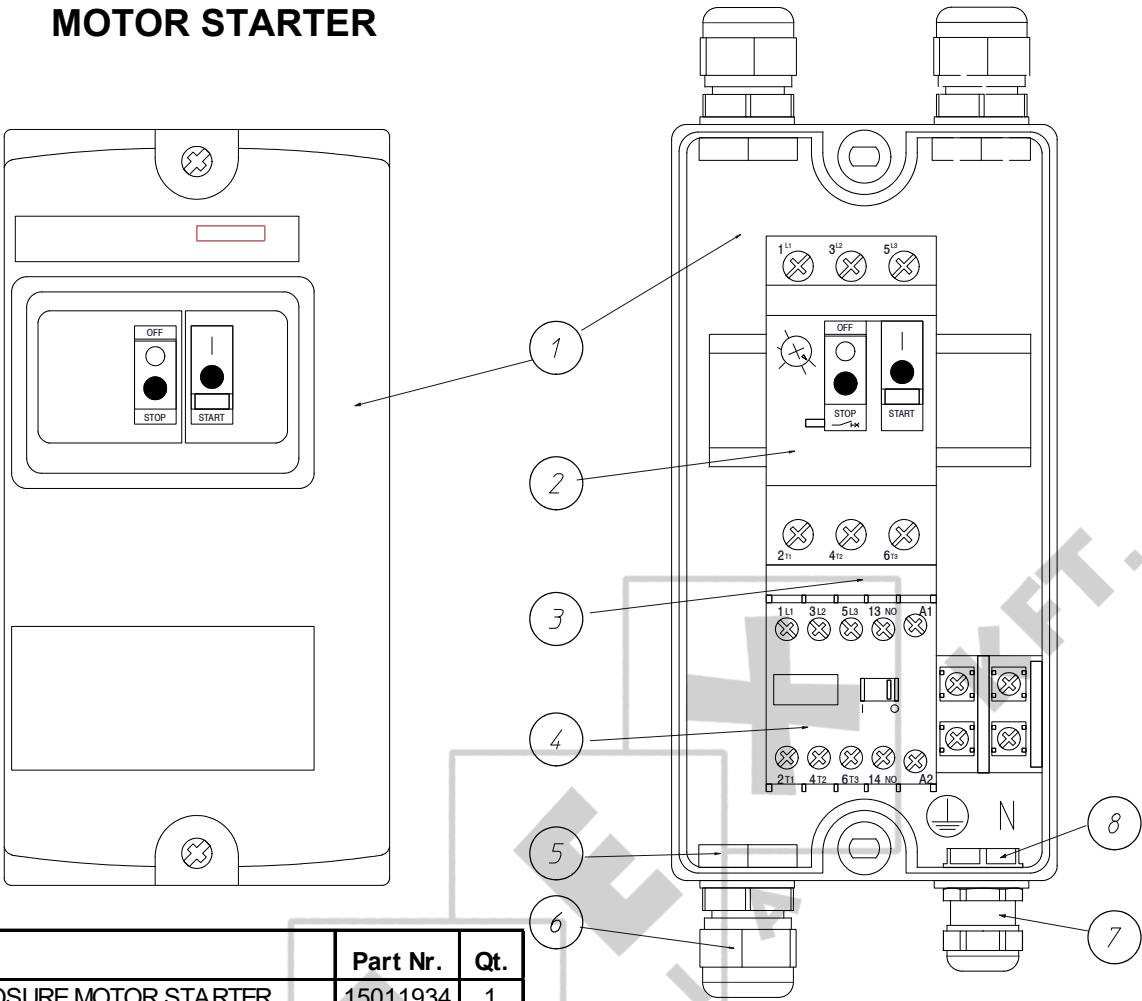
Key	Name	Part Nr.	Qt.
1	ASS'Y CLOSING SHIELD CU LTF	10403672	1
2	CABLE INPUT RUBBER	14904742	2
3	BUT HEAD CAPSCR.W/FLANGE M6X12	20101614	1
4	PART L. CU LTF	10403464	10
5	FRONT PL. CU UPP. P. LTF 50.8MM	10403560	1
6	TUBE BRACKET CU LTF 50.8MM	10403584	1
7	TRANSP. LOWER PART CONE LTF	10403600	1
8	FR.PL.CU LOWER P. LTF 50.8MM	10403544	2
9	BOLT M6X70-DIN 933-8.8	20103792	1
10	HARDWARE KIT	10900322	1
11	SWITCH CORD GUARD	13104518	1
12	CLAMP SENSOR LTF	10403576	1
13	THREAD FORMING SCREW Ø3*10 Dk5	20110575	1
14	PART R. CU LTF	10403456	4
15	CLOSING BRACKET LTF	10403440	1
16	SUPPORT PL. E. BOX LTF	10403552	1
17	HANDY BOX OBO A8	15000037	1
18	ANTI ROOST GUARD	10400455	1
19	SENSOR RELAY BOX 25A	10112460	1
20	SUPPORT PLATE RELAY BOX RIGHT	10112452	1
21	SUPPORT PLATE RELAY BOX LEFT	10112444	1

INTERMEDIATE CONTROL UNIT WITH SENSOR LTF WITHOUT PAN - 00403861



Key	Name	Part Nr.
1	HANDY BOX OBO A8	15000037
2	SUPPORT PLATE HANDY BOX LTF	10403664
3	BOLT M6X70-DIN 933-8.8	20103792
4	SWITCH CORD GUARD	13104518
5	TRANSP. LOWER PART CONE LTF	10403600
6	CLAMP SENSOR LTF	10403576
7	THREAD FORMING SCREW Ø3*10 Dk5	20110575
8	SENSOR VC12 RT230106821 OFF DELAY	03101185

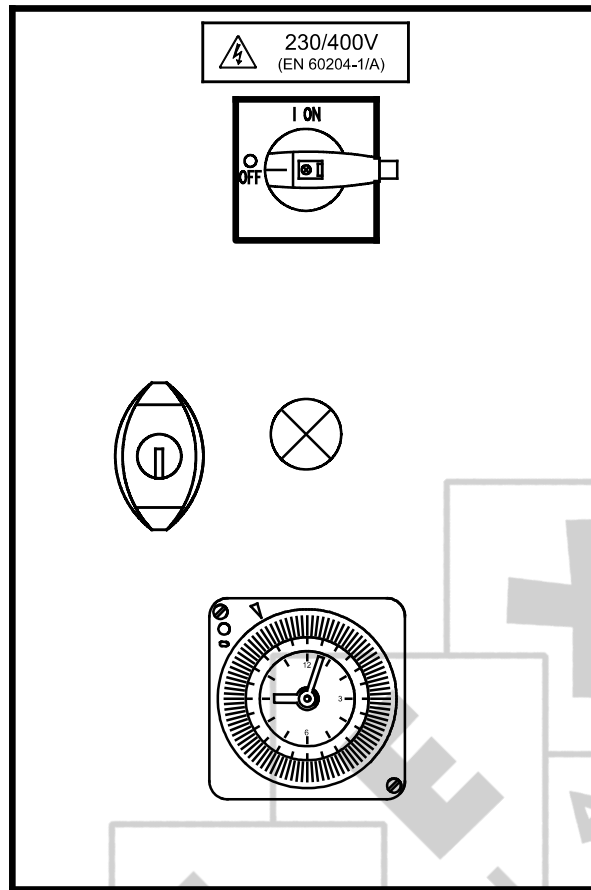
MOTOR STARTER



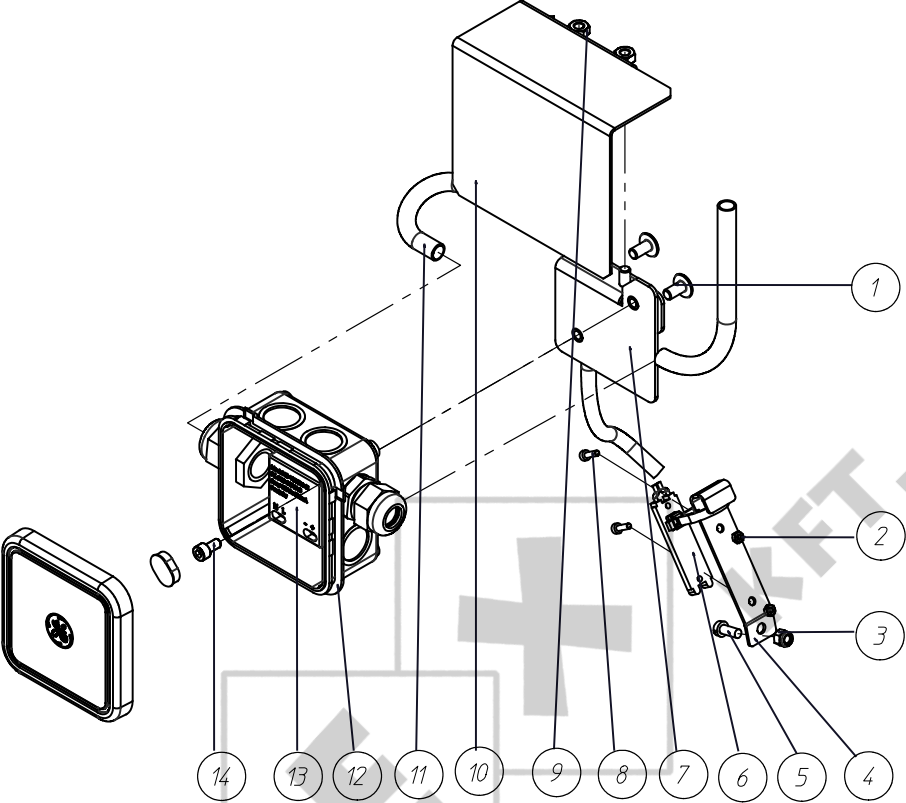
Key	Name	Part Nr.	Qt.
1	ENCLOSURE MOTOR STARTER	15011934	1
2	THERMAL MAGNETIC PROTECTION: See: Where used	-	1
3	MOUNT SOCLE GV2-AF01	15010291	1
4	CONTACTOR 3P+1NO 230VAC	15011926	1
5	CABLE RING NUT M20	15010440	3
6	CABLE RING V-TEC VM20 LGR	15010210	3
7	CABLE RING M16	10111755	1
8	CABLE RING NUT M16	10111763	1

MOTOR STARTER USED FOR:					
MOTOR RATING			SUPPLY VOLTAGE		
50Hz	60Hz		3-PH. 230 V	3-PH. 400 V	1-PH. 230 V
0.18KW	0.22KW		05001233	05001225	05001241
0.25KW	0.30KW		05001233	05001225	05001241
0.37KW	0.44KW		05001241	05001233	05001249
0.55KW	0.66KW		05001249	05001241	05001249
0.74KW	0.90KW		05001249	05001241	05001257
1.10KW	1.32KW		05001257	05001249	05001265
1.25KW	1.50KW		05001257	05001249	05001265
1.50KW	1.80KW		05001265	05001249	05001265

	THERMAL-MAGNETIC MOTOR PROTECTION: WHERE USED					
MOTOR STARTER	05001225	05001233	05001241	05001249	05001257	05001265
THERM. MAGNETIC PROTECT.	13600861	13900261	13600887	13900279	15004799	15006307
SCHNEIDER REF.	GV2-ME05	GV2-ME06	GV2-ME07	GV2-ME08	GV2-ME010	GV2-ME014
CURRENT	0,63-1.00A	1.00-1,60A	1,60-2,50A	2,50-4.00A	4.00-6.30A	6.00-10.00A

CONTROL PANEL WITH TIME CLOCK - 00100685

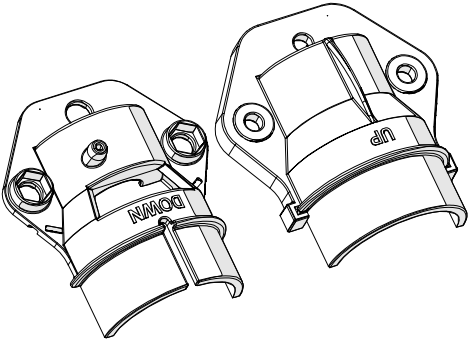
OPTION: LED LIGHT KIT FOR CONTROL UNIT - LTF **- 00404182**



Key	Name	Part Nr.
1	BUT HEAD CAPSCR.W/FLANGE M6X12	20101614
2	NUT M 3	20100608
3	LOCKNUT M5-DIN 985	20100392
4	SUPPORT PLATE LED BAR LTF	10403784
5	SCREW M5X12 DIN 84-4.8	20101135
6	LED BAR - 100LUMEN - LG 550MM	10112237
7	SUP. PL. POWER SUPPLY BOX LTF	10403768
8	SOCKET CAP SCREW M3X10-DIN912	20106134
9	NUT M6 - DIN 934	20100210
10	PROTECTION PLATE HANDY BOX LTF	10403776
11	SWITCH CORD GUARD	13104518
12	TERMINAL BOX POWER SUPPLY LED	10112389
13	POWER SUPPLY 12VDC - 6W	10112245
14	SOCKET CAP SCREW M5x10-DIN 912	20103149

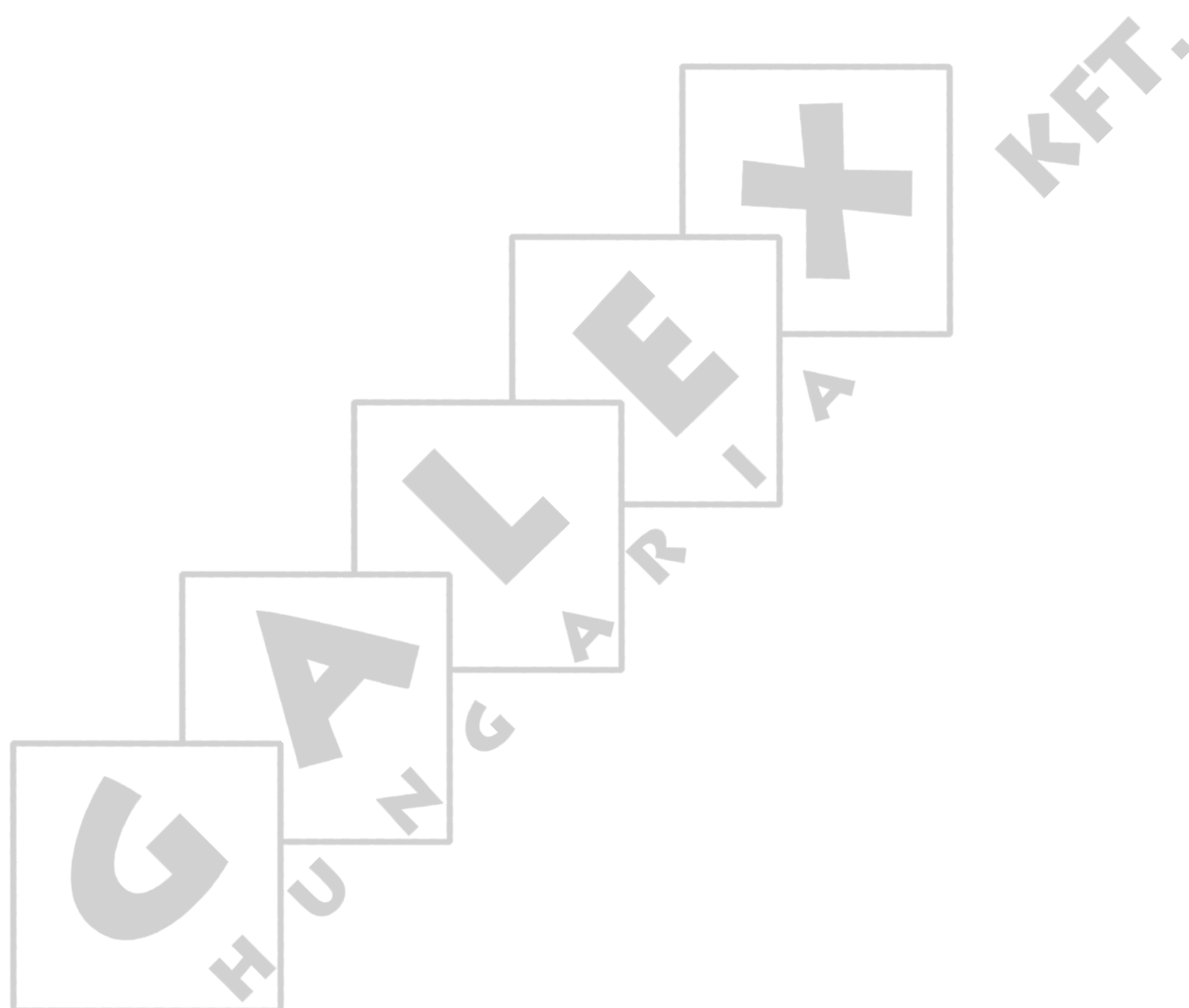
SPARES SET BEAR. CAP HOLD - Ø44.5 (SET 10 PCS) - 00106929

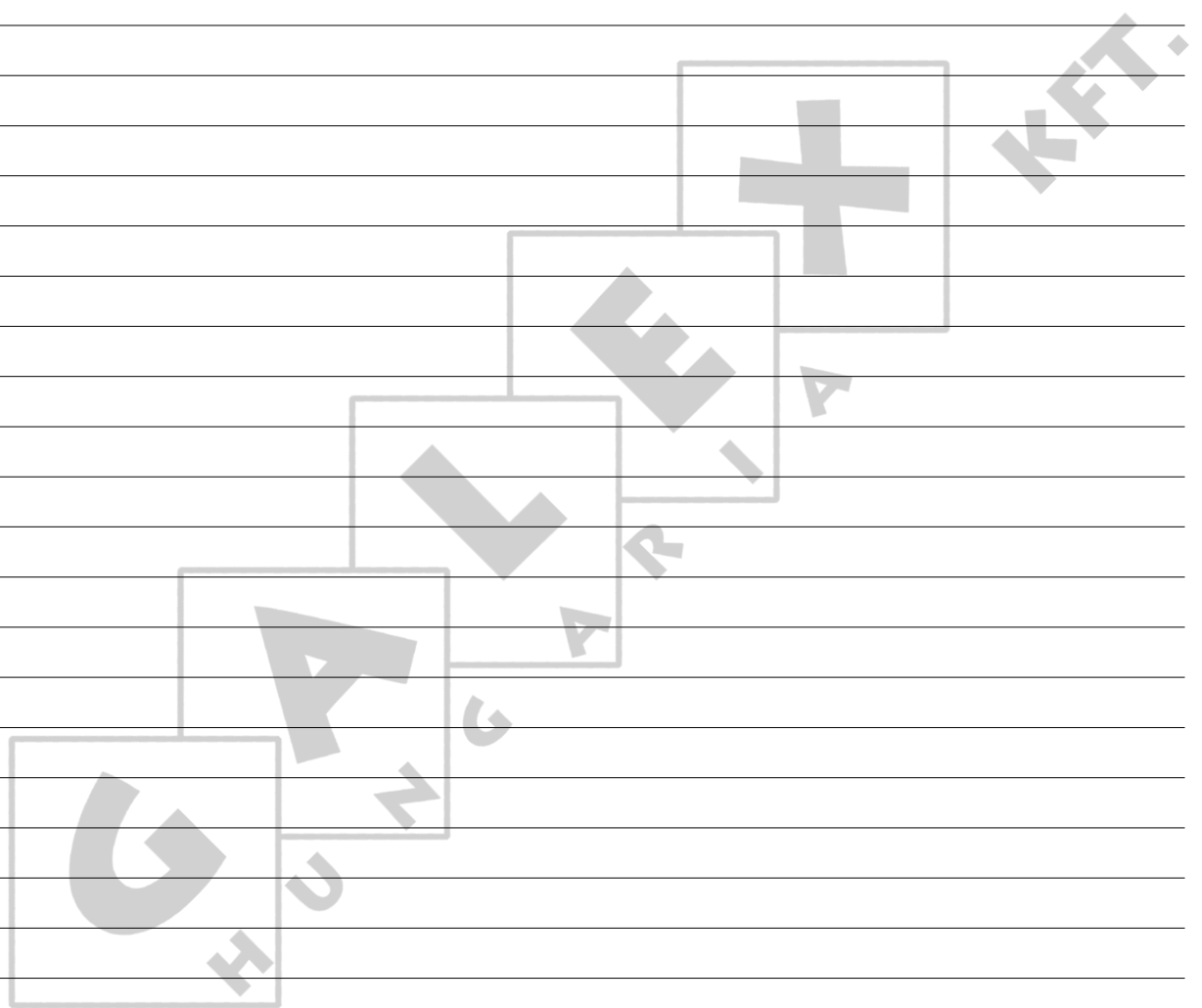
Name	Part Nr.	Qt.
BEAR.CAP HOLDER-Ø44.5 (SET 10PCS)	00106929	10
	Used in :	
FEED INTAKE BOOT POULTRY	00106500	
POULTRY INTAKE BOOT WITH SENSOR	00108950	
POULTRY INTAKE BOOT WITH SENSOR 230VAC	00108952	
DOUBLE FEED INTAKE BOOT	00106518	



PART III

INSTALLATION INSTRUCTIONS





GENERAL SAFETY RULES

Titan Nr: 004...

Automatic pan feeding system for rearing and production of turkeys

Winching system for feeding and drinking lines

IMPORTANT



DANGER

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

- Be **careful** when handling the **rolls of auger**.
 - When you release the **binding wire**, it is possible that the auger **unrolls**. This can cause injuries.
 - **Always** use **safety gloves** when you slide the auger into the tube.
 - **Always** see that the auger **cannot spring back** (by using clamps) when you put it under tension.
- Check all **tube connections** and all **tube clamps** on control units, feed intake boots and bearings for **proper clamping**. Tighten all tube clamps with a **torque** of min. 10 Nm.
- **Test** the **suspension system** for safe operation:
 - Firmly fasten the **winch** and the **suspension points**. Firmly tighten **all cable clamps**.
 - **Winch up the feeding lines three times** and lower them again (full course). **Never stand underneath the system** when doing this.
 - Winching up and lowering must proceed **without any hitch**.
- At the **first start-up**, make sure that, if the auger **hitches or blocks**, you can **immediately switch off** the system with the main switch on the control panel.



This **SYMBOL** will be used to draw your attention to matters that are of **GREAT IMPORTANCE** for your **SAFETY**.

It means: **WARNING** - follow the safety instructions.

Disconnect the current, re-read the safety rules.

In short: **BE ALERT**. **IGNORING** these instructions can cause **SERIOUS INJURIES** or even **DEATH**.

WINCHING SYSTEMS

GENERAL SAFETY RULES

Daily / motorized / hand-operated winch for poultry systems



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

- **Pay attention** when **winching up** or **putting down** the poultry lines/circuits.
 - **Stop** the handling in case of any malfunctioning.
 - **Never** stand **underneath** the load when winching up or putting down the poultry lines/circuits.
- **Never allow unauthorized persons to enter** the house during your absence.
- **Always** choose a location that can withstand the maximum lifting capacity of the winch.
- **Only** use the winch for suspension of **Roxell poultry lines/circuits**.
- Place the winch:
 - in a location where there's **little passage**.
 - so that the user **doesn't stand underneath the load** during use.
 - so that the user **sees the load** during use.
 - at a **well-lit, dry, roofed and accessible** place.
 - on a **solid** wall.
 - so that the handle can be easily used.
 - so that the **warning marking** is **always visible**.
- Only use the **supplied mounting kit** for fixing on the ceiling.
- **Always** check the condition of the winch and the cable before operating.
 - A **raveled, kinked or damaged cable** must be replaced **immediately**.
 - A **loose or damaged daily winch** must be replaced **immediately**.
- **Cover** the winch during **cleaning**.

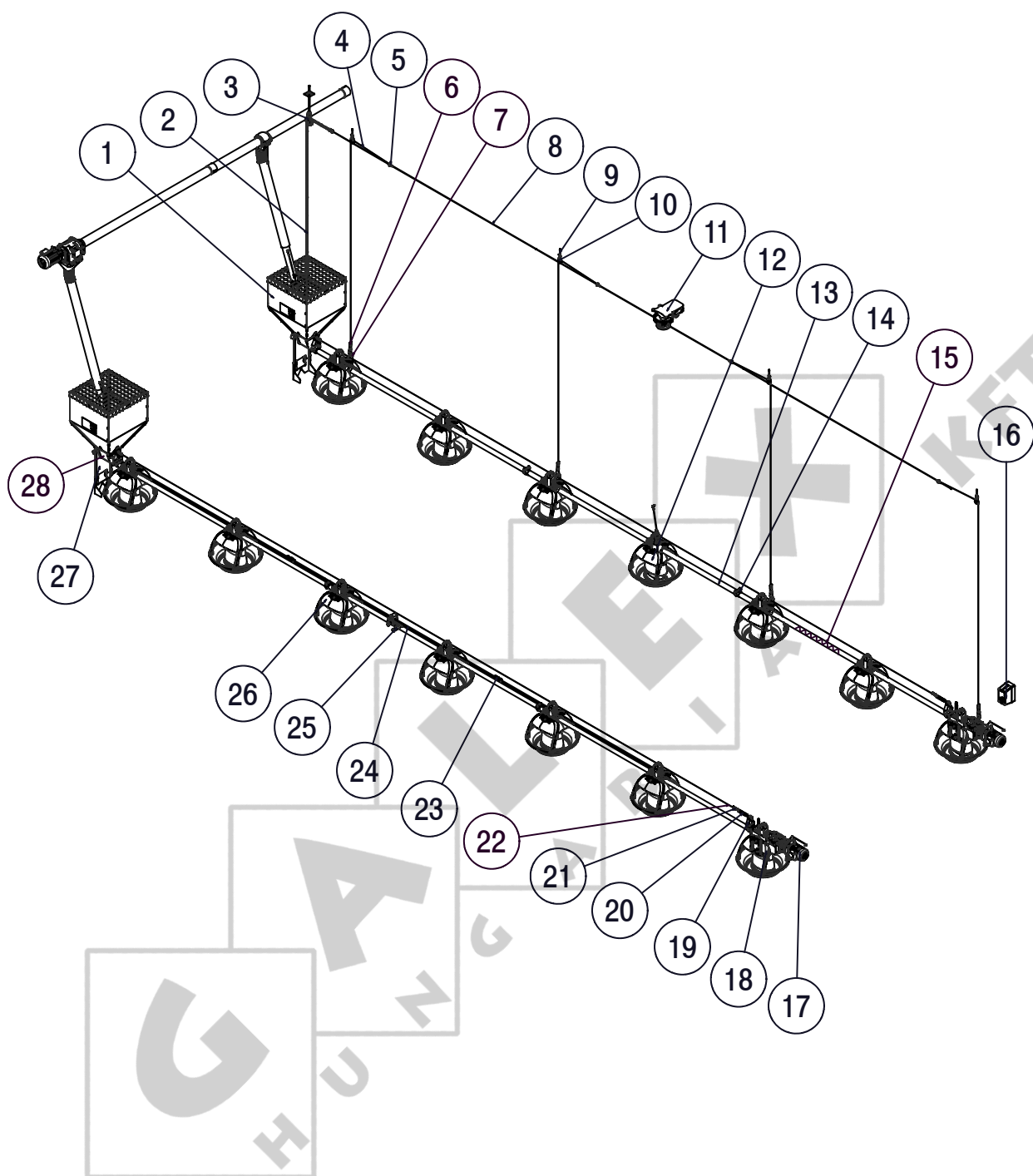


Forbidden: Never use the winch to lift persons.



Danger: Getting jammed may cause **serious injuries**.

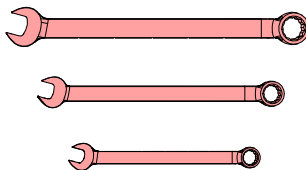
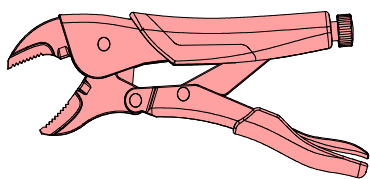
GENERAL LAYOUT



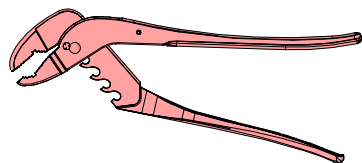
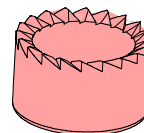
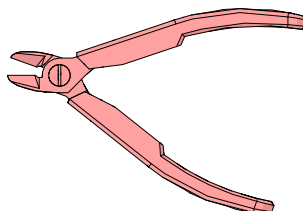
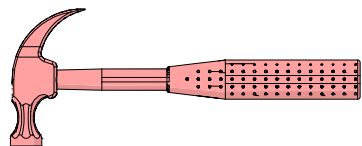
COMPONENT NUMBERS

Key	Name	Part Nr.
1	100 KG HOPPER	00100602
2	CHAIN DIA. 3.5 MM	00100750
3	HEAVY DUTY PULLEY	00100412
4	CABLE 3/32" - ø2.5 MM - 250M	00106887
	CABLE 3/32" - ø2.5 MM - 500M	00106895
5	CABLE CLAMP NO. 5	00100545
6	ADJUSTMENT LEVELER	00602060
7	HANGER LTF	00403942
8	CABLE ø 5MM - 3/16" - (7x7)	00100388
9	SCREW HOOK 90 MM	05000872
10	PLASTIC PULLEY Ø45MM W/ ST.ST. HOOK	00107198
11	HAND OPERATED CENTRAL WINCH	00102368
12	INTERM. CU W. SENS. LTF W/O PAN	00403861
13	TUBE 3.05M LTF W/2 HOLES ø50.8	00400044
	TUBE 3.05M LTF W/1 HOLE ø50.8	00403918
	TUBE 3.05M LTF 1 HOLE ø50.8/2M	00403926
	TUBE 3.05M W/2 RECTANGULAR HOLES	00102285
*	TUBE 3.05M W/2 RECTANGULAR HOLES	00402388
	TUBE 3.05M W/1 RECTANGULAR HOLE	00102277
*	TUBE 3.05M W/1 RECTANGULAR HOLE	00402370
	TUBE 2.9M W/2 RECTANGULAR HOLES	00204065
	TUBE 2.9M W/1 RECTANGULAR HOLE	00204057
	TUBE 2.90 M WITHOUT HOLES	00500074
*	OPTIONAL W. 1 OR 2 HOLES EVERY 2M	
14	TUBE CLAMP ø54MM	00400085
	TUBE CLAMP ASSEMBLY Ø45 MM	00102921
	TUBE CLAMP ø45MM	00104372
15	AUGER PF/ATF	00100974
16	MOTOR STARTER	SEVERAL
17	POWER UNIT	SEVERAL
18	CONTROL UNIT 50.8MM LTF W/O PAN	00403837
	CONTR. U. W. SENS. LTF W/O PAN	00403821
19	ANCHOR BRACKET LTF	00403934
20	SPRING	00400077
21	DUPLEX CABLE CLAMP ST.ST. - 3 MM	00106945
22	CABLE F. PERCH GUARD - 50 M	00106847
	CABLE F. PERCH GUARD - 100 M	00106855
23	U-CONNECTOR (SET OF 5PCS)	00403958
24	ROD F/CENTRAL ADJUSTMENT SYSTEM	00403950
25	FEED REG. KIT C.A.S. 50.8MM	00403966
	FEED REG. KIT C.A.S. 44.5MM	00403974
26	TITAN ASSEMBLY	II-4
27	SUPPORT F. HOPPER IN LINE LTF	00404118
28	BOOT ASS'Y - LTF	00400390
	FEED INTAKE BOOT POULTRY	00106500

TOOLS



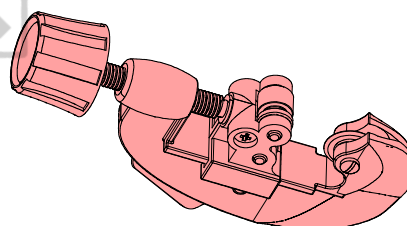
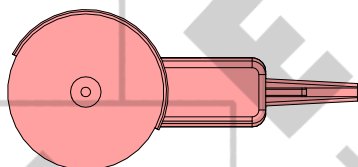
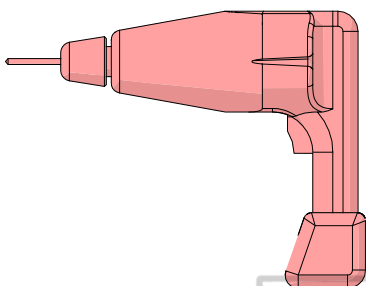
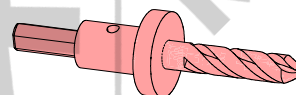
- Ø32 (SENSOR) - 09701699
- Ø40 - 09700022 (MOD. 55),
 - Ø51 - 09700030 (MOD. 75),
 - Ø70 - 09700048 (MOD. 90),
 - Ø108 - 09700055 (MOD. 125)
 - Ø130 mm (Holes in wall)



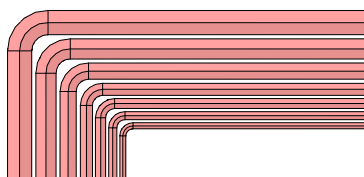
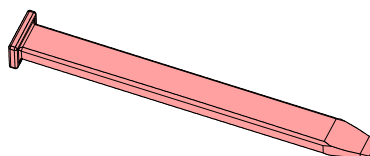
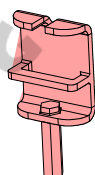
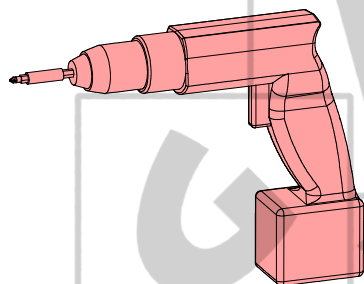
Ø9, Ø7 & Ø2,8



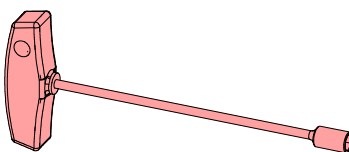
09700071



Ø6 mm - 09700220



19700236



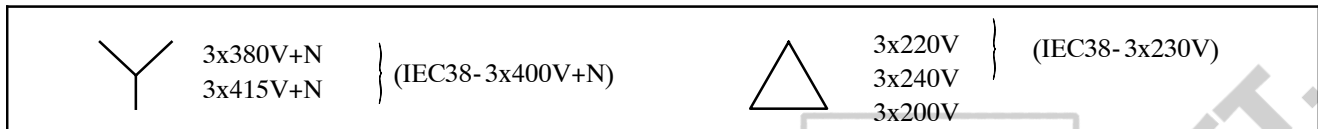
ELECTRICITY ... WATCH OUT !

Leave connections to the system to a qualified electrician!

- Wire the system with the utmost care and attention.
- Always provide a solid earthing.
- Check all connections before you switch on.
- Always follow the wiring diagrams included in the control panels.
- Compare setting of the motor protection with the data on the motor label.
- Motor protections are set at minimum by the manufacturer.
- If you do not use a Roxell control panel, make sure to provide the necessary motor protections.
- Compare motor label plate and motor connection with local voltage :



DANGER

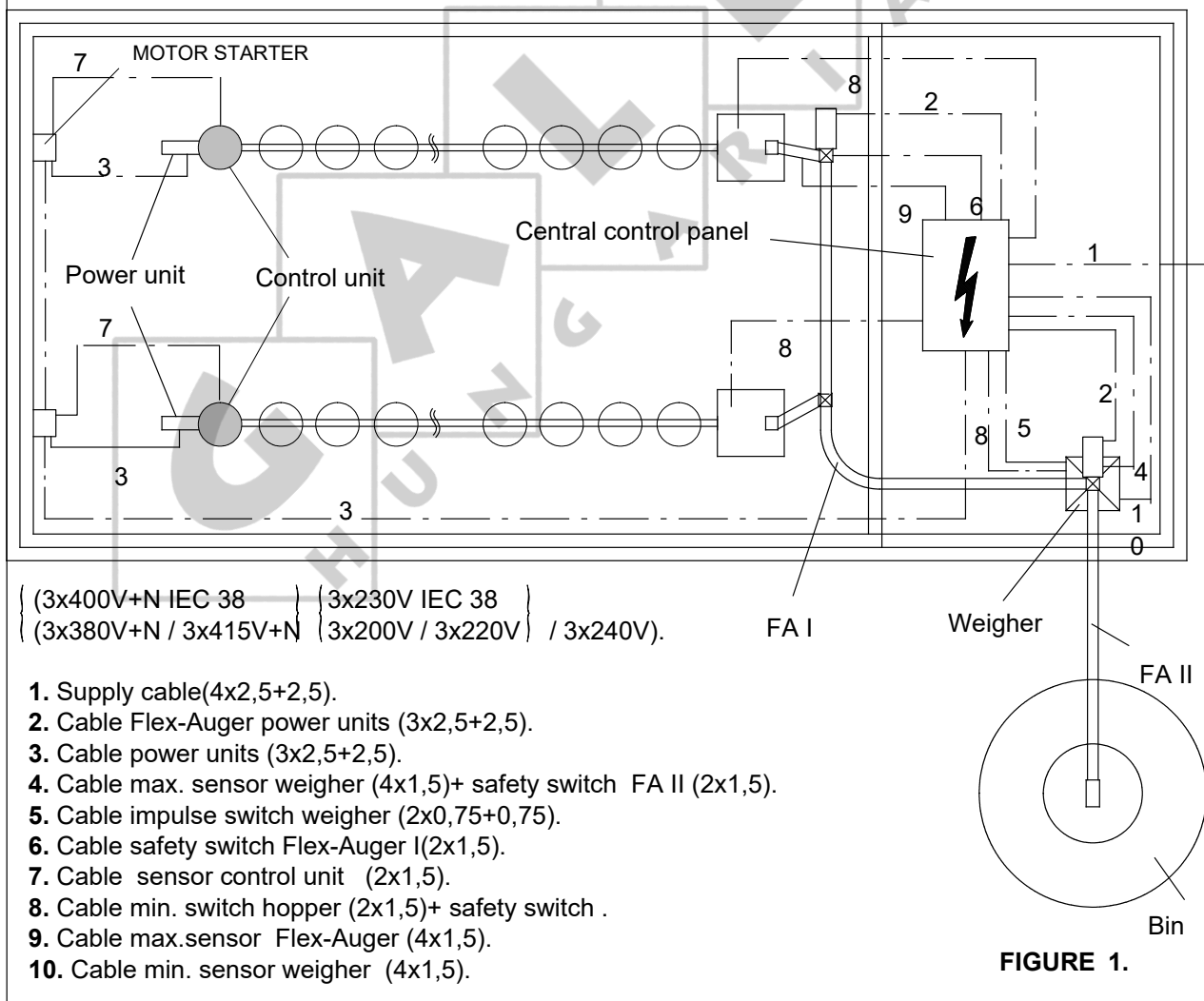


Maximum cable lengths to the motors: See page III-59

ELECTRICAL WIRING DIAGRAM

Sealed parts in control panels must under no condition whatsoever be unsealed!

Only the connection diagram is shown in the assembly guide. Wiring diagrams are always supplied with the control panels.



THE SUSPENSION

The suspension of the system is very important: it must be done carefully and accurately!
Closely study the instructions before starting the suspension.

- **IMPORTANT:** If there is a layer of insulation, first install the necessary reinforcements!

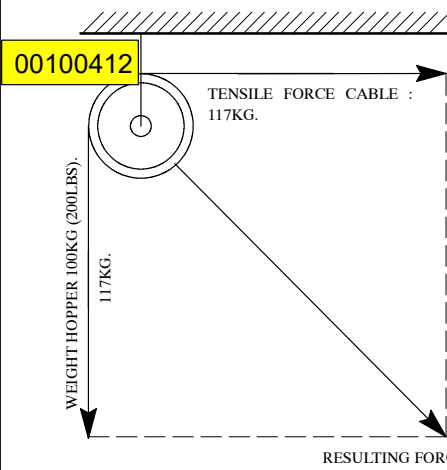


- Each suspension point (small pulley) should be able to hold a 100 kg burden.
- Each fixing of the heavy duty pulley should be able to hold a burden of 3 X F.

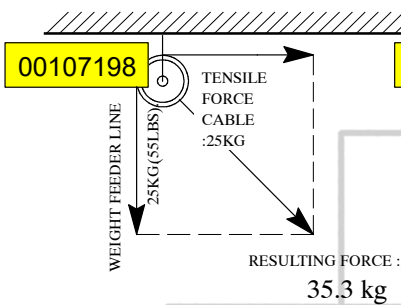
DANGER

* You can easily determine the winch location by means of forces:

- On hopper suspension



- On standard pulley



- On power unit suspension

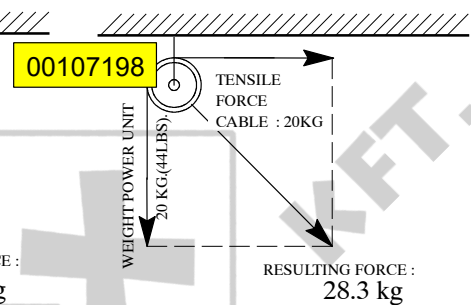


FIGURE 2.

SUSPENSION COMPONENTS

In a wooden beam:

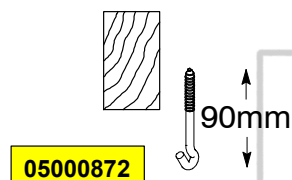


FIGURE 3.

Drill a small hole in HARD WOOD.
This will prevent screw hooks from breaking off.

Use a drilling machine with our special driver for screw hooks.

Wooden beam + insulation:

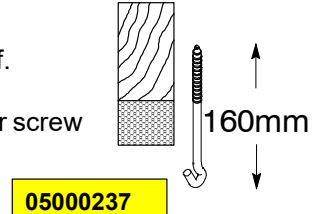


FIGURE 4.

In a concrete beam:

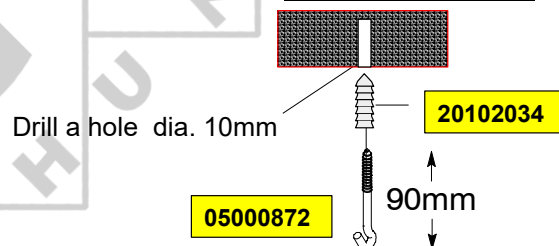


FIGURE 5.

In a metal girder:

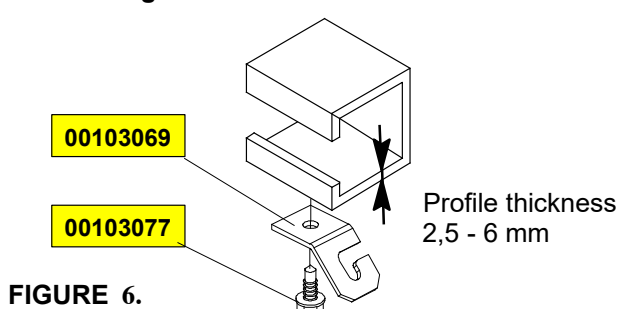


FIGURE 6.

In metal I girder:

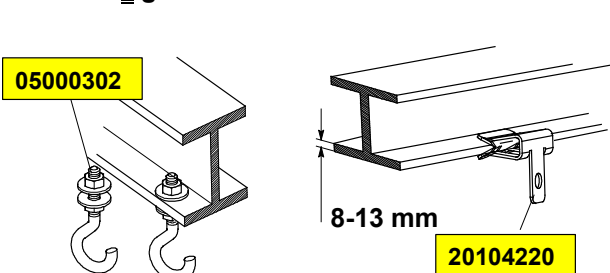


FIGURE 7.

DRAWINGS OF SUSPENSION SYSTEM WITH CENTRAL WINCH



DANGER

For your safety: never make the installations longer than the recommended length.

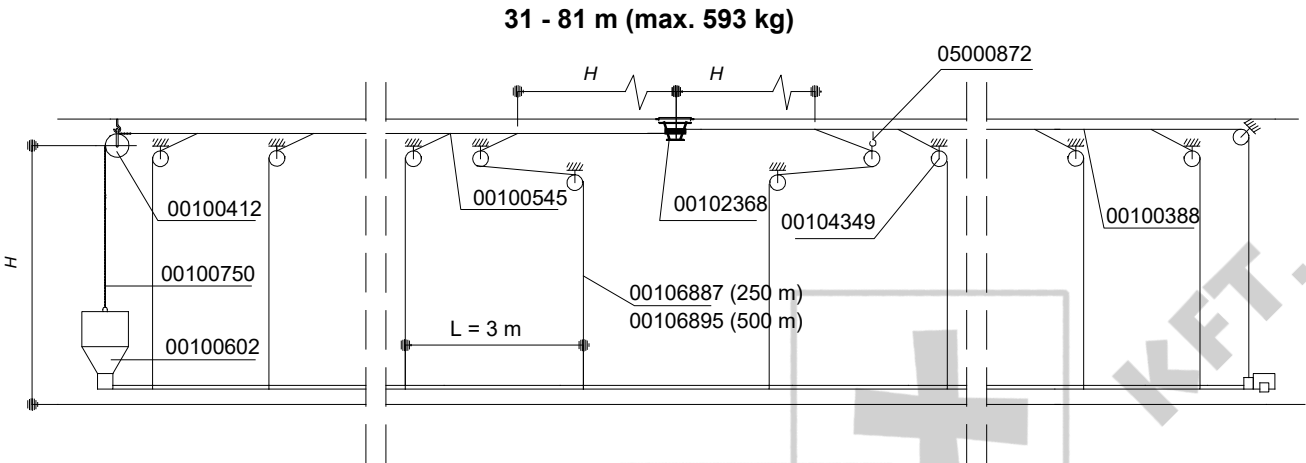


FIGURE 8.

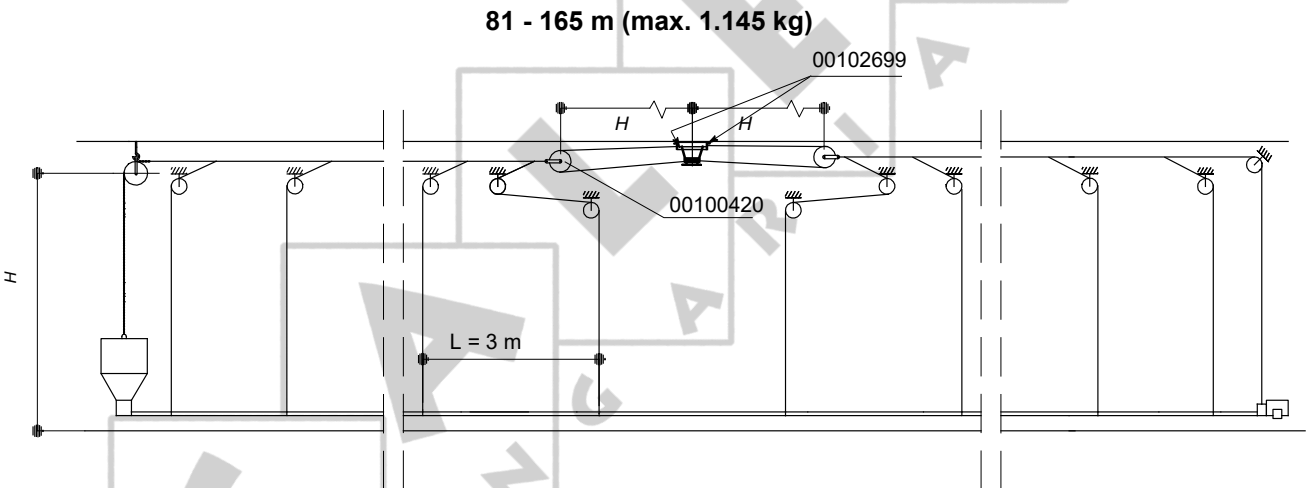


FIGURE 9.

00100412	HEAVY DUTY PULLEY	00100750	CHAIN DIAM. 3.5 MM
00104349	SMALL PULLEY WITH STAINLESS STEEL HOOK	00106887	CABLE 3/32" - ø2.5 MM - 250M
00102368	HAND OPERATED CENTRAL WINCH	00106895	CABLE 3/32" - ø2.5 MM - 500M
00100388	CABLE ø 5 MM - 3/16" - (7x7)	00100420	SINGLE EYE PULLEY
00100545	CABLE CLAMP NO. 5	05000872	SCREW HOOK 90MM
00102699	CABLE CLAMP NO. 5	00100602	100 KG HOPPER

Choose between 2 following possibilities (so the cable clamps will not touch the pulleys when you winch up the line).

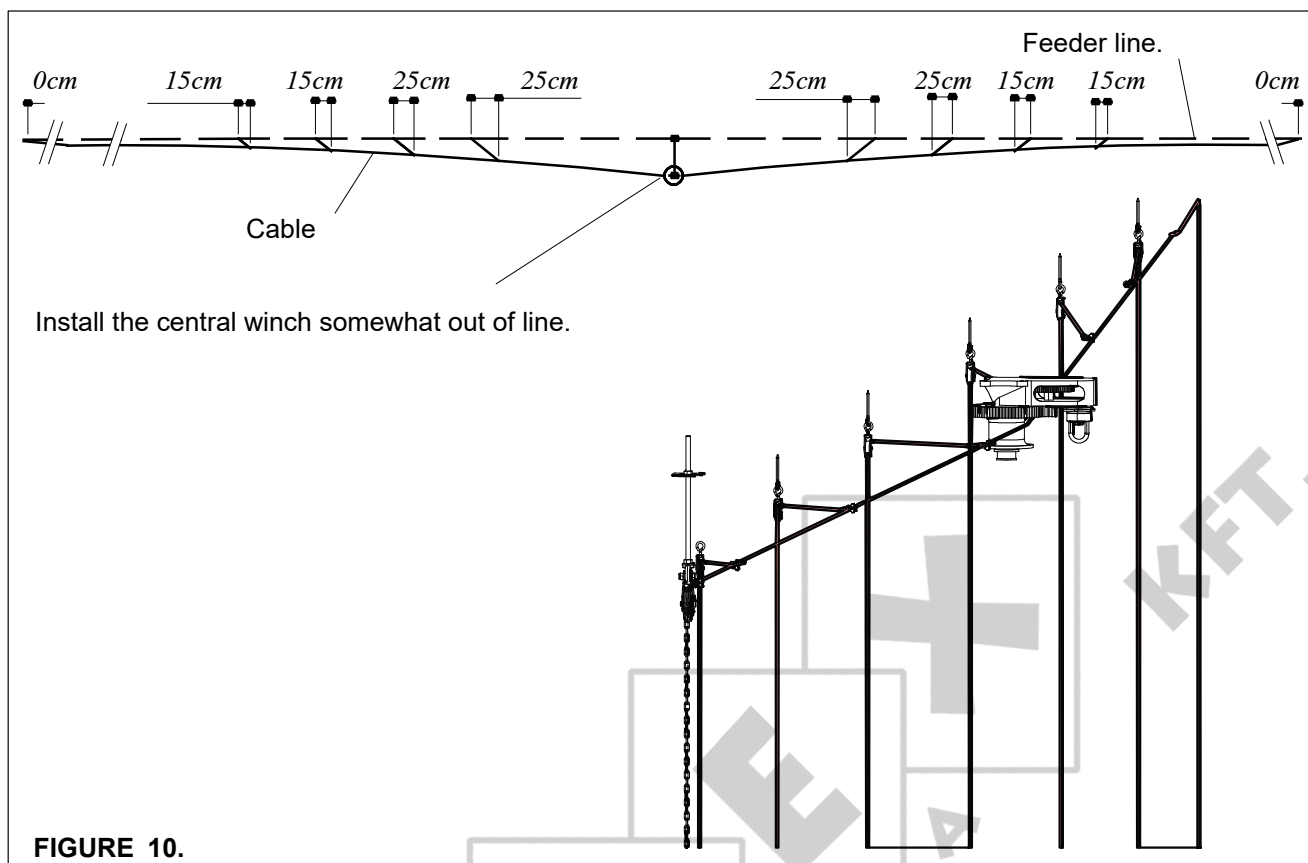


FIGURE 10.

Place suspension hooks crosswise off the beam center line.

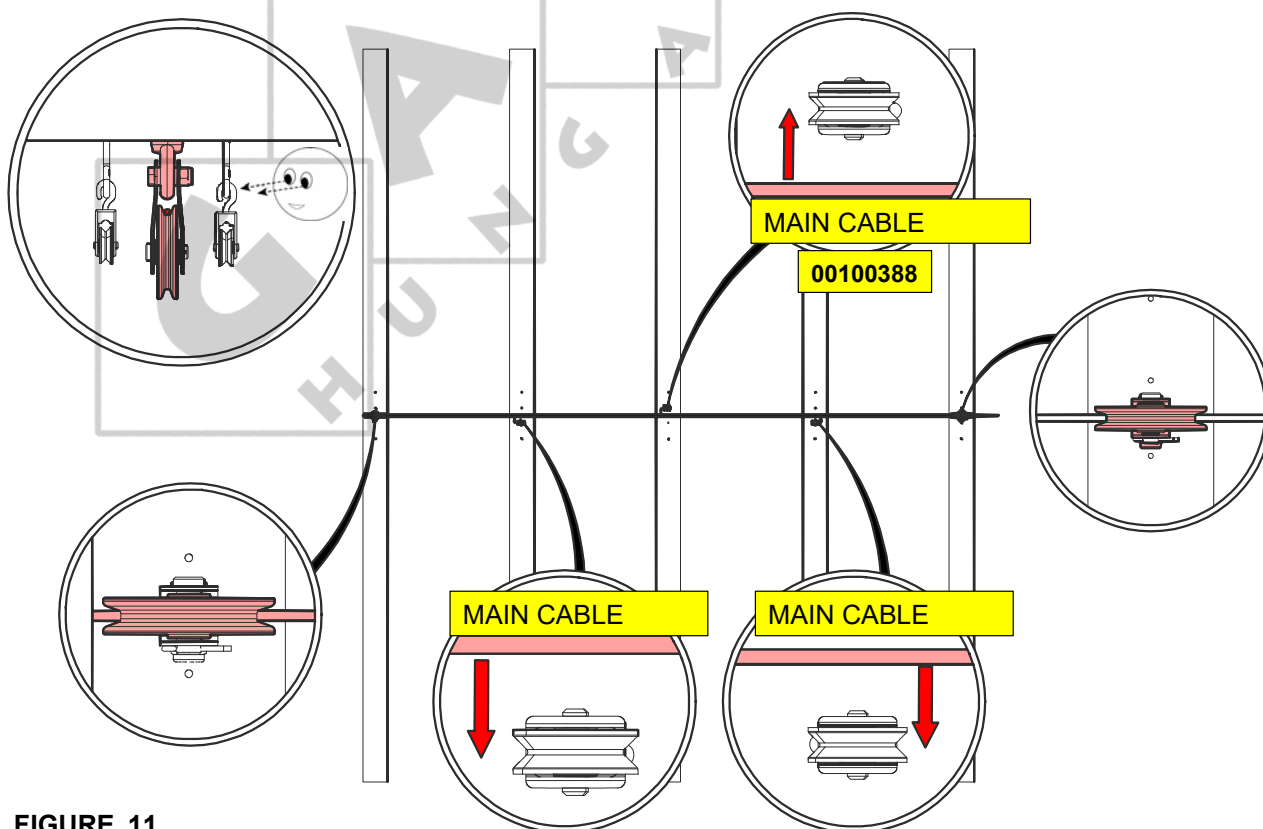


FIGURE 11.

CENTRAL WINCH

Maximum lifting power: 800 kg

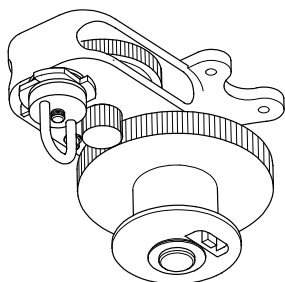


DANGER

IMPORTANT: The winch can only be used as a central winch, not at the end of a circuit. so install the winch in the middle.

The traction of the winch is 800 kg. Install the winch at a solid spot in the roof construction. Reinforce when necessary.

= HAND-OPERATED CENTRAL WINCH.



Roxell supplies the hand-operated winch without mounting plate and bolts/nuts.

Fix the winch directly to a **SOLID CEILING**.

You can install plate & winch in any direction.

OPTION

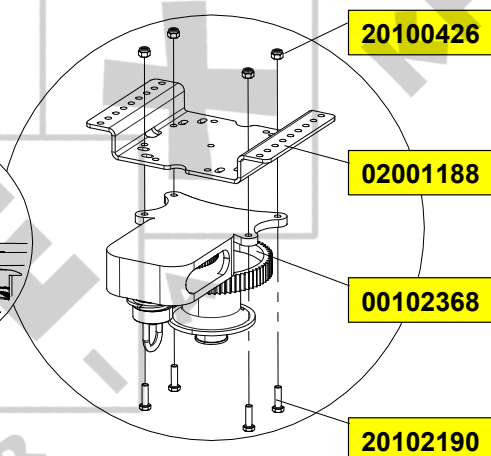
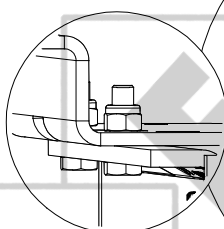
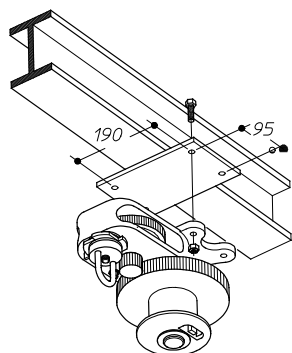
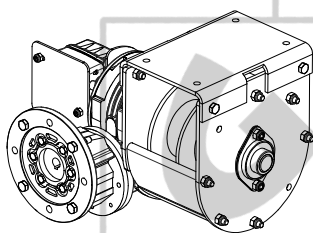


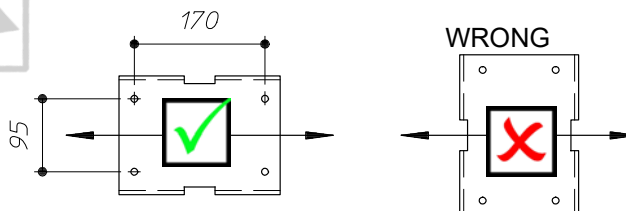
FIGURE 12.

Winching up speed:
1 m/minute.

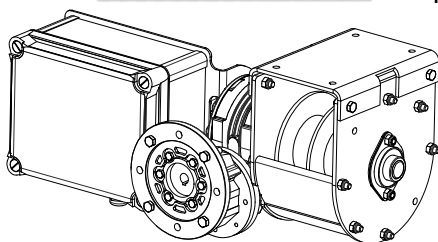
= CENTRAL WINCH W/GEARBOX (MOTOR-OPERATED), supplied with **MOUNTING PLATE**.



Fix this plate to the ceilings before the insulation. Pay attention to the correct direction.



Fix the winch to the plate with bolts and locknuts.



Install the motor after finishing the installation.

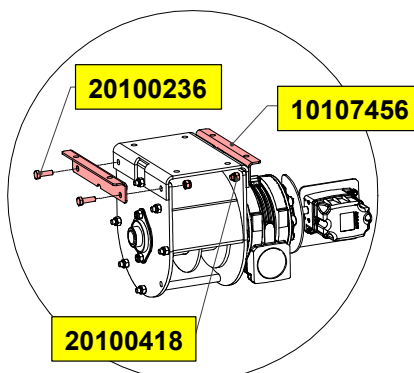


FIGURE 13.

SUSPENSION FOR FEEDING LINE

Suspend the control unit at least 3 m from the house end wall!

Make sure that the main cable 5 mm does not hang in, but beside the screw hooks and pulleys!

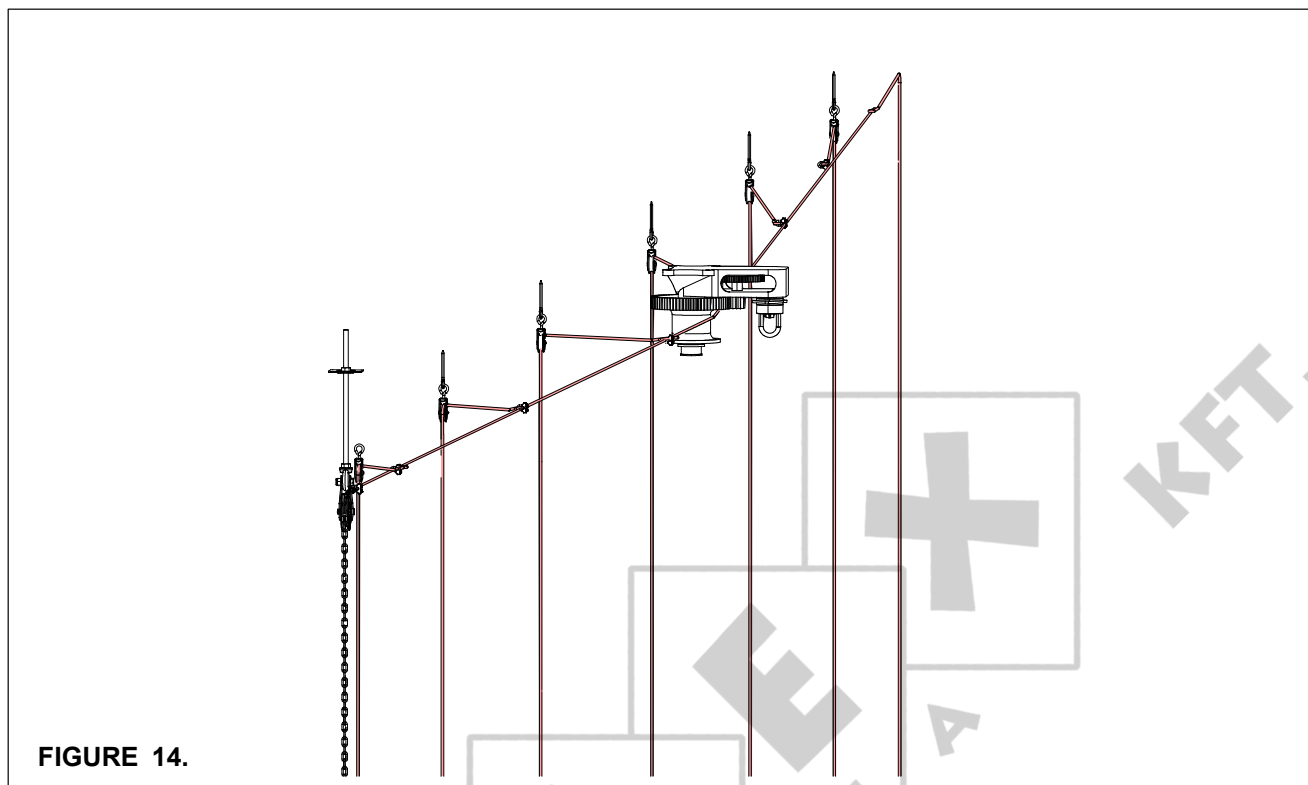


FIGURE 14.

Consider the double diversion! Only then install the cable. You can hang the main cable in the screw hooks for the time being.

- Measure the distance from the wall to the first feeding line.
- Mark from this spot the suspension points on the ceiling over the whole length of the line.

Alternatives: see page III-9

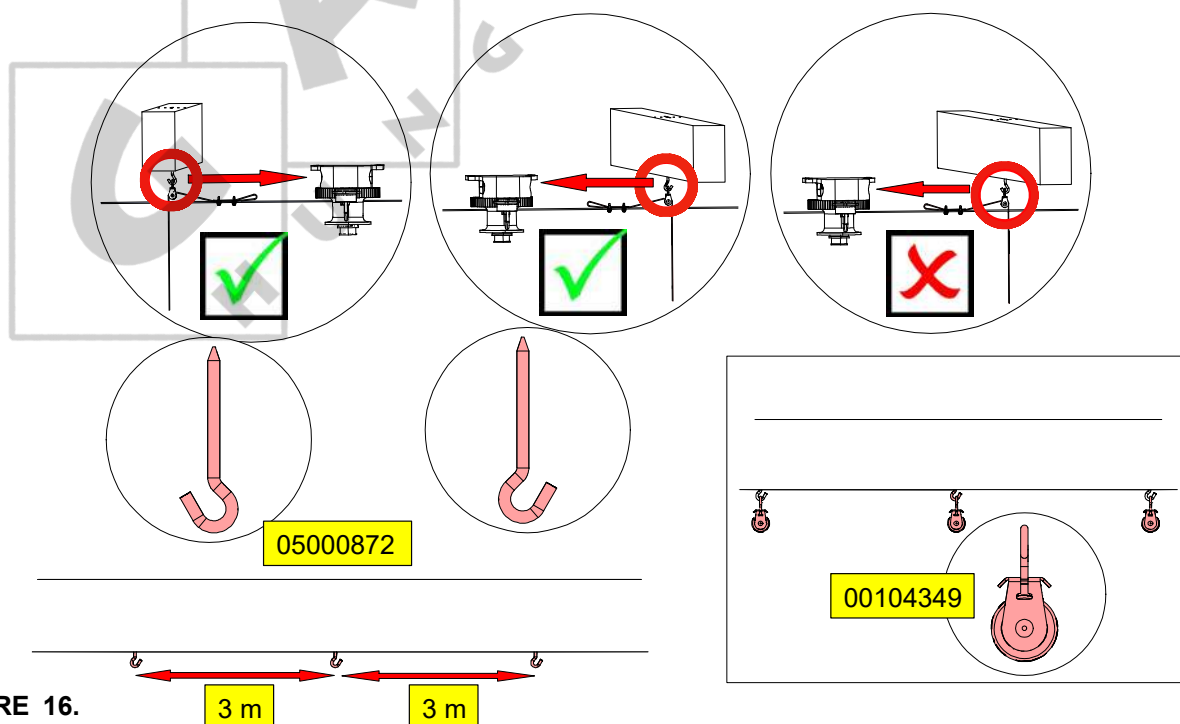
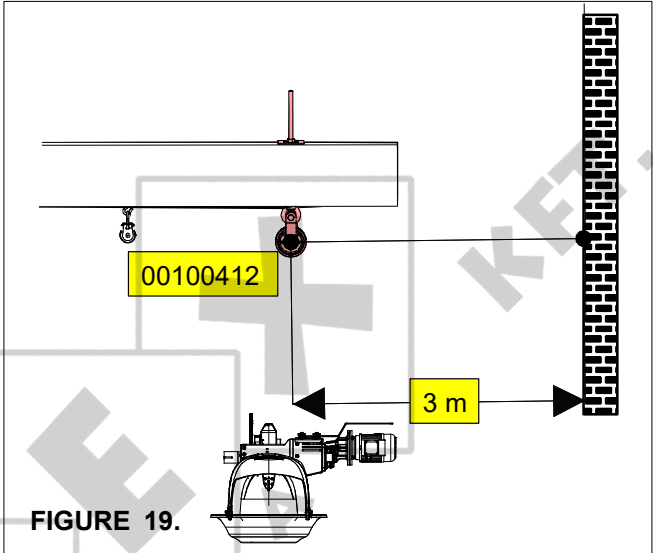
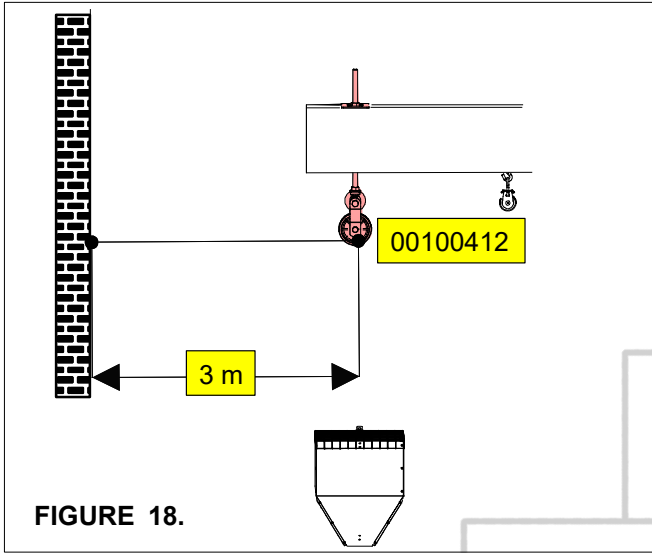
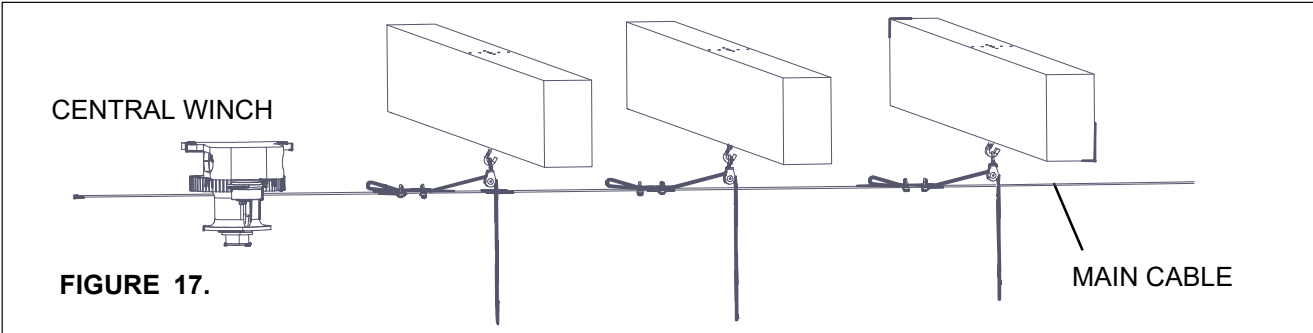
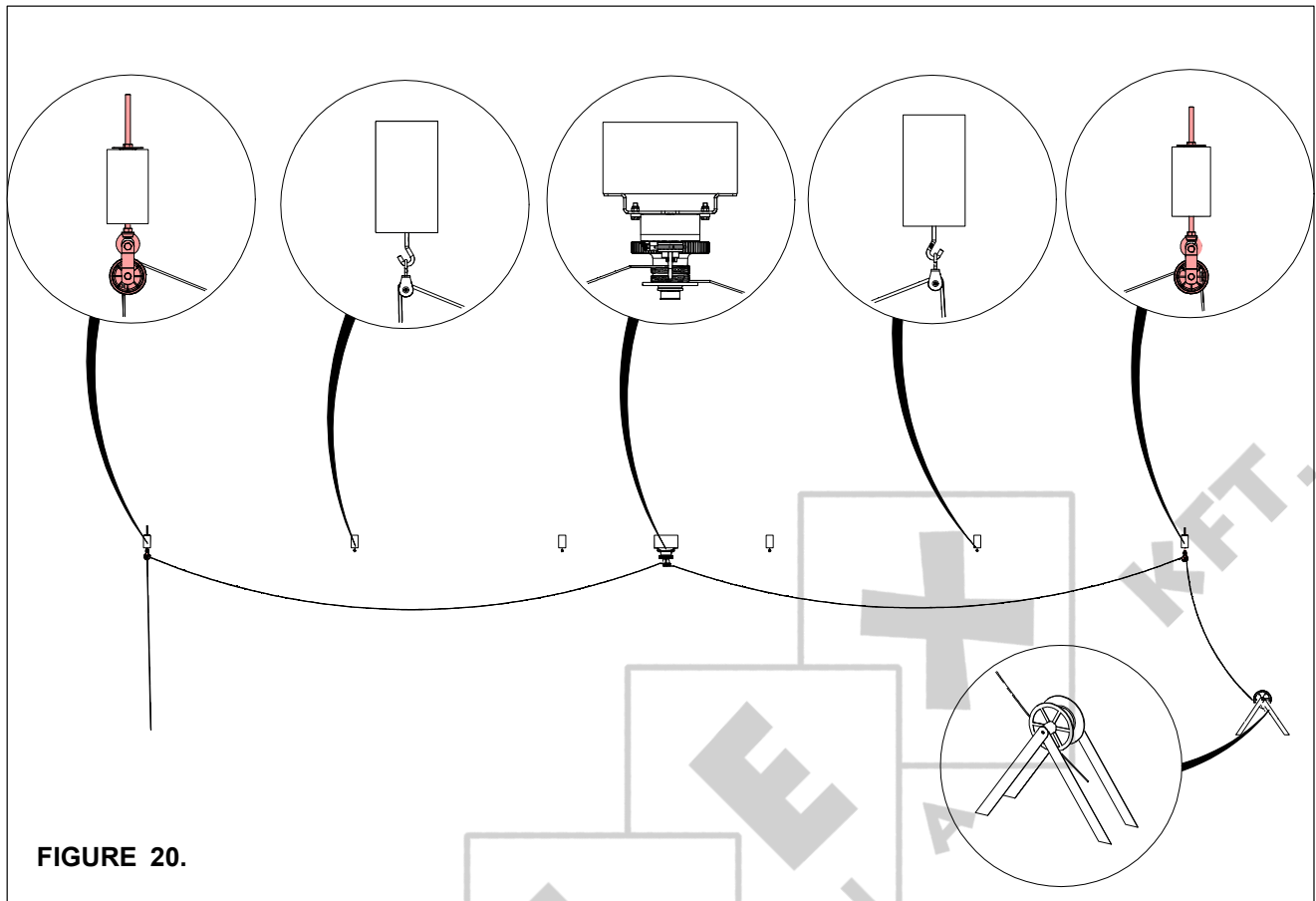


FIGURE 16.

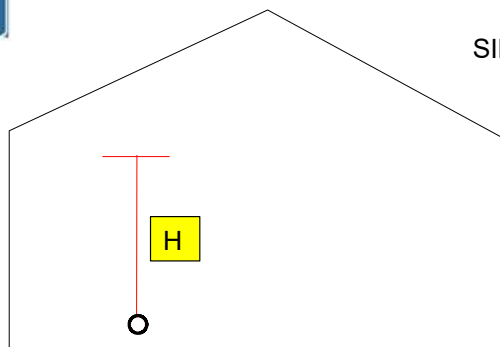


TO INSTALL THE MAIN CABLE



Feeding line > 81 m: See page III-10 Fig. 9.:

SINGLE DIVERSION



Required cable length : 4 x **H**

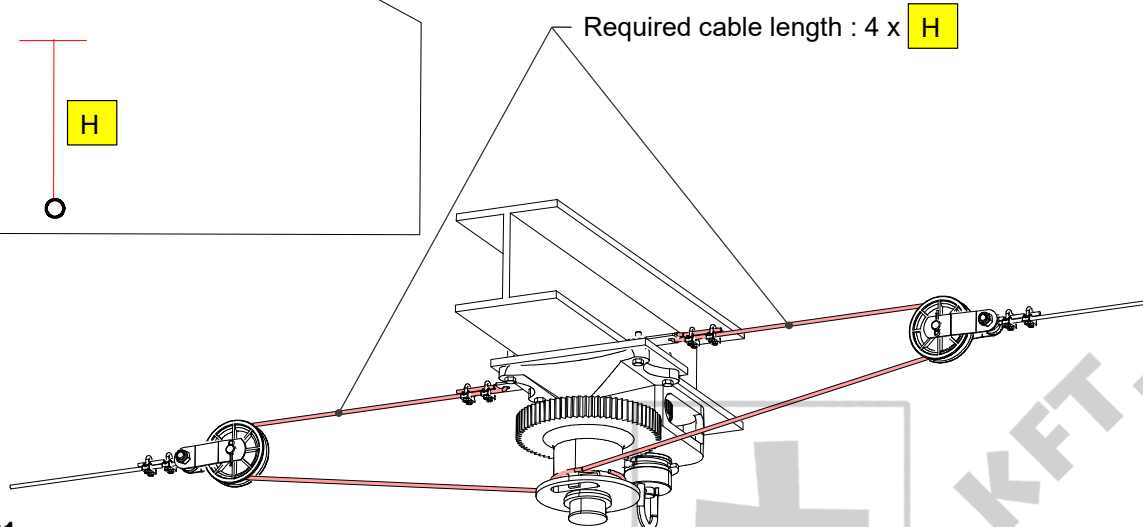


FIGURE 21.

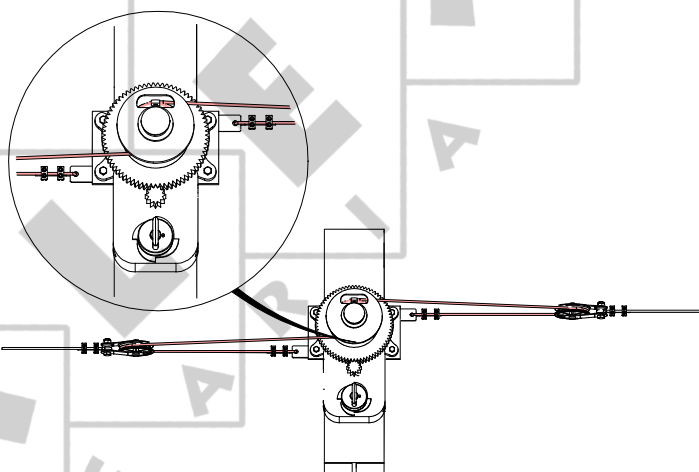


FIGURE 22.

Required cable length : 4 x **H**

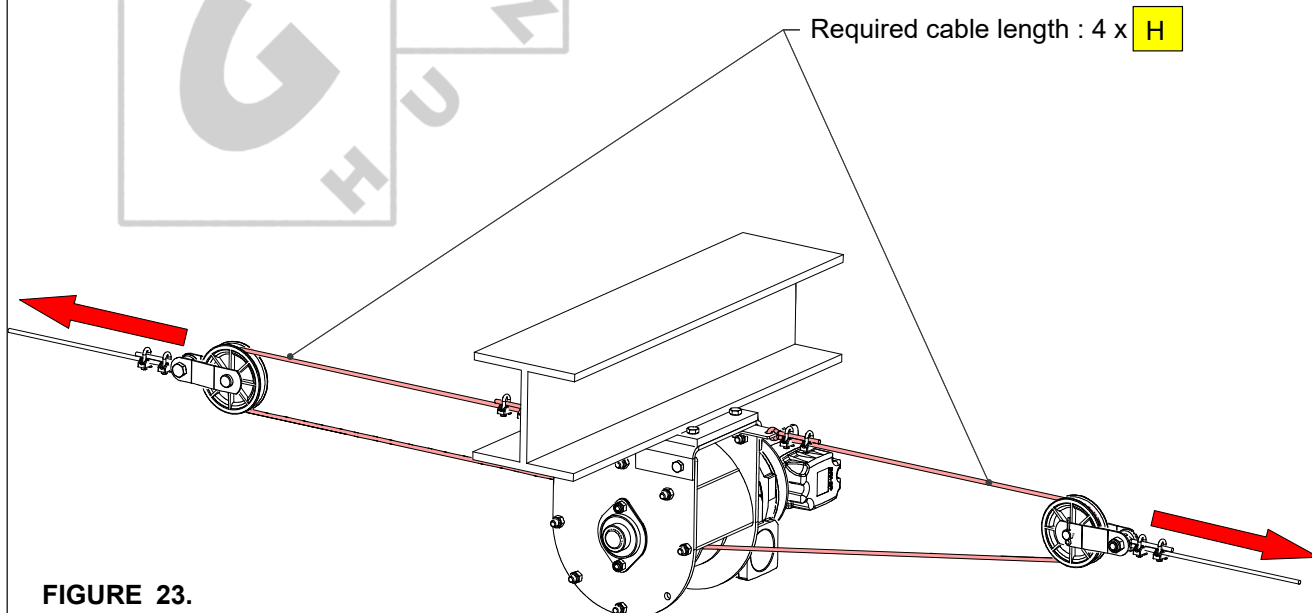
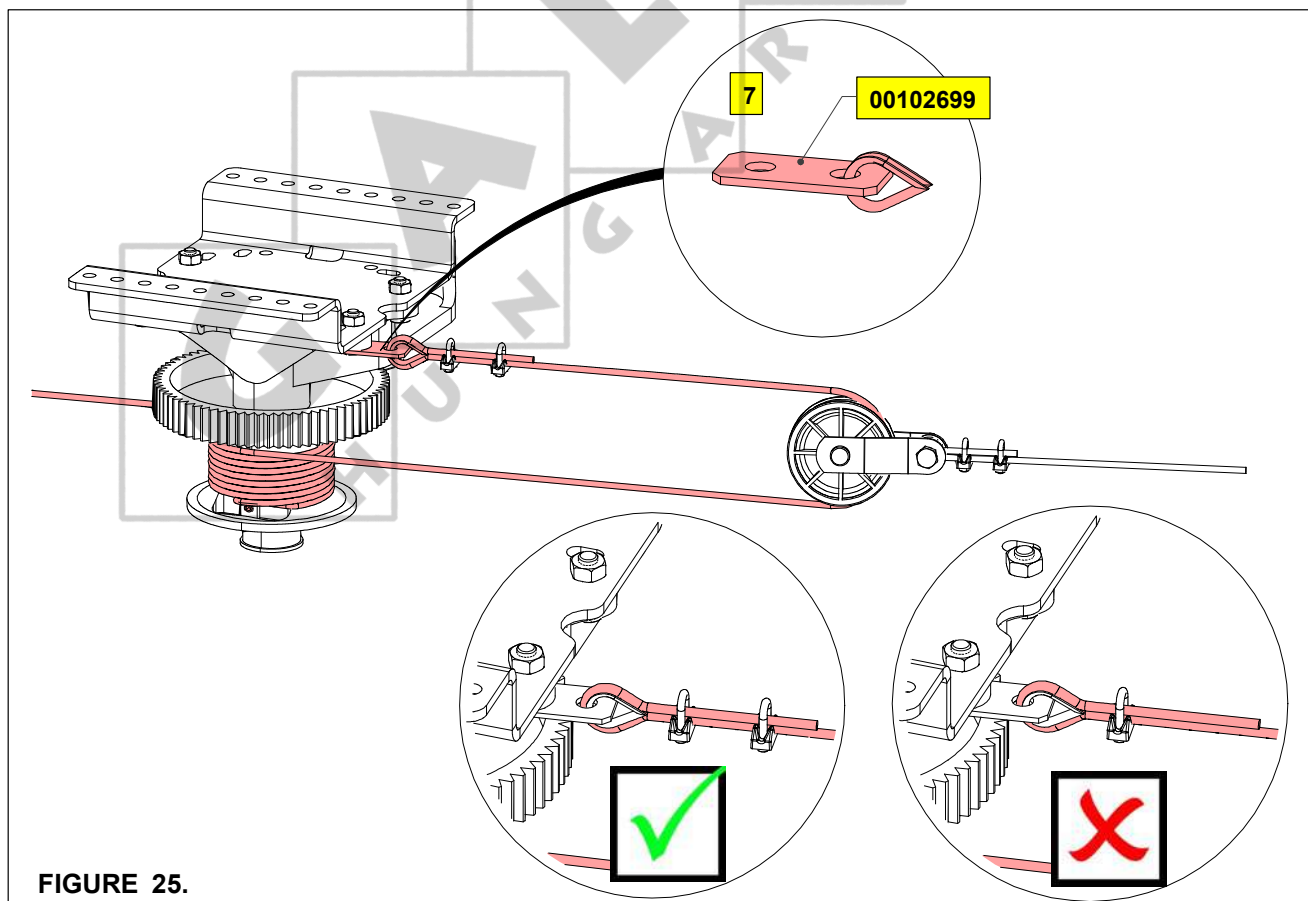
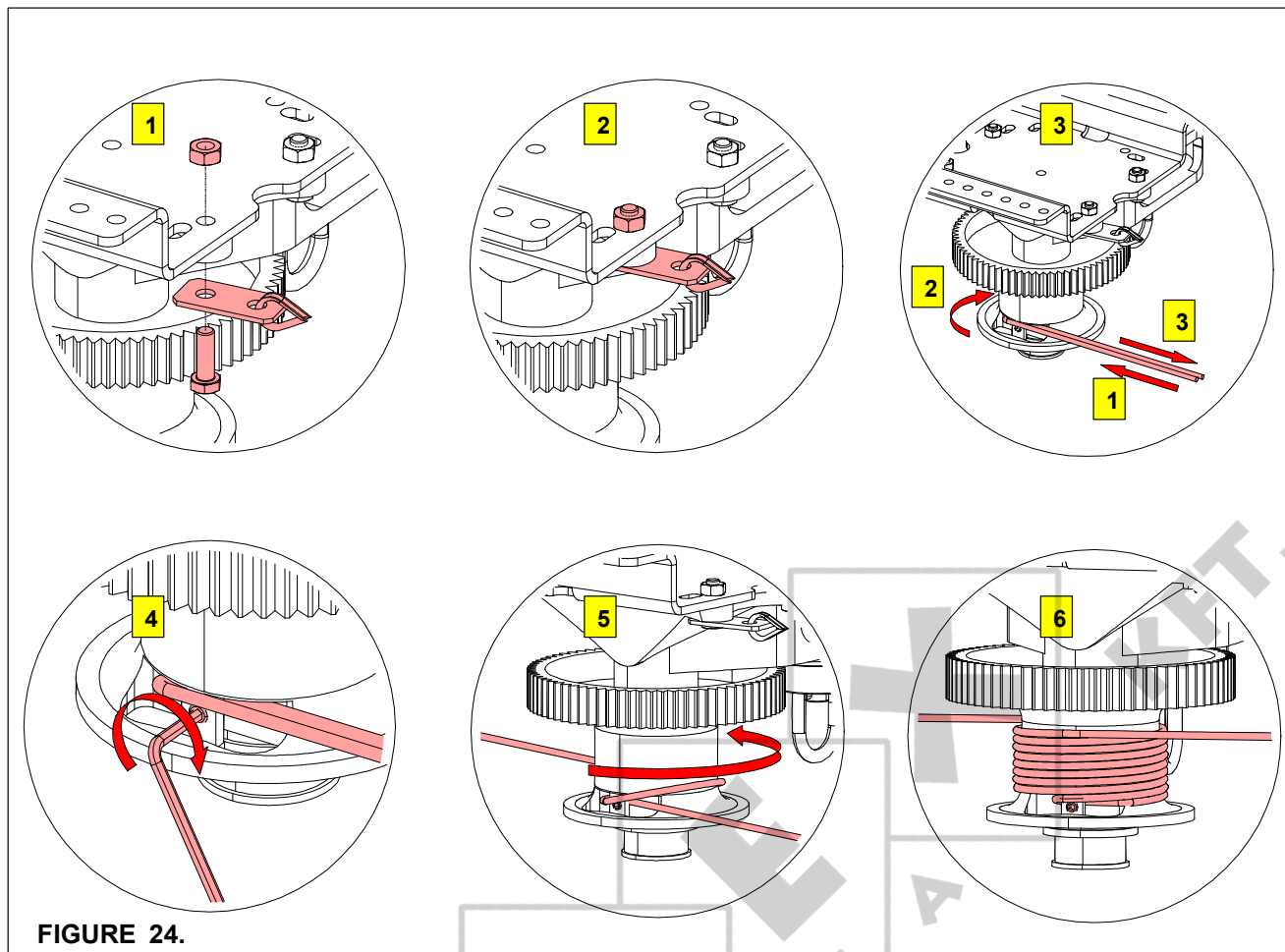


FIGURE 23.



CENTRAL WINCH W/GEARBOX

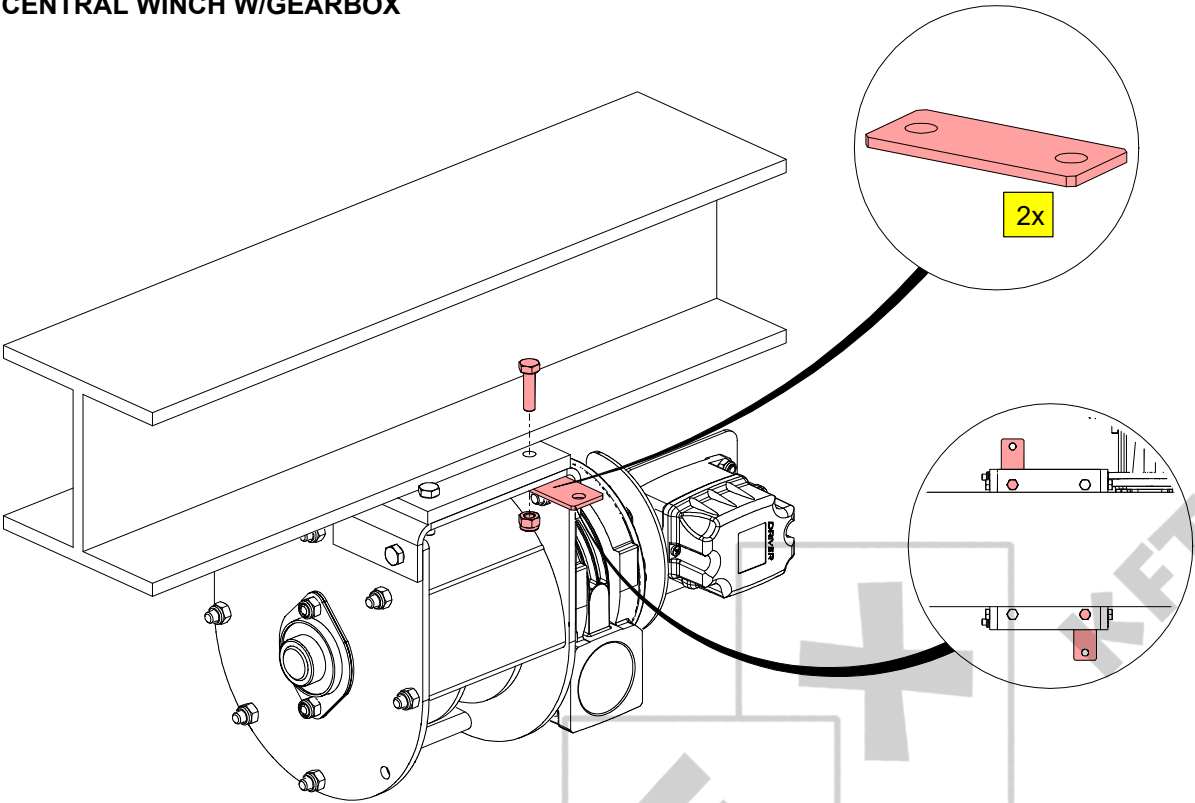


FIGURE 26.

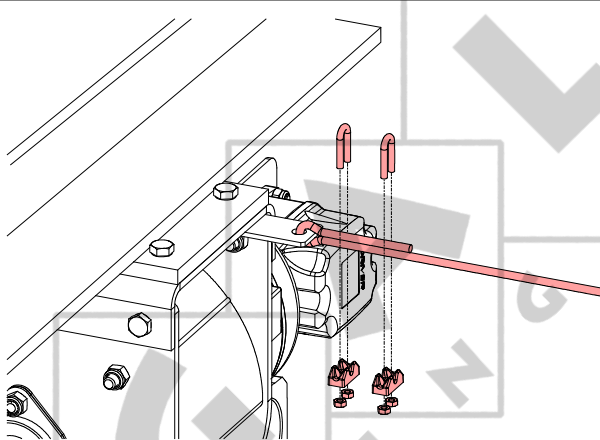


FIGURE 27.

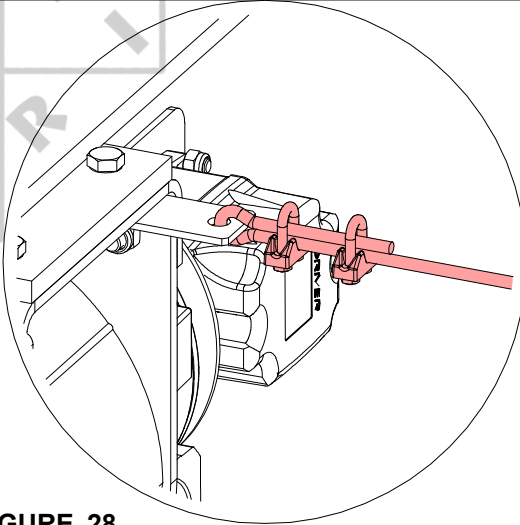


FIGURE 28.

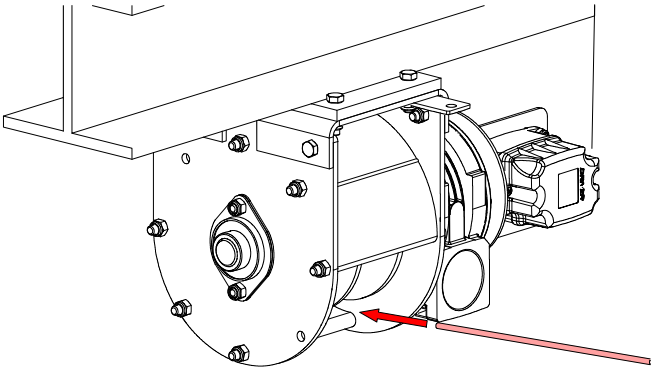


FIGURE 29.

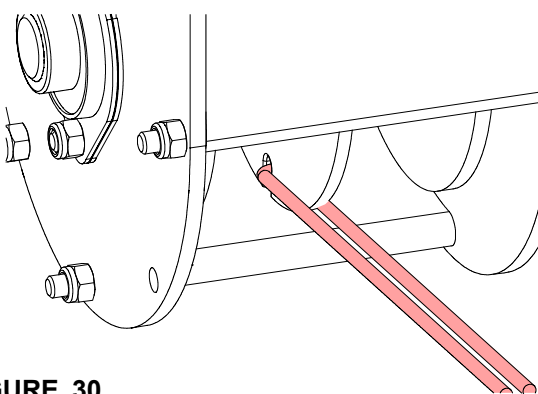


FIGURE 30.

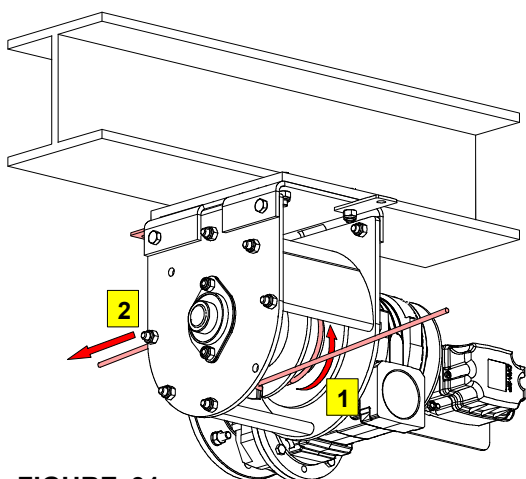


FIGURE 31.

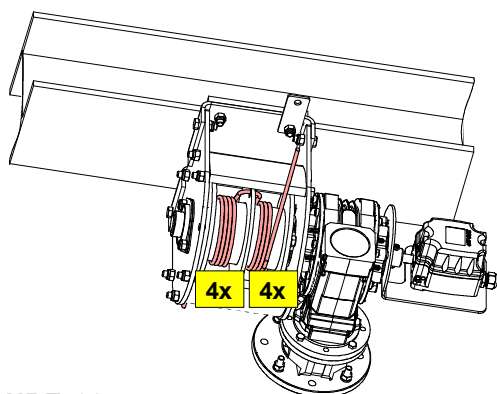
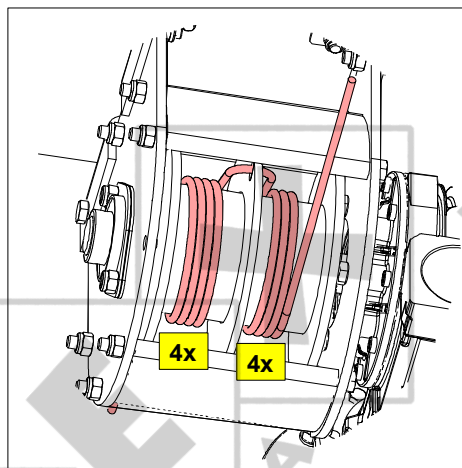


FIGURE 32.



OVERVIEW

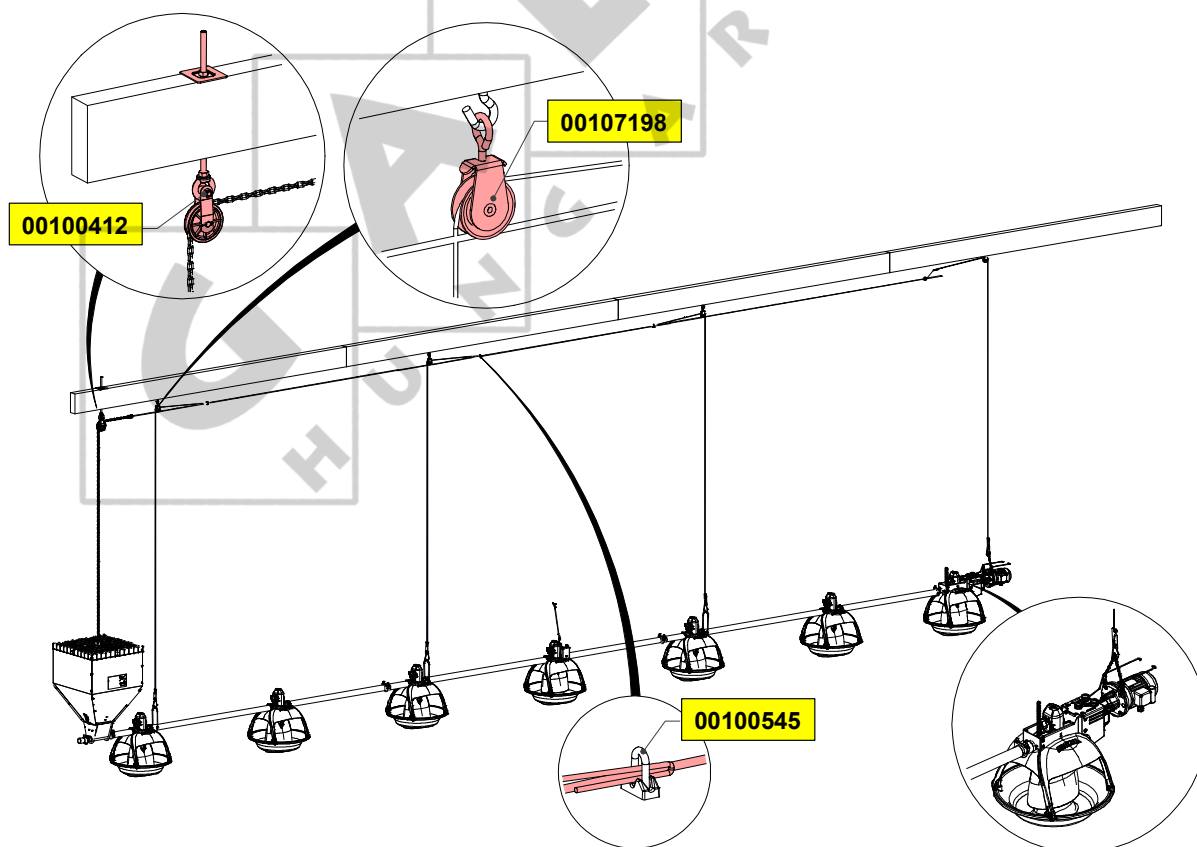
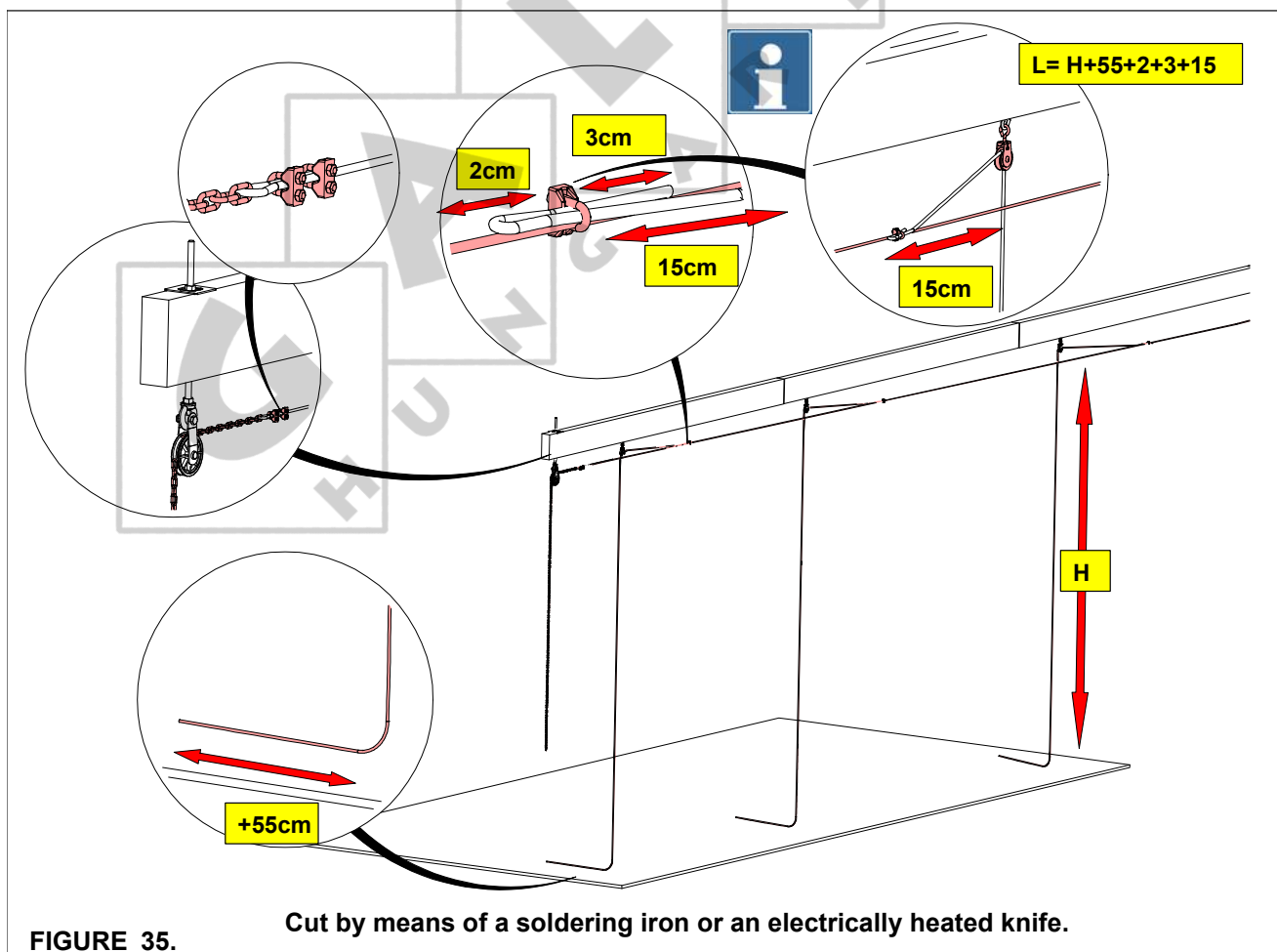
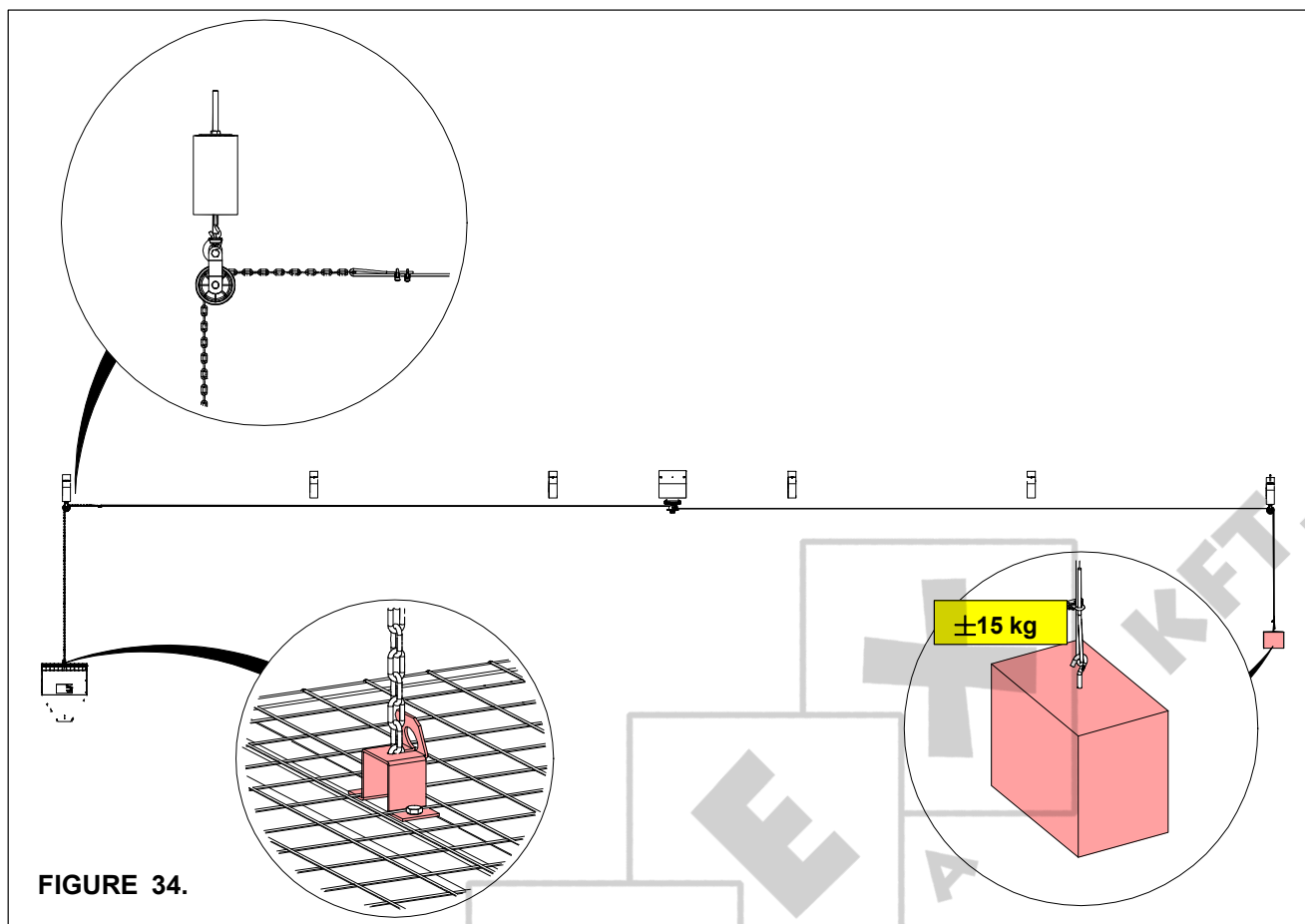


FIGURE 33.

TIGHTEN MAIN CABLE



TO INSTALL THE LINE

POSSIBLE FEEDER PAN COMBINATIONS

MANUAL ADJUSTMENT

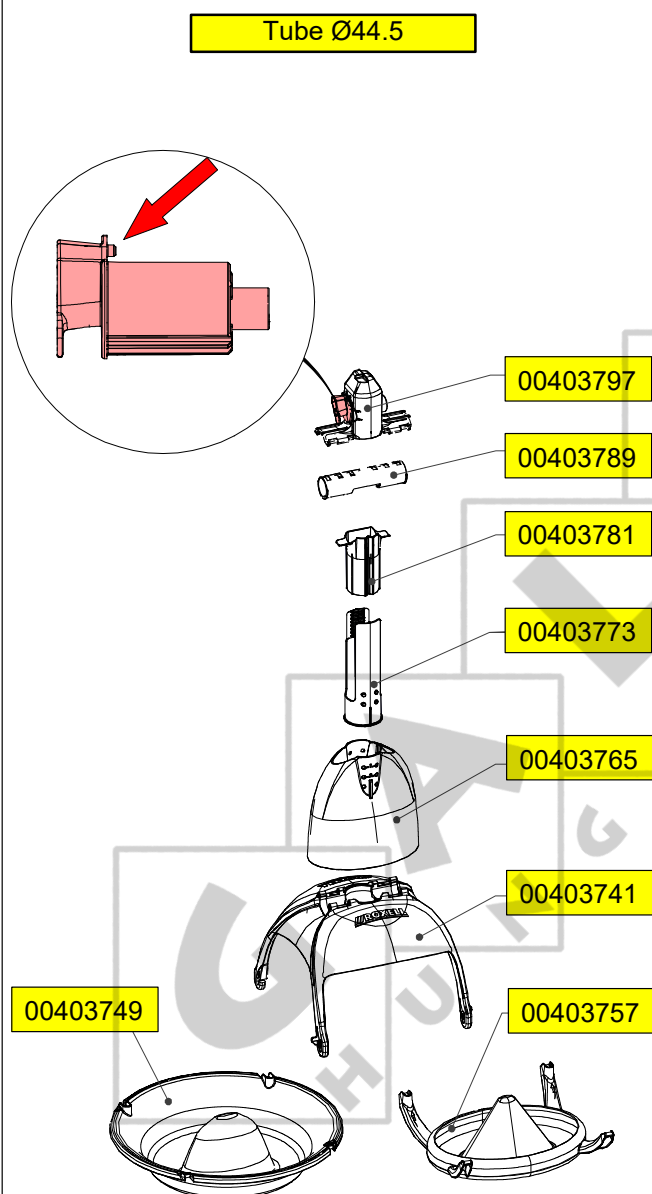


FIGURE 36.

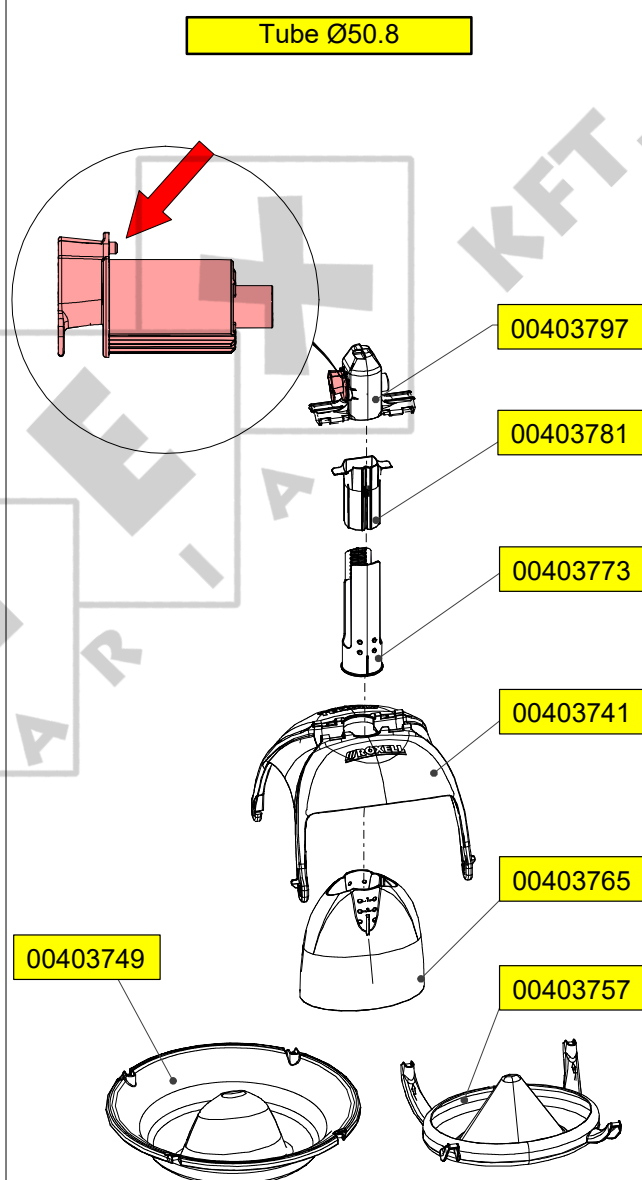


FIGURE 37.

CENTRAL ADJUSTMENT

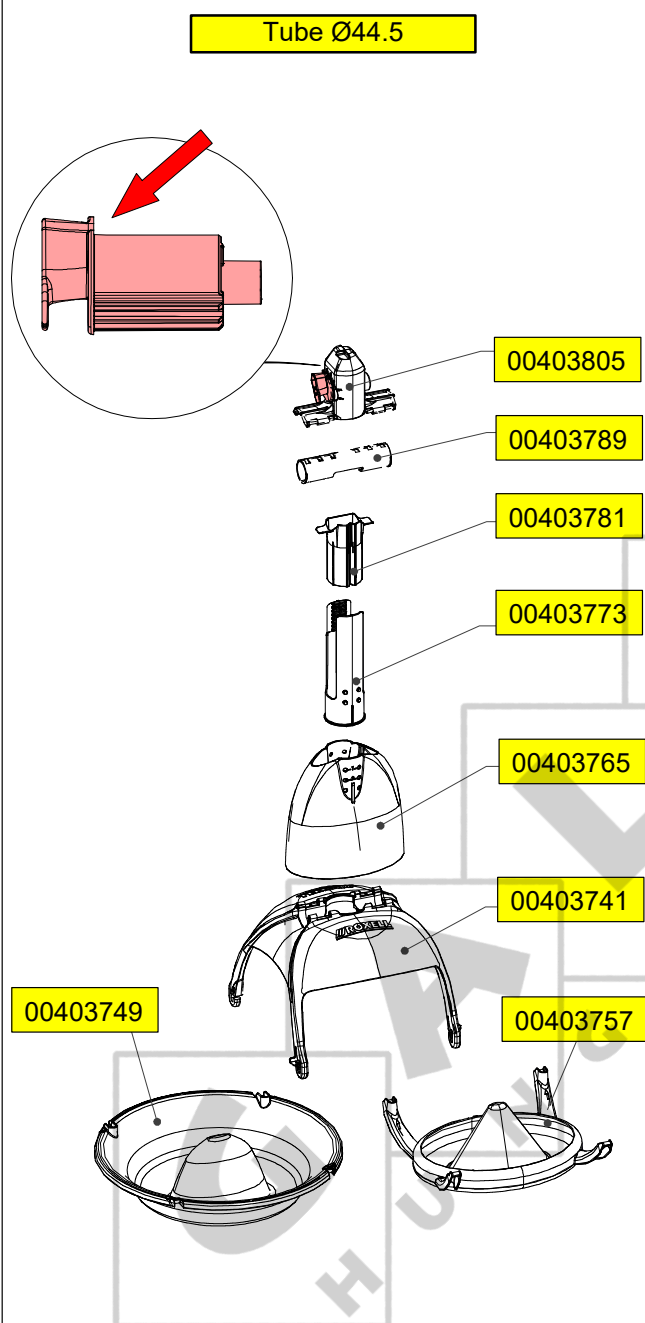


FIGURE 38.

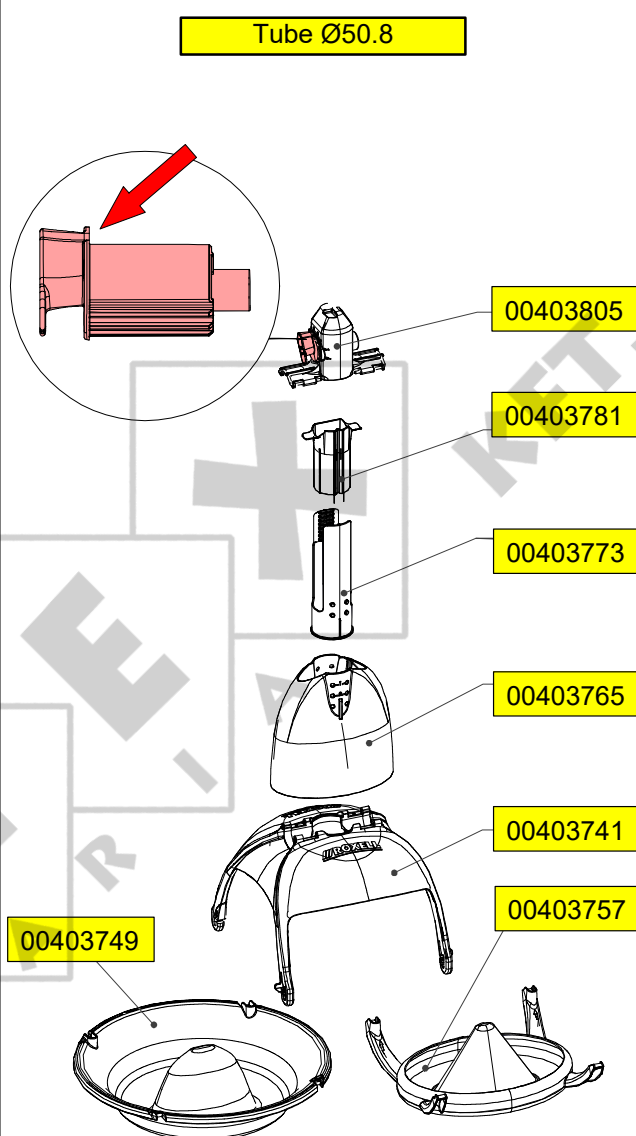
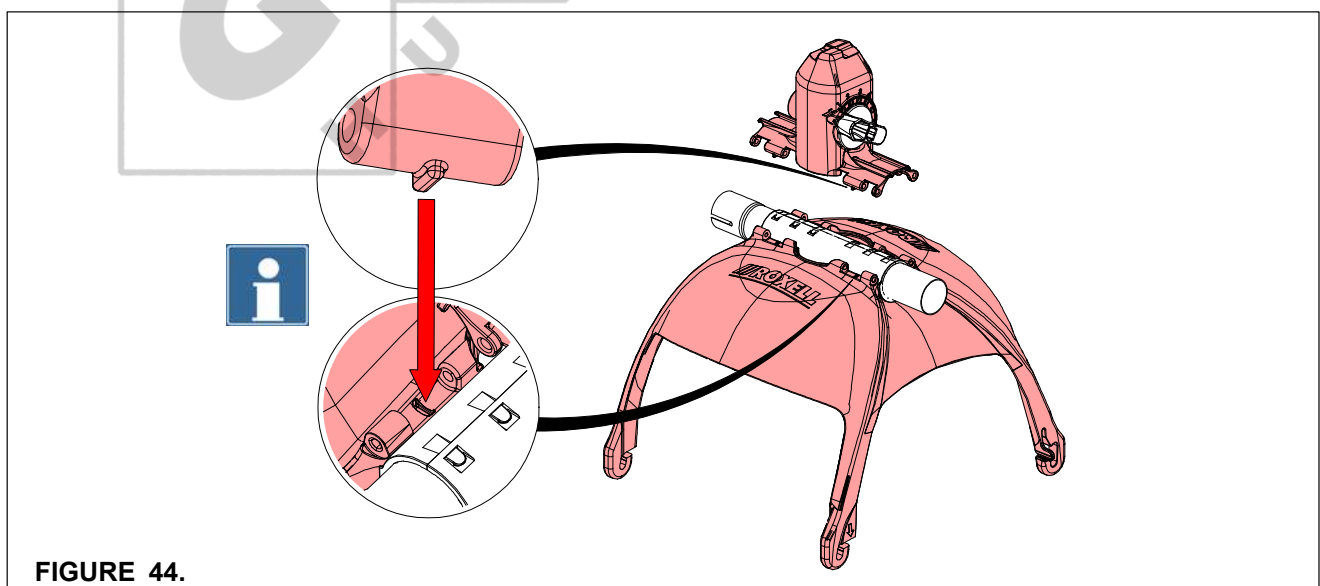
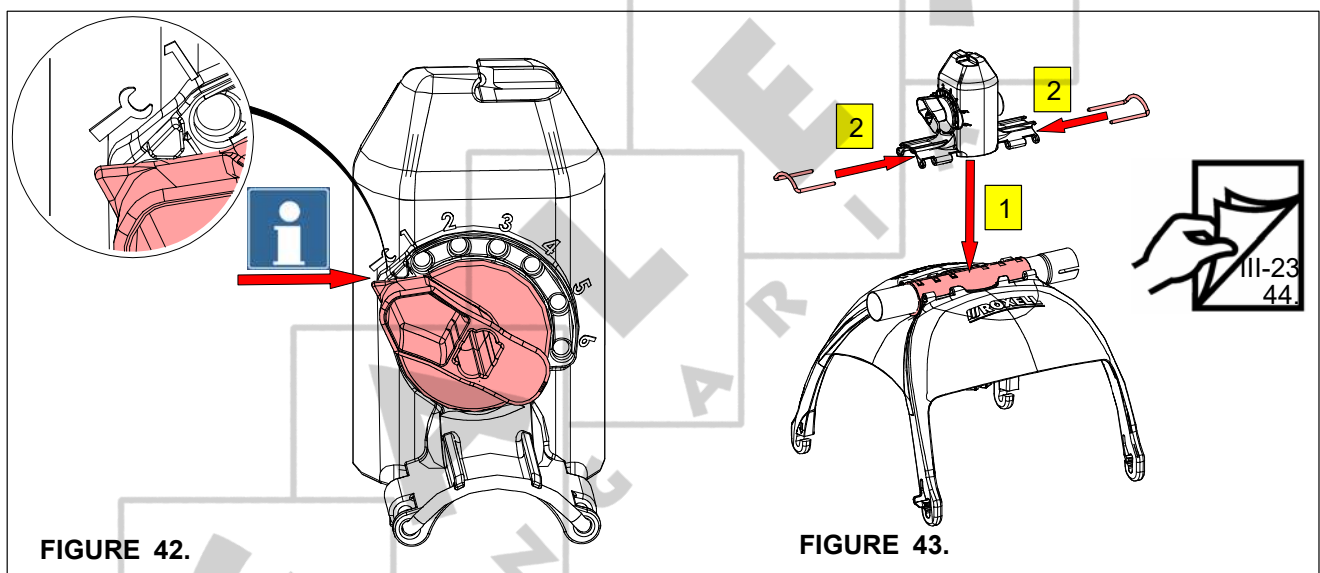
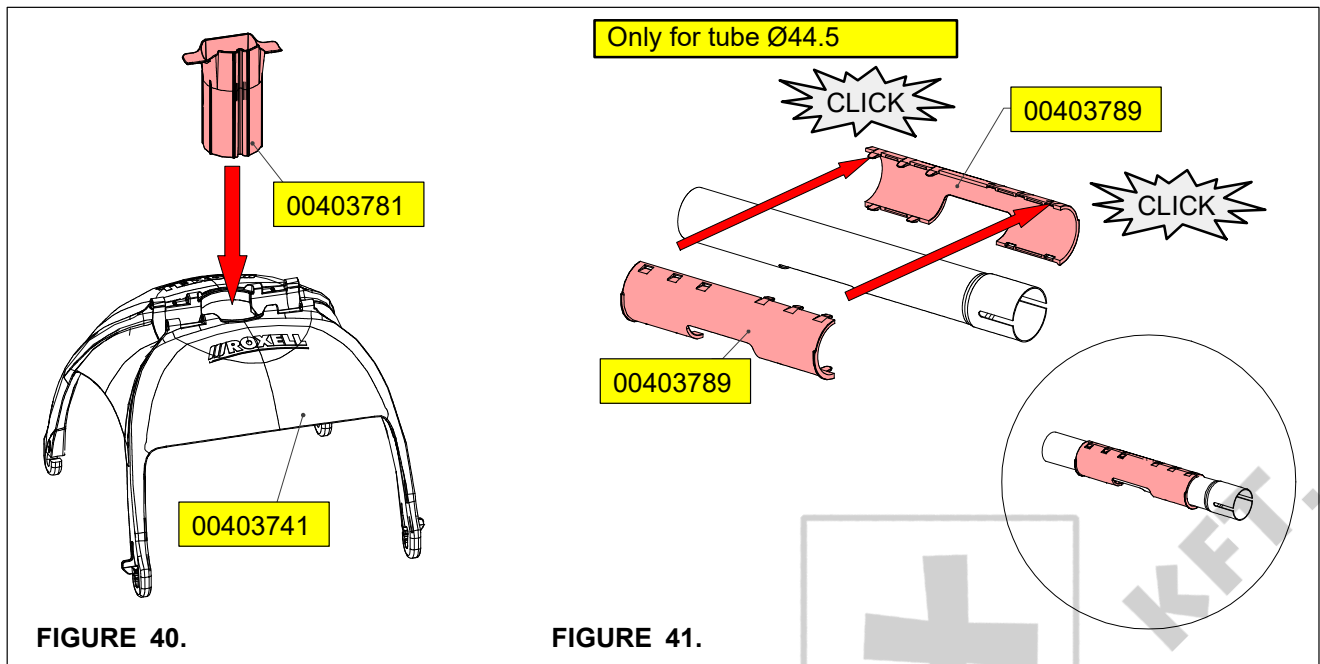


FIGURE 39.

TO INSTALL THE FEEDER PANS





Push (2x)

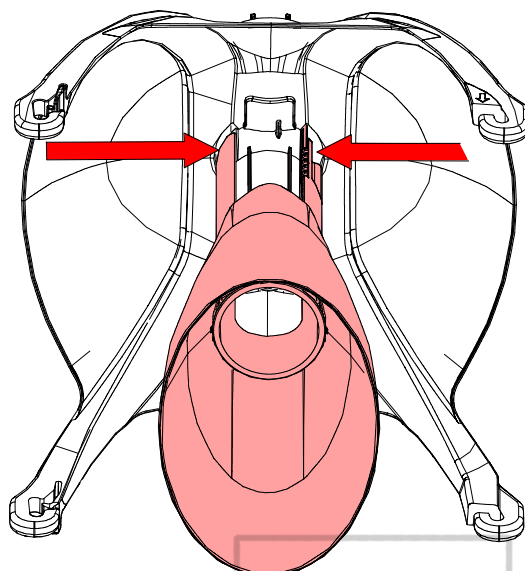
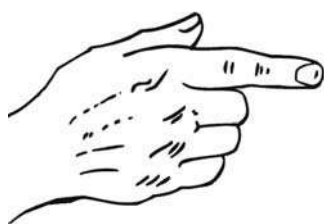


FIGURE 49.

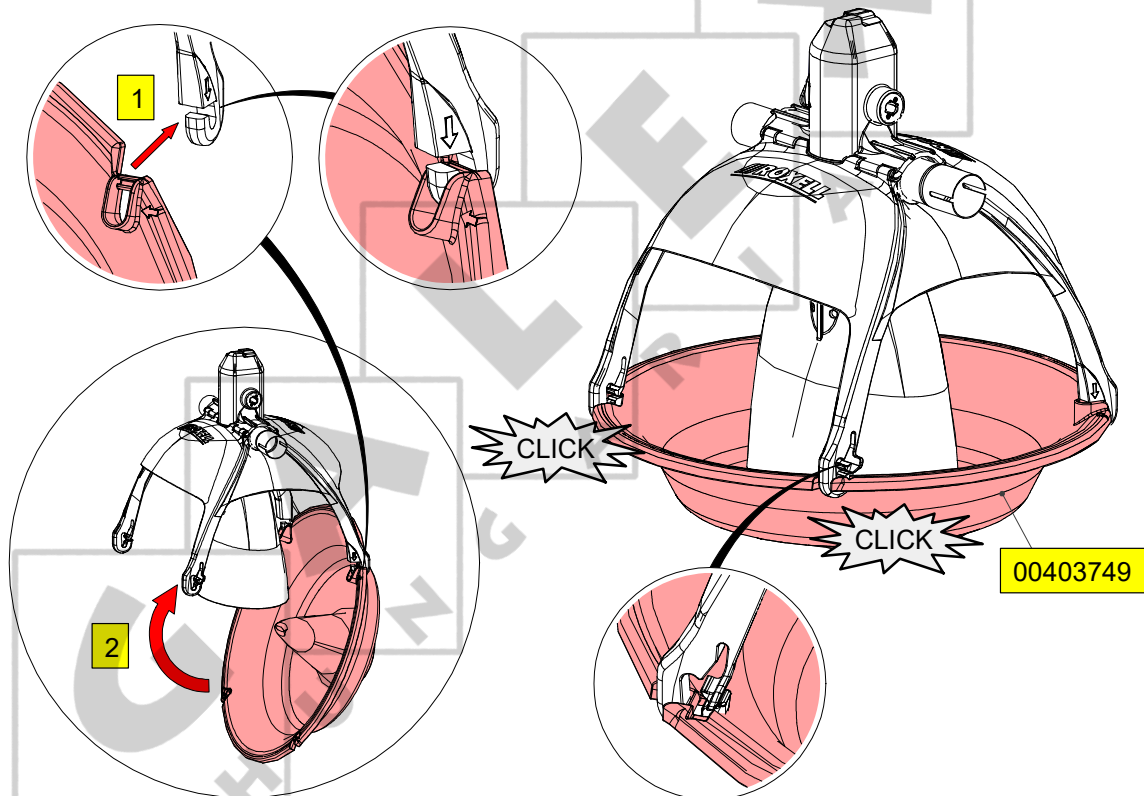
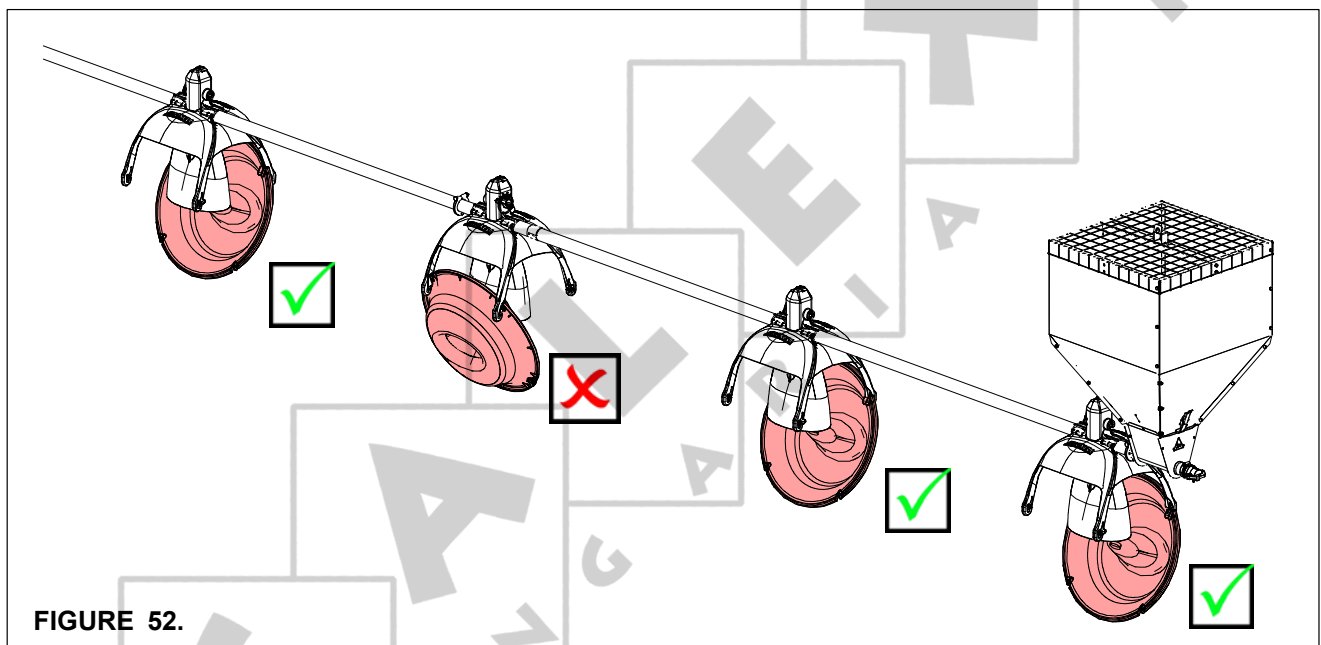
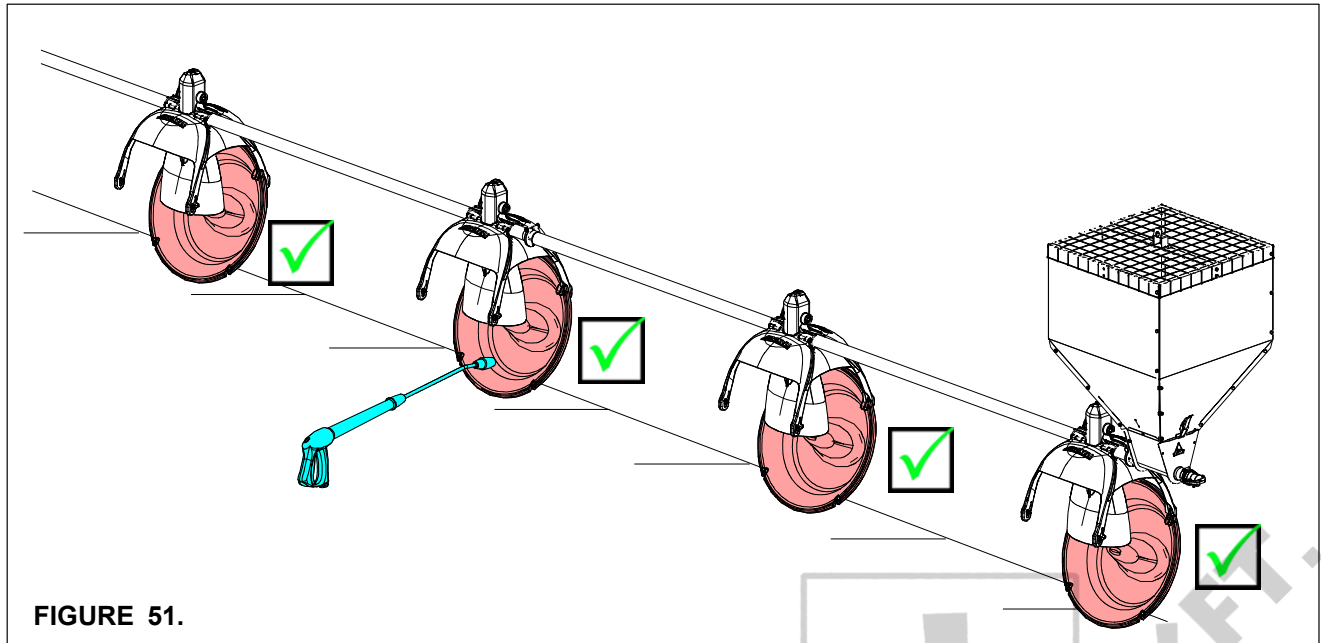


FIGURE 50.



OPTION: CHICK STARTER OUTLET ASS'Y KIT - 44.5 MM

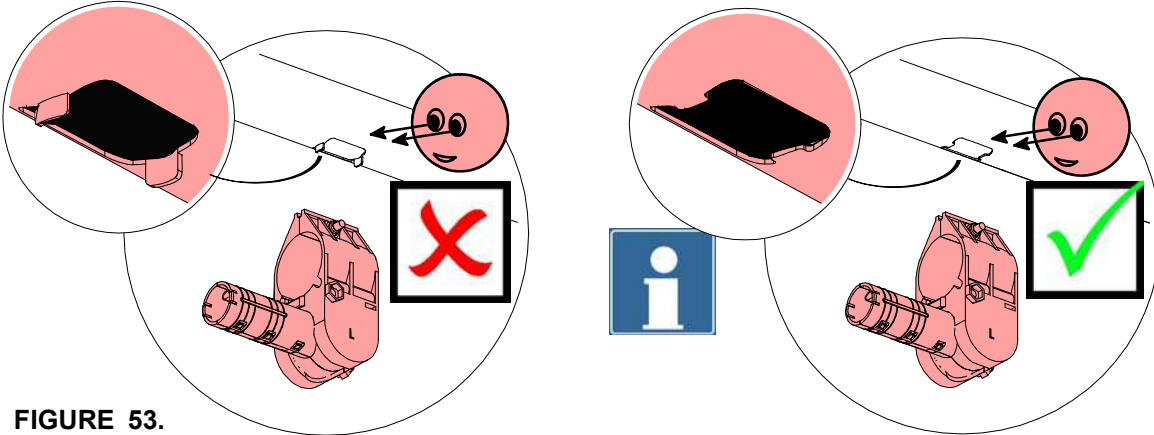


FIGURE 53.

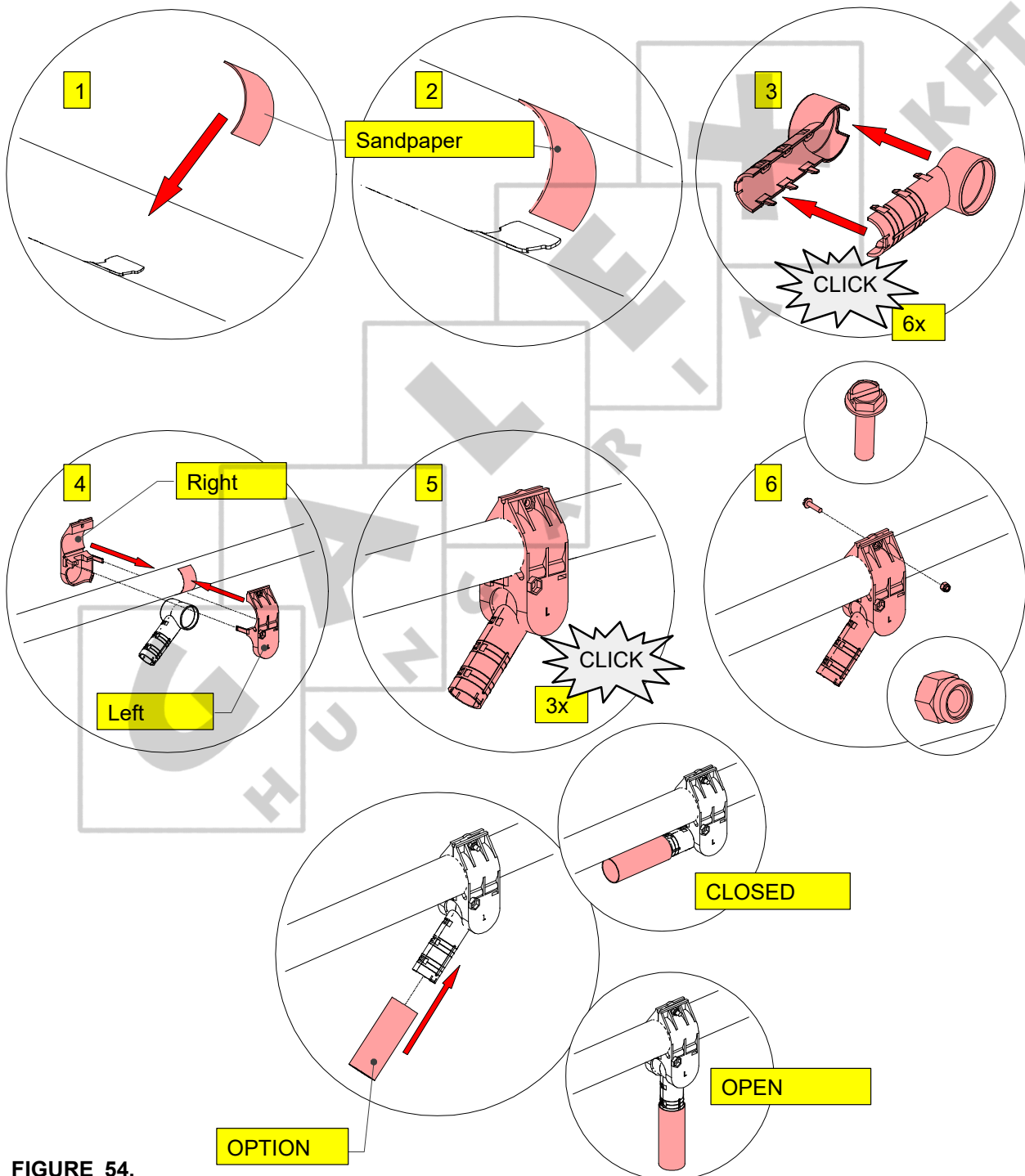
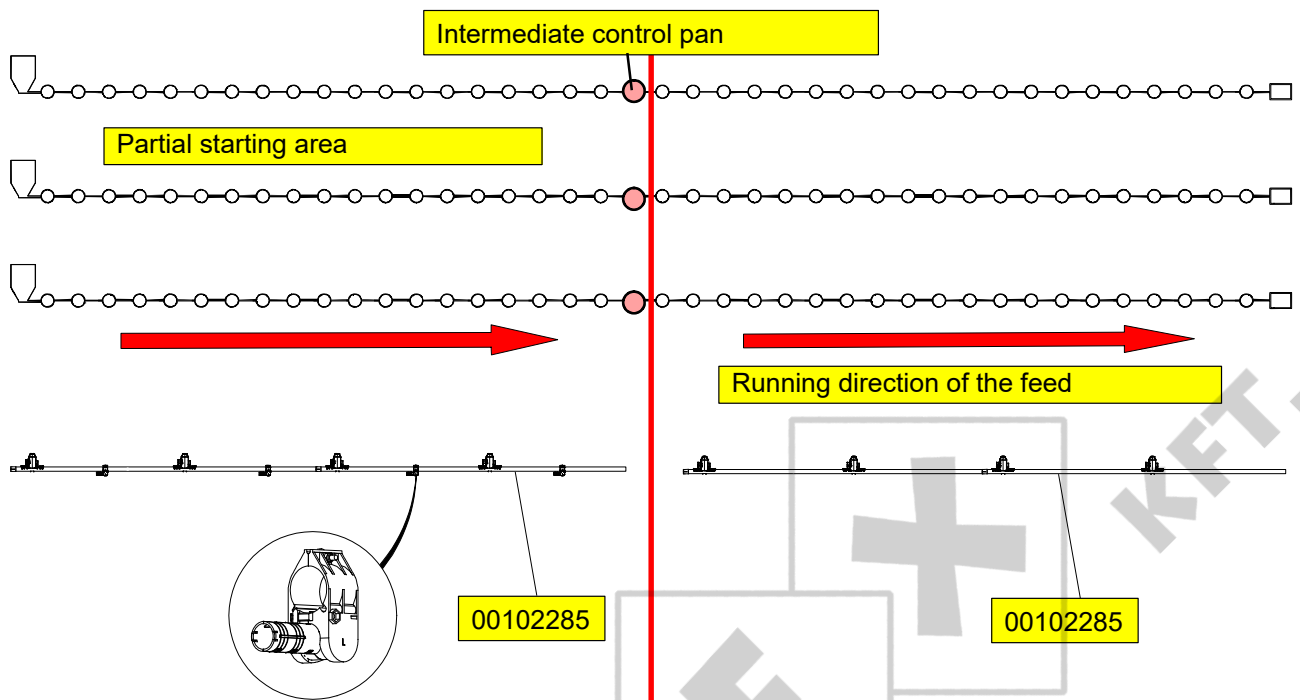
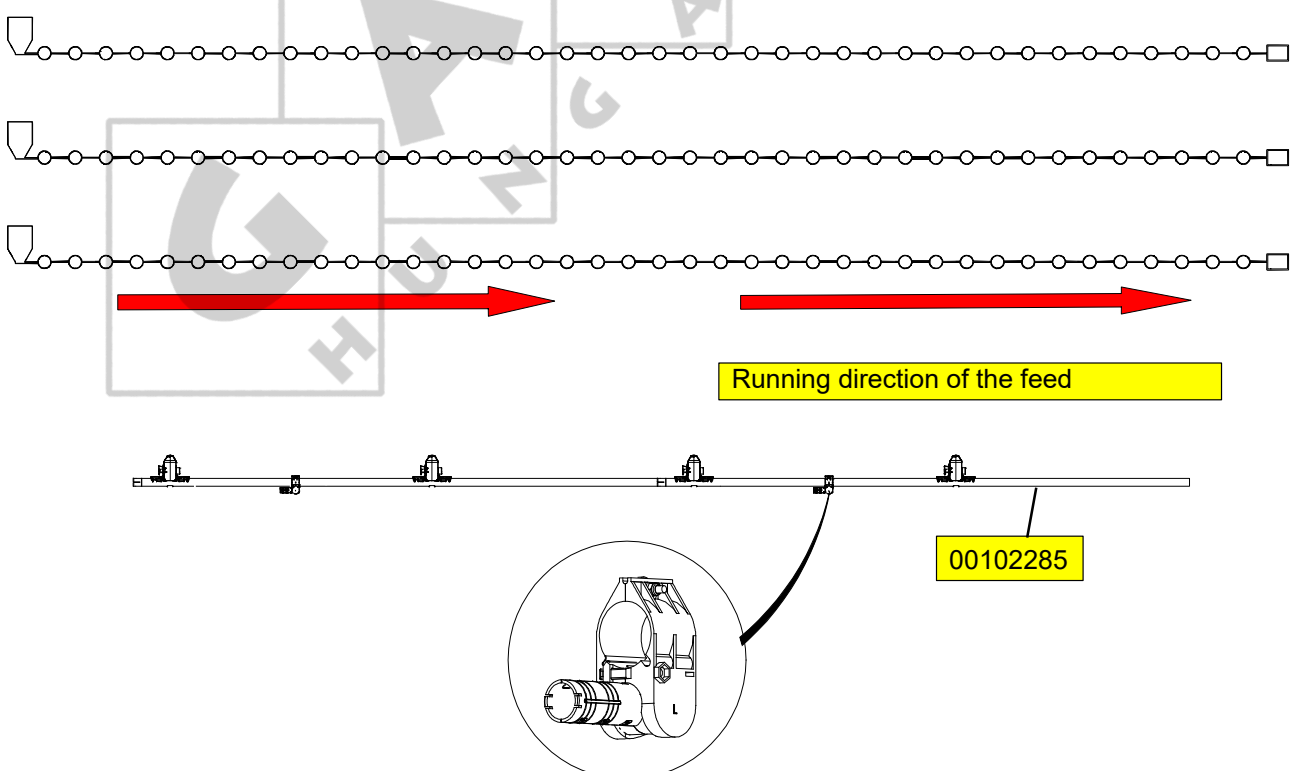


FIGURE 54.

OPTION: TO INSTALL THE SHUT-OFF SLIDE - 44.5 MM**FOR PARTIAL STARTING - FRONT****FIGURE 55.****FIGURE 56.****TOTAL HOUSE BROODING****FIGURE 57.**

TO INSTALL THE FEEDING LINE

To start, suspend all cables under slight tension.

Cable: 00106887 / 250 m - 00106895 / 500 m

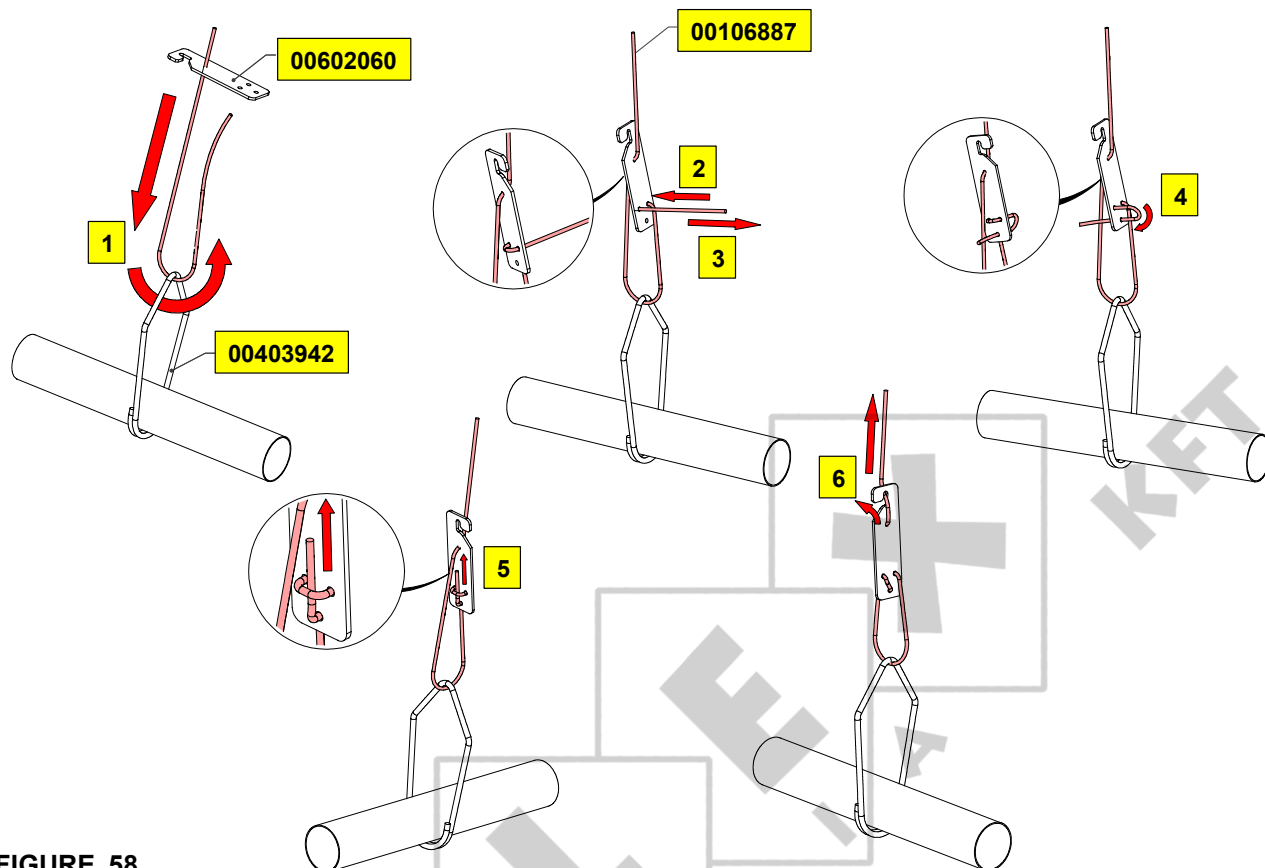


FIGURE 58.

FEED INTAKE BOOT

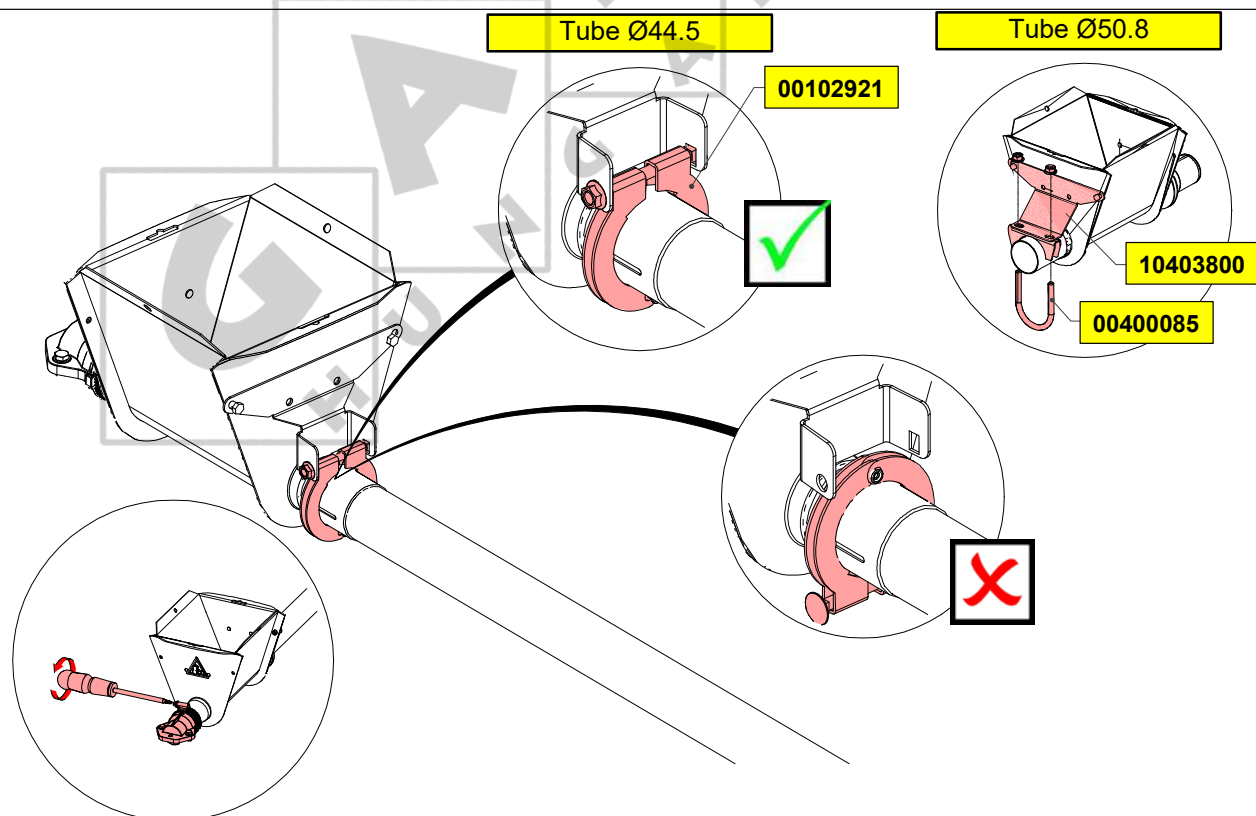
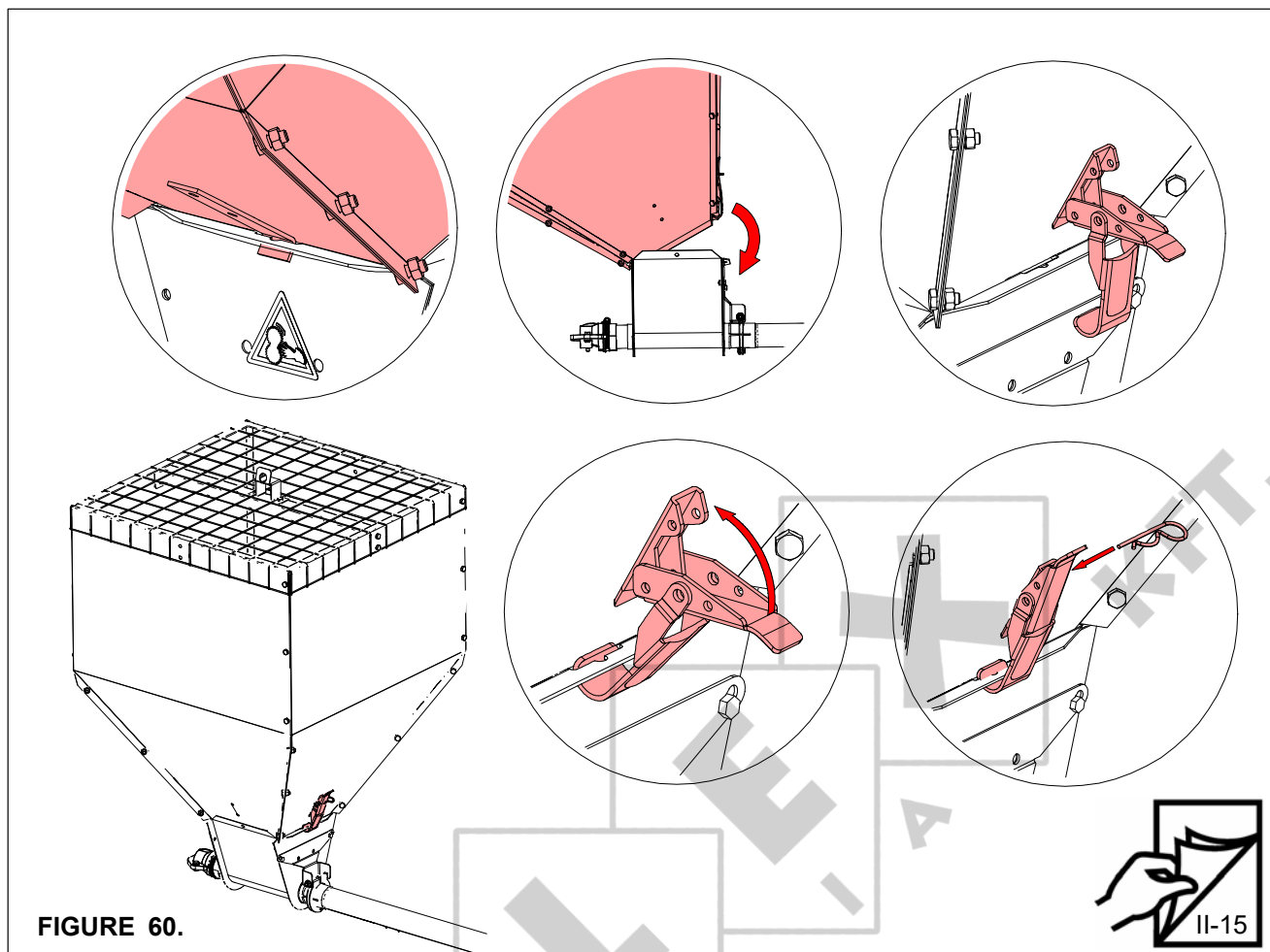
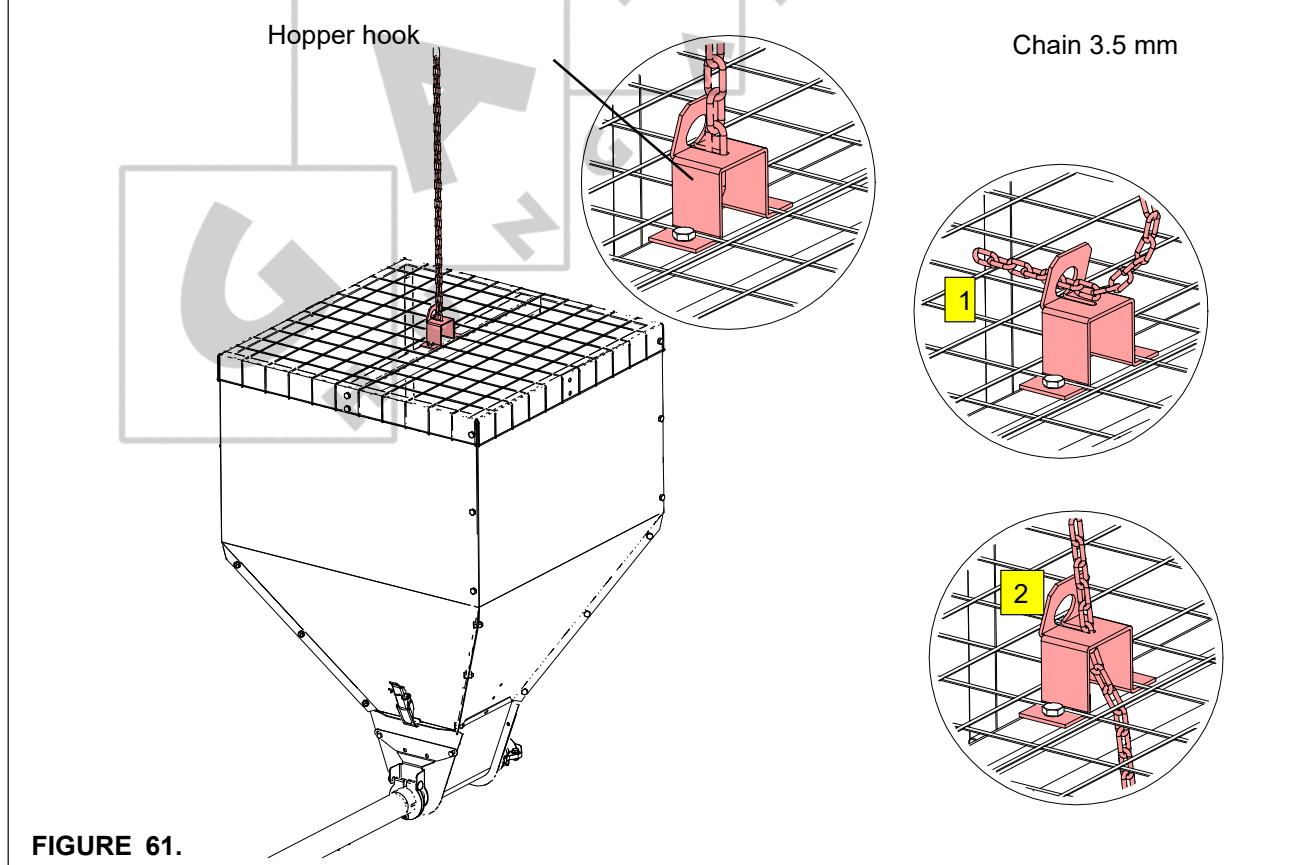


FIGURE 59.

TO INSTALL THE 100 KG HOPPER**HEIGHT ADJUSTMENT OF THE 100 KG HOPPER**

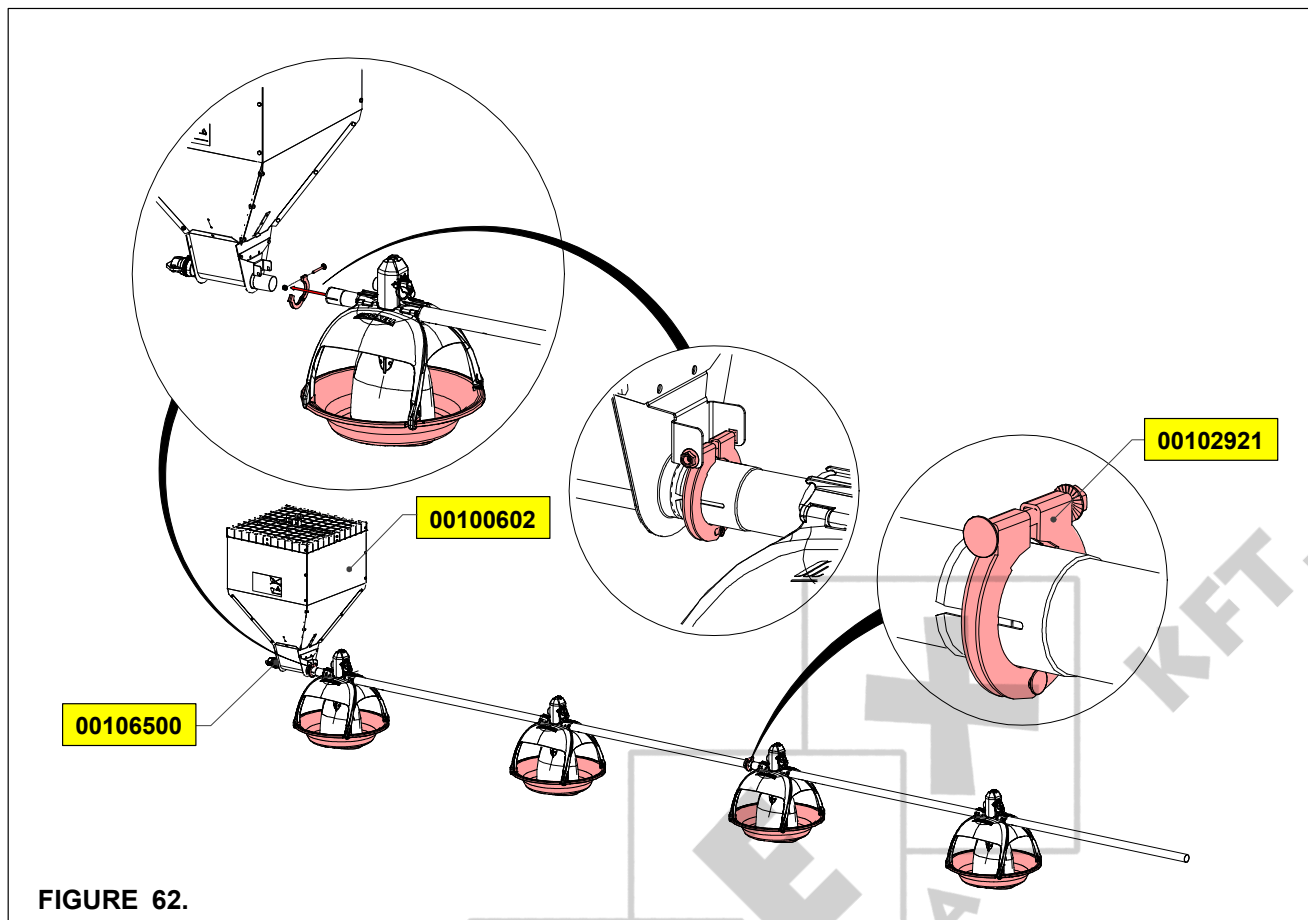


FIGURE 62.

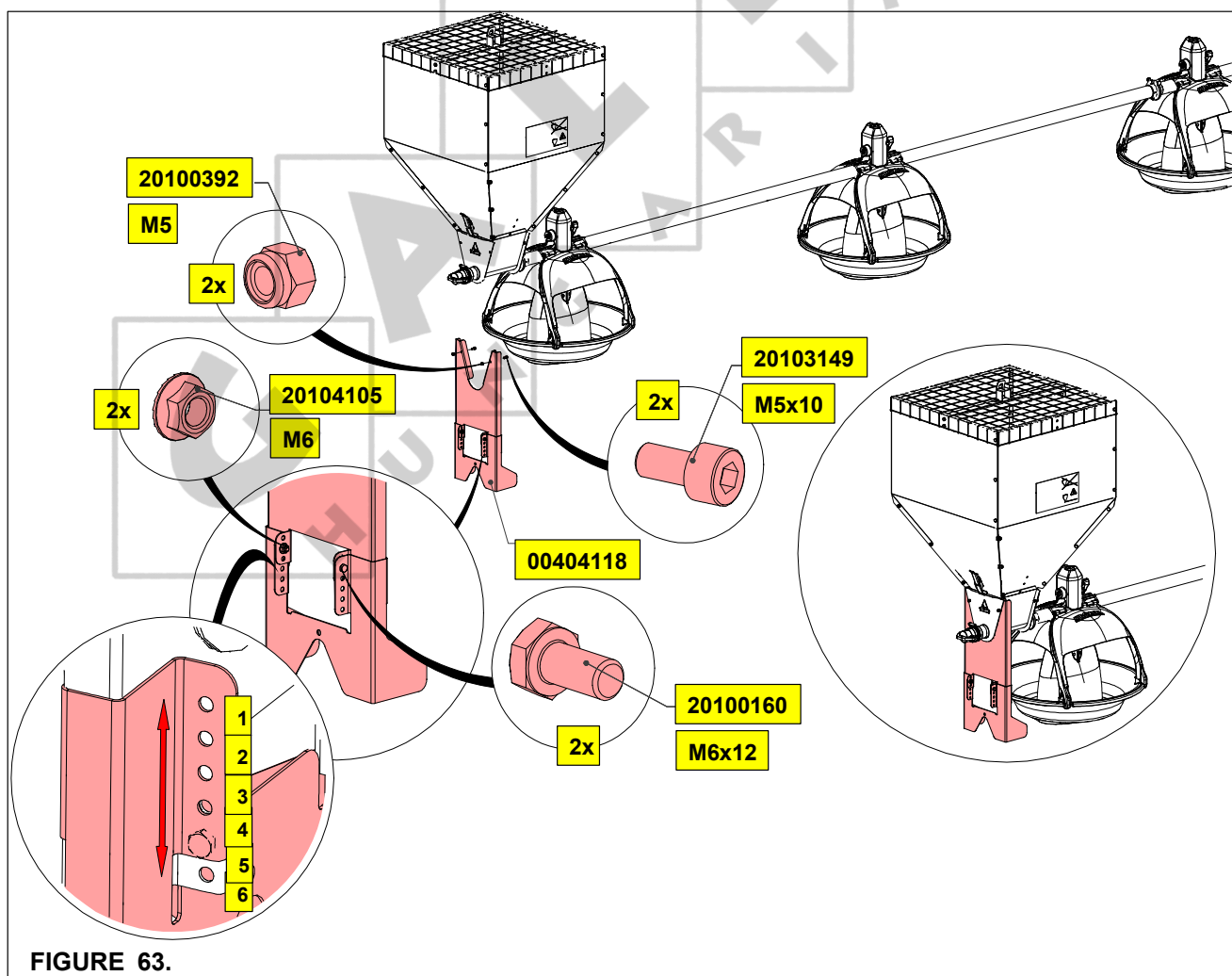


FIGURE 63.

TO INSTALL THE INTERMEDIATE CONTROL PAN

The intermediate control replaces a standard pan of the feeding line.

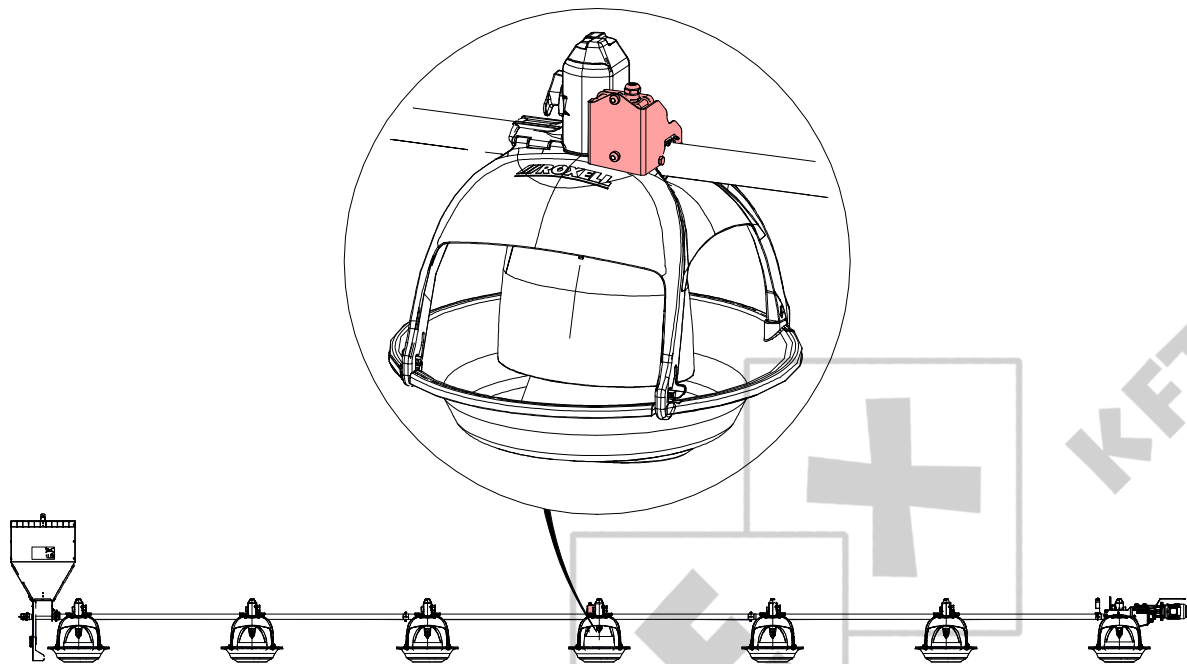


FIGURE 64.

CONTROL PANEL INTERMEDIATE CONTROL PAN (WITH SENSOR)

For an “easy use”, and/or switching over from a partial area to full use of the house, you can make advantage of a control panel intermediate control unit (optional).

Use of	Position of the switch
1 intermediate control unit	1 and 2
2 intermediate control units	1 or 2, depending on the brooding area in the house
control unit with sensor (at the end)	E

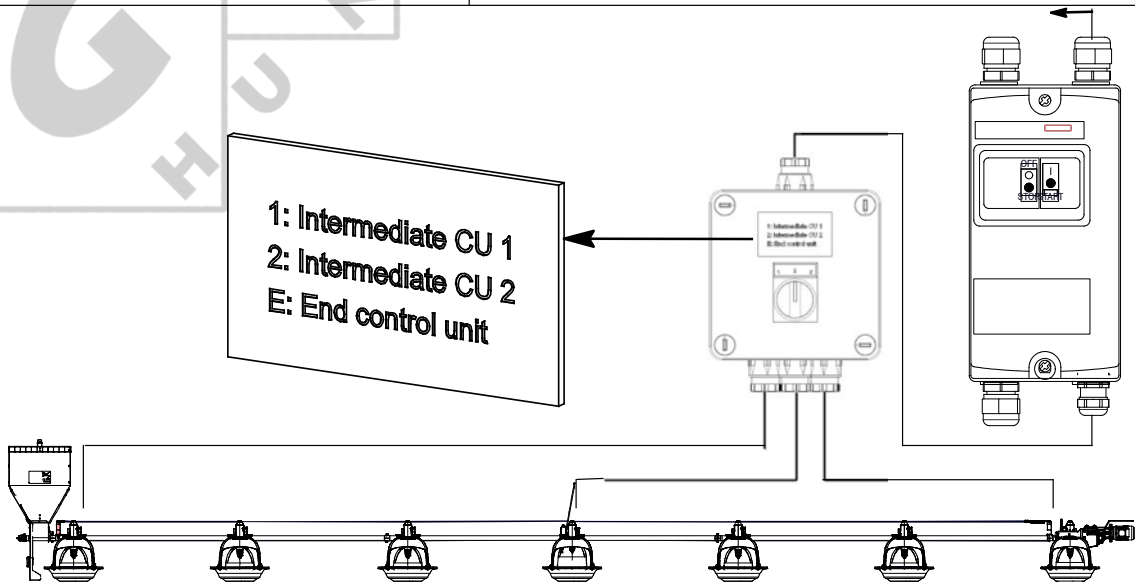
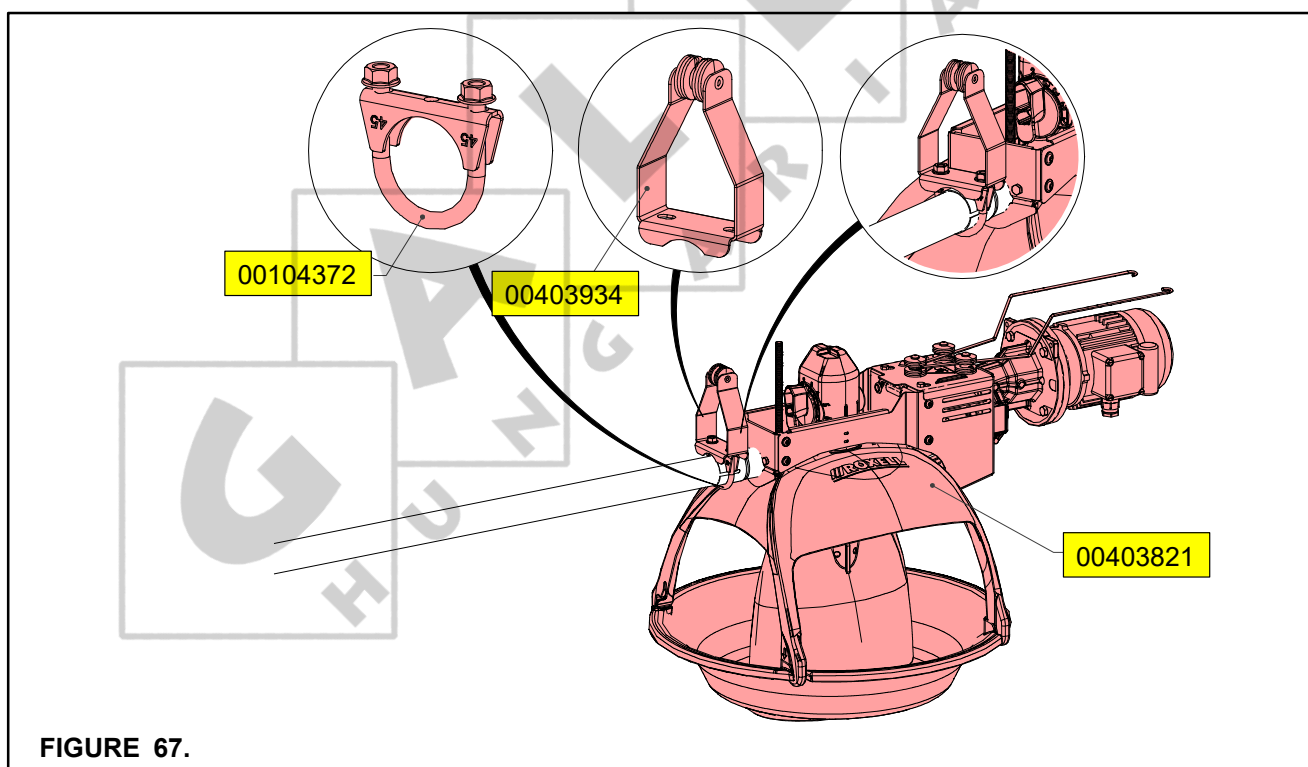
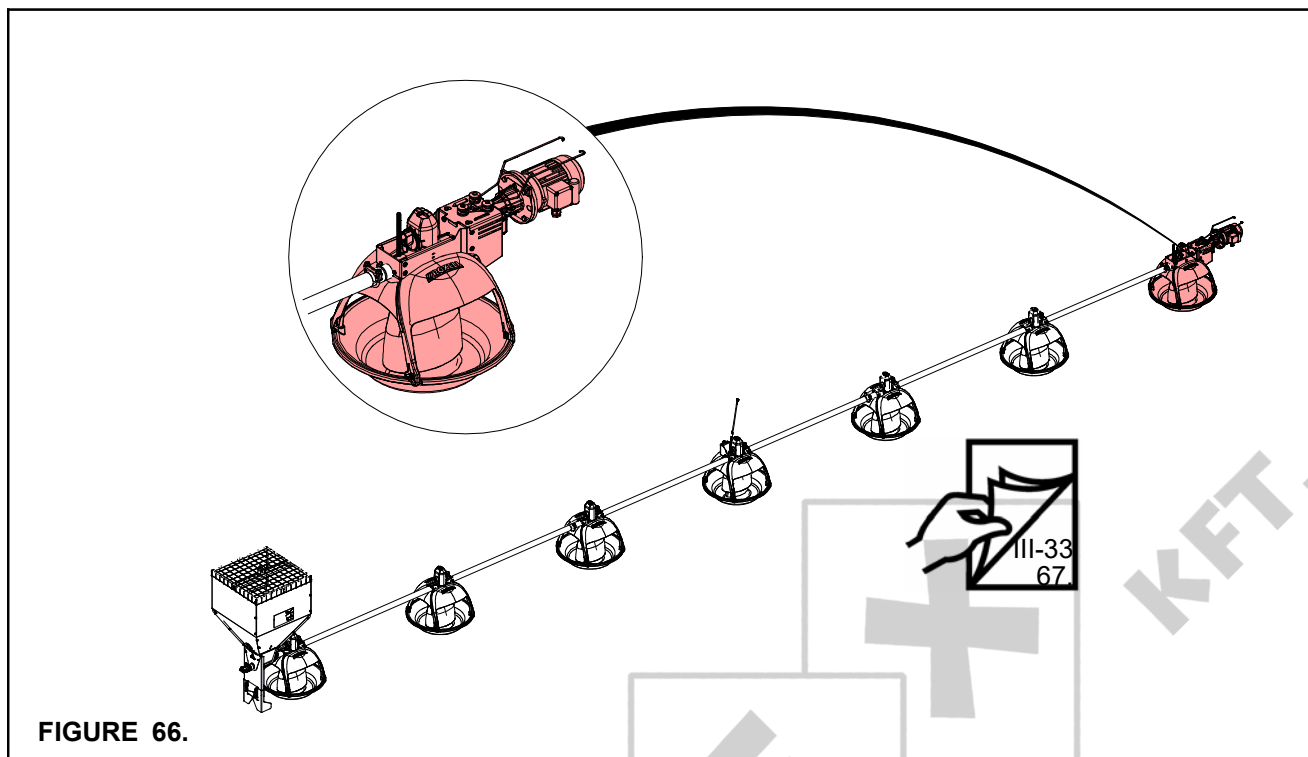


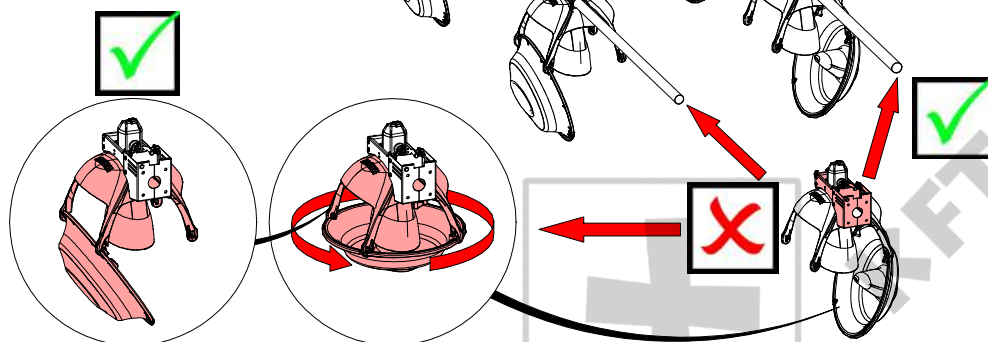
FIGURE 65.

TO INSTALL THE CONTROL PAN





Direction of control pan!



Turn 180°.

FIGURE 68.

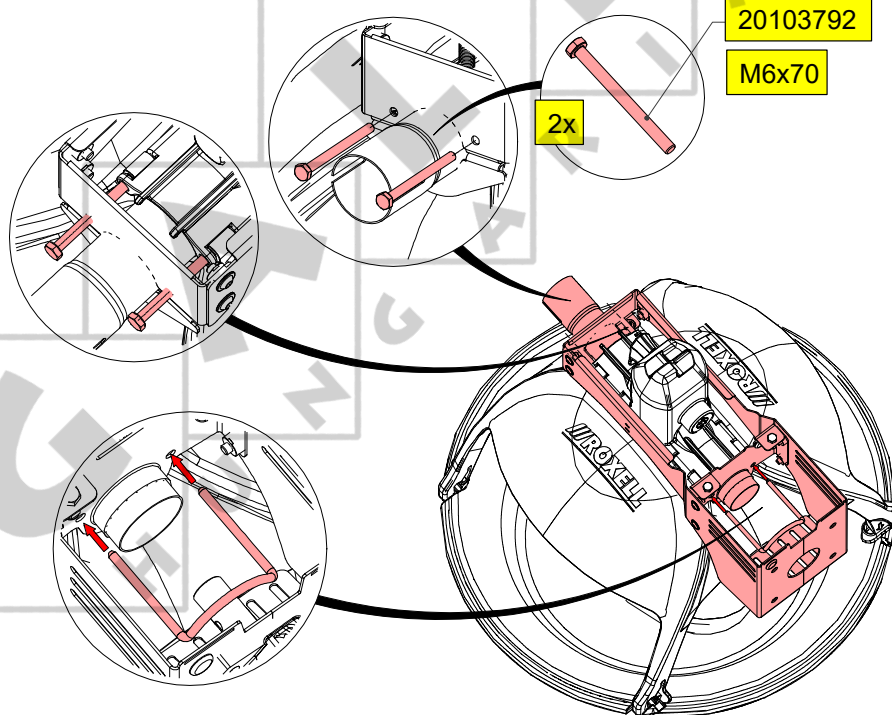
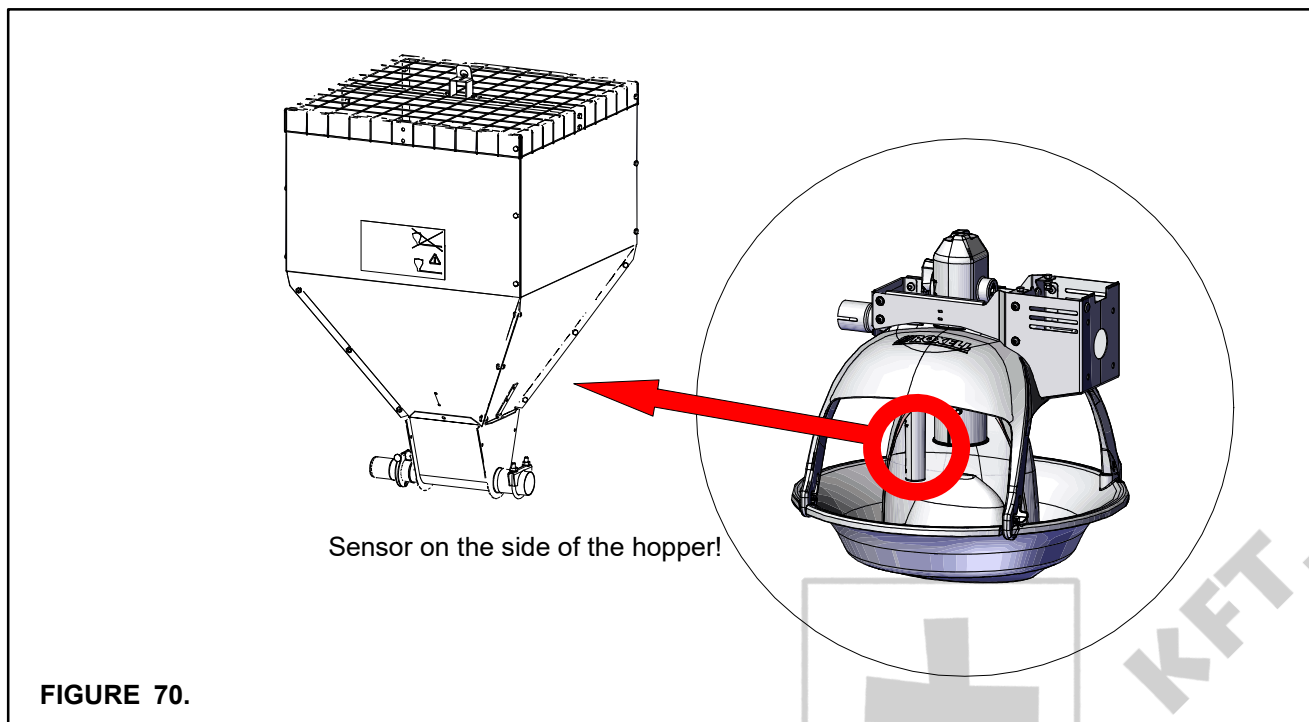
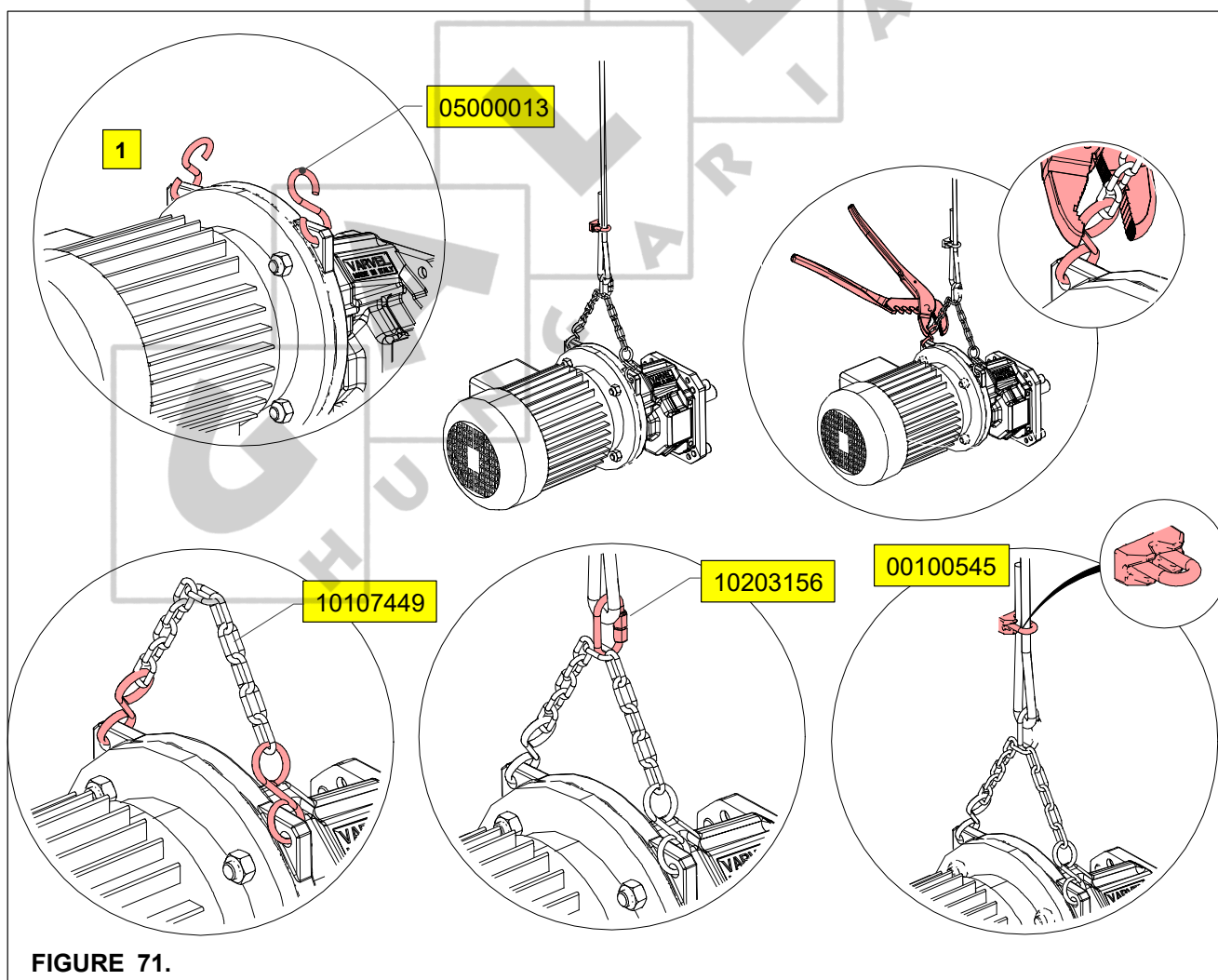


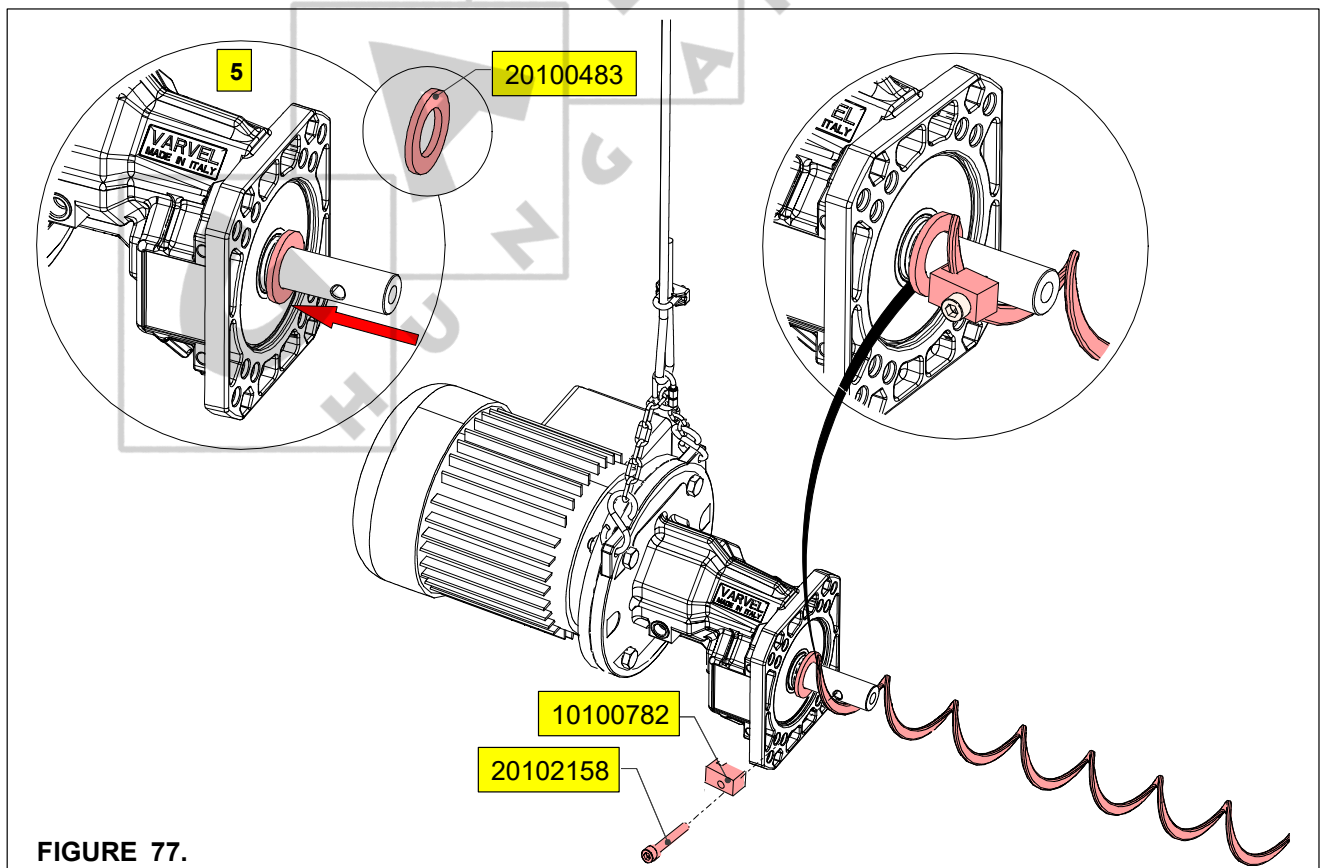
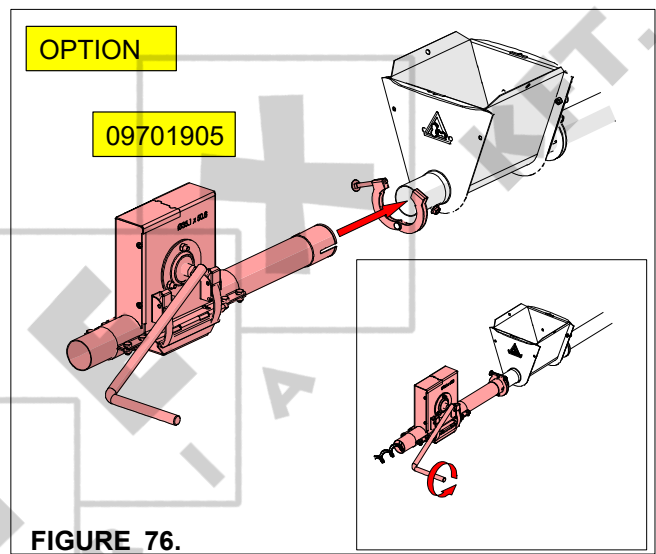
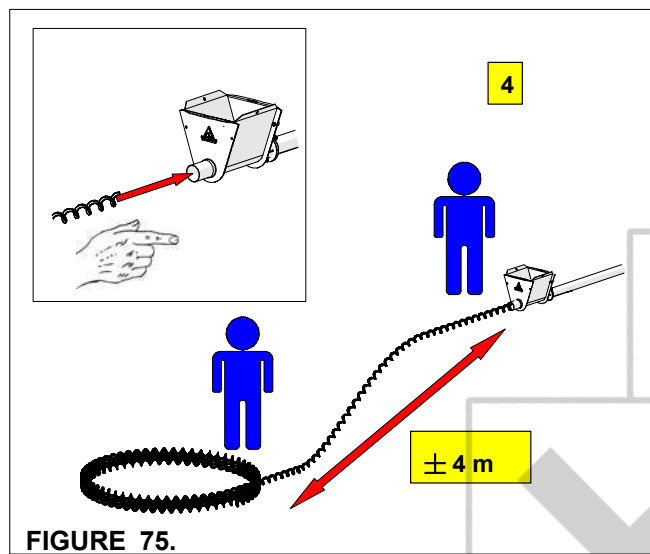
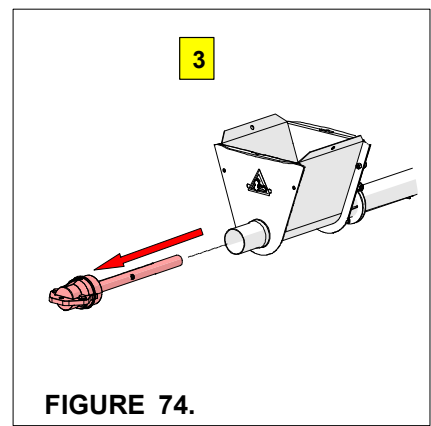
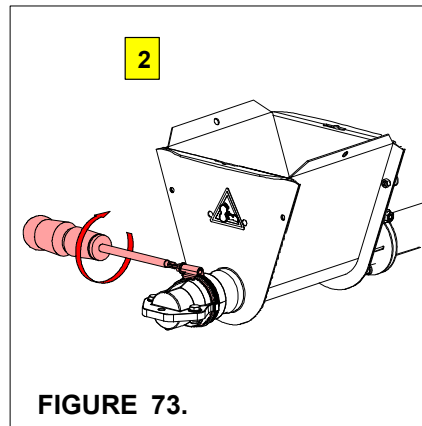
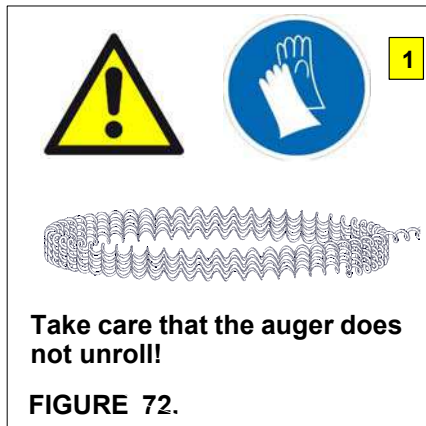
FIGURE 69.

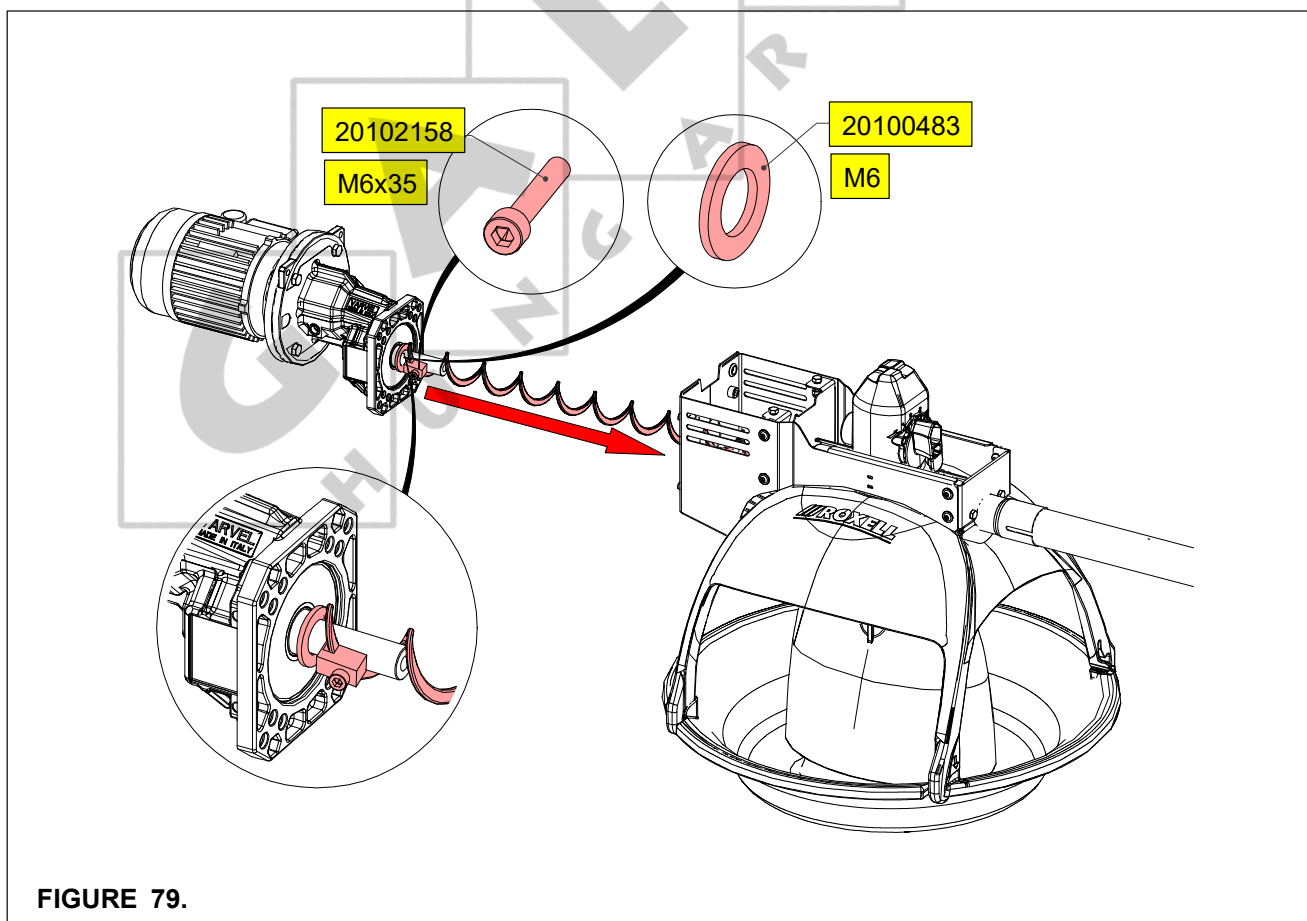
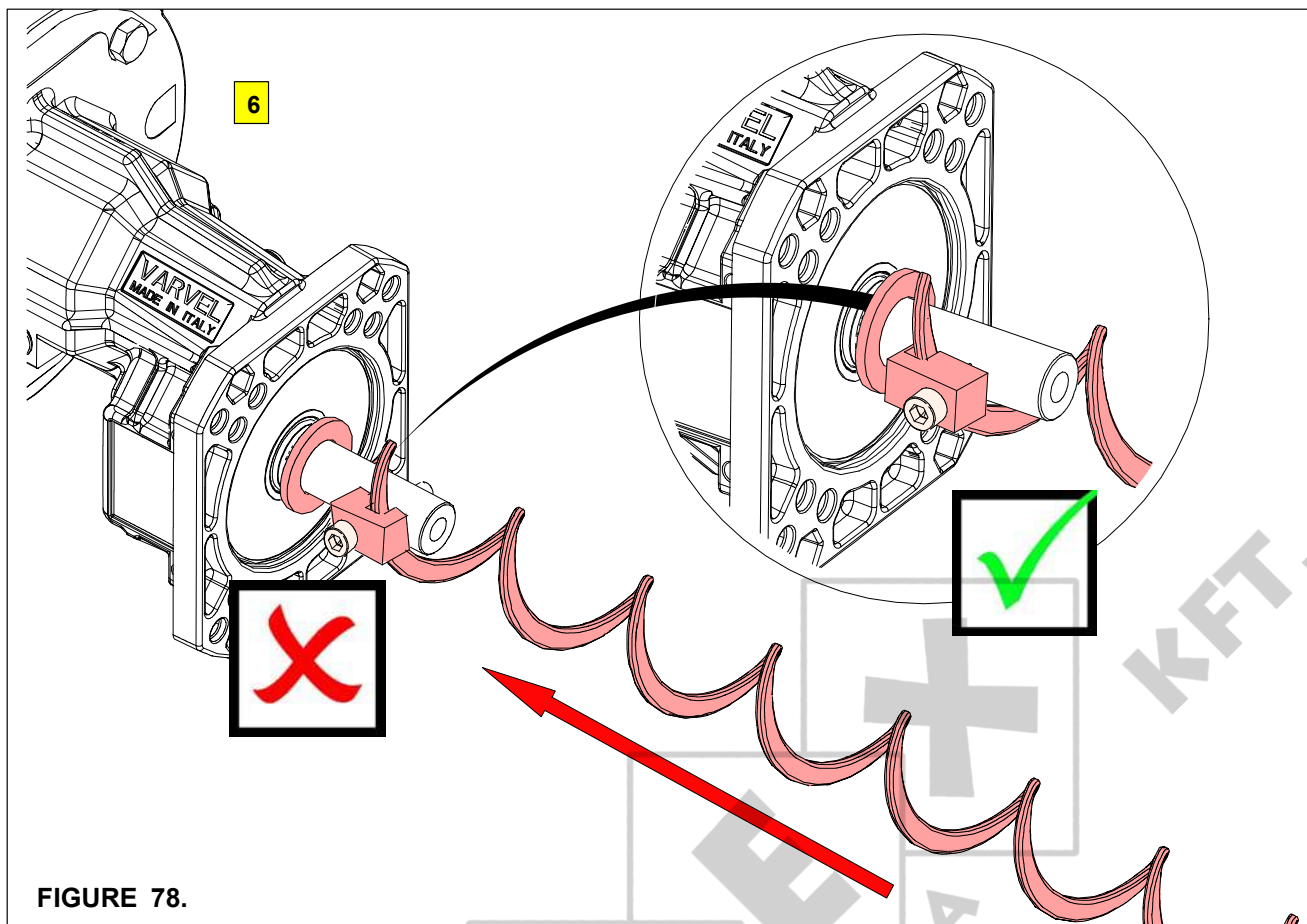


POWER UNIT SUSPENSION



TO INSTALL THE AUGER





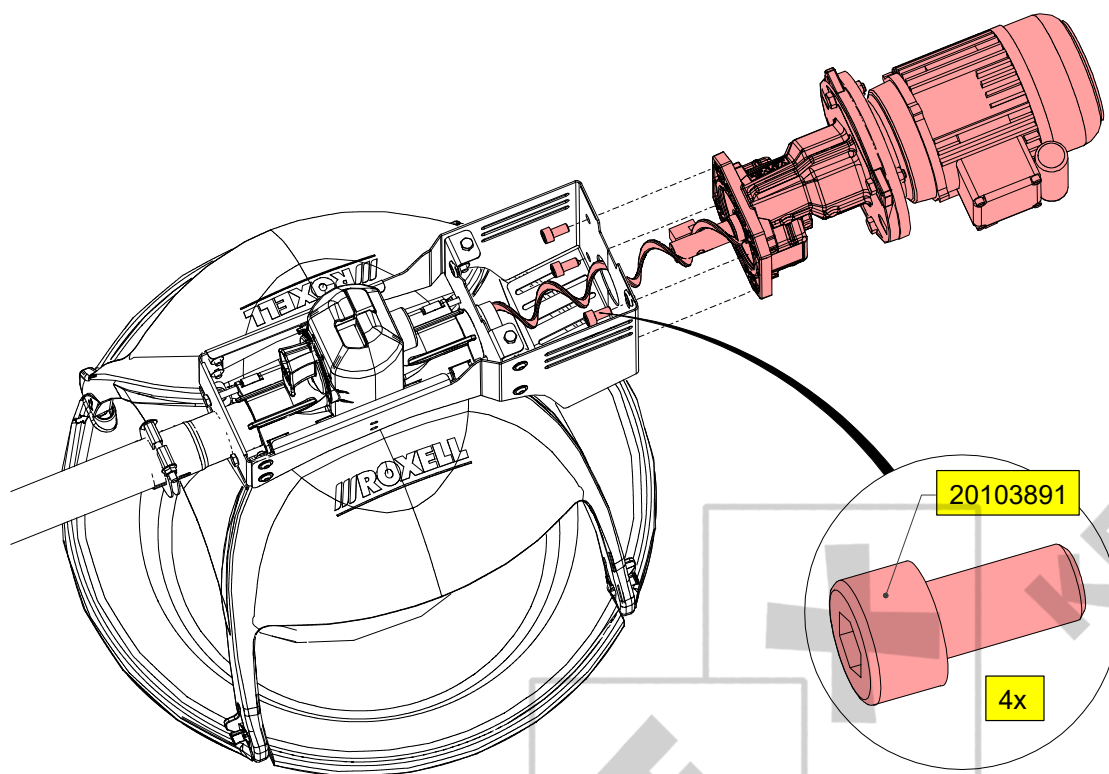


FIGURE 80.

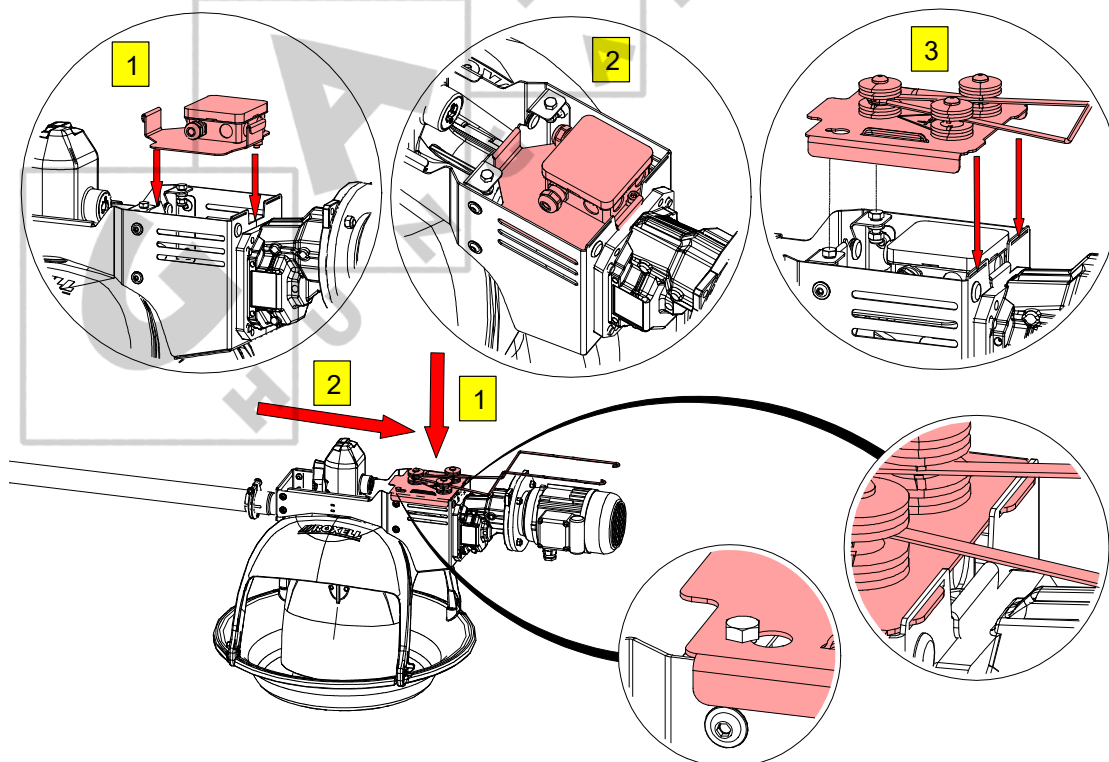
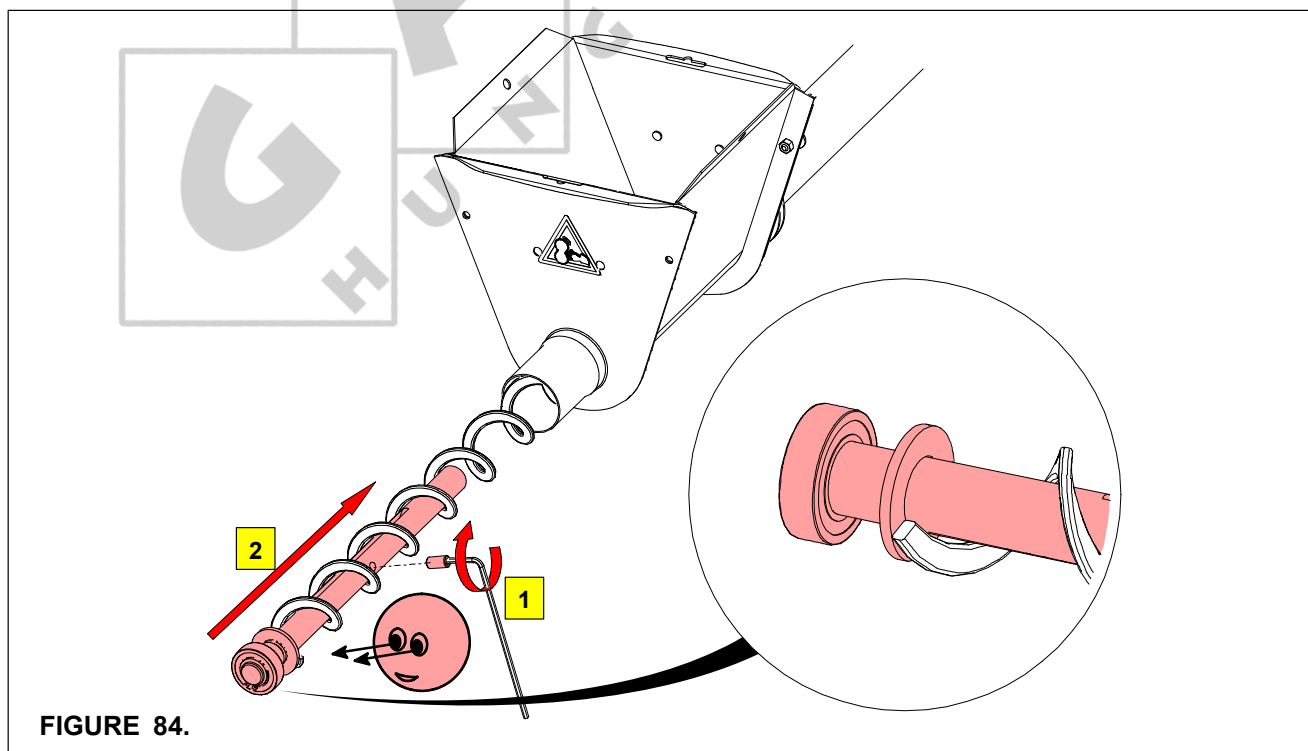
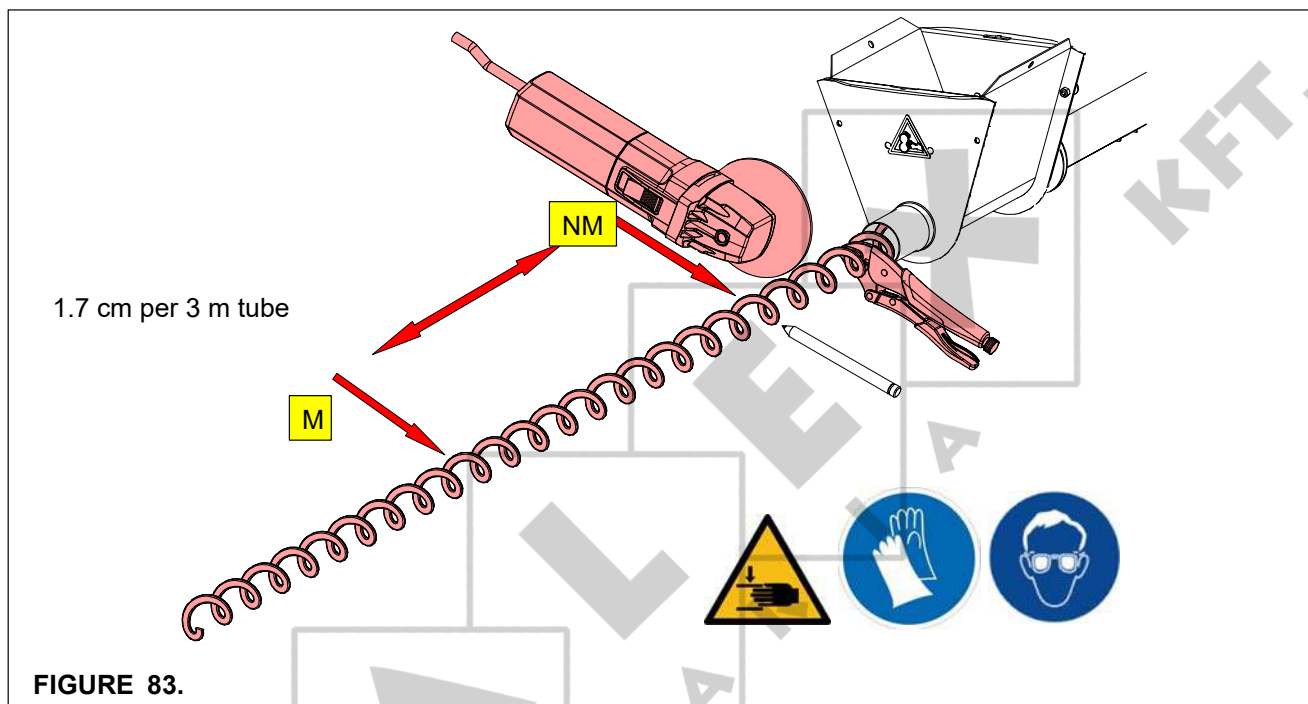
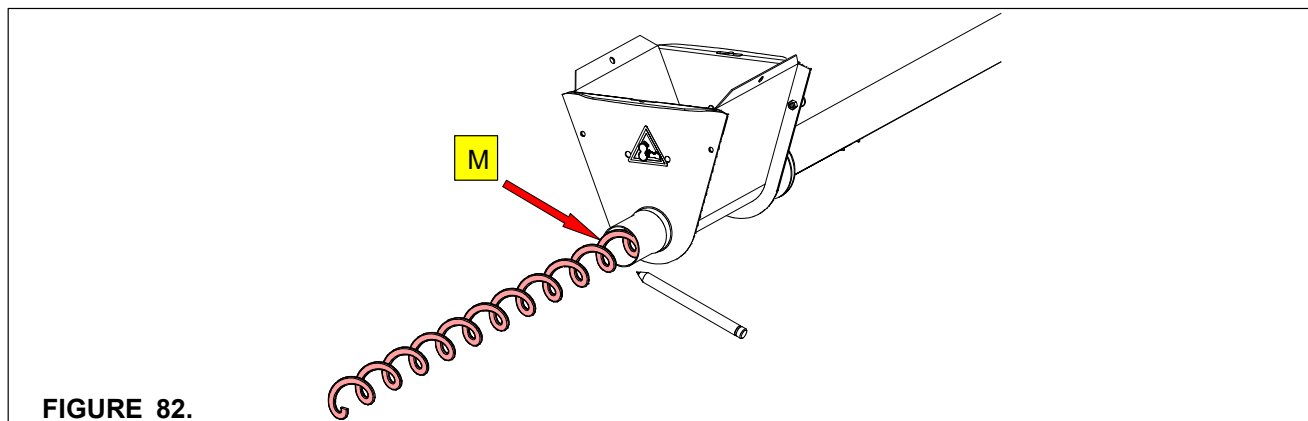
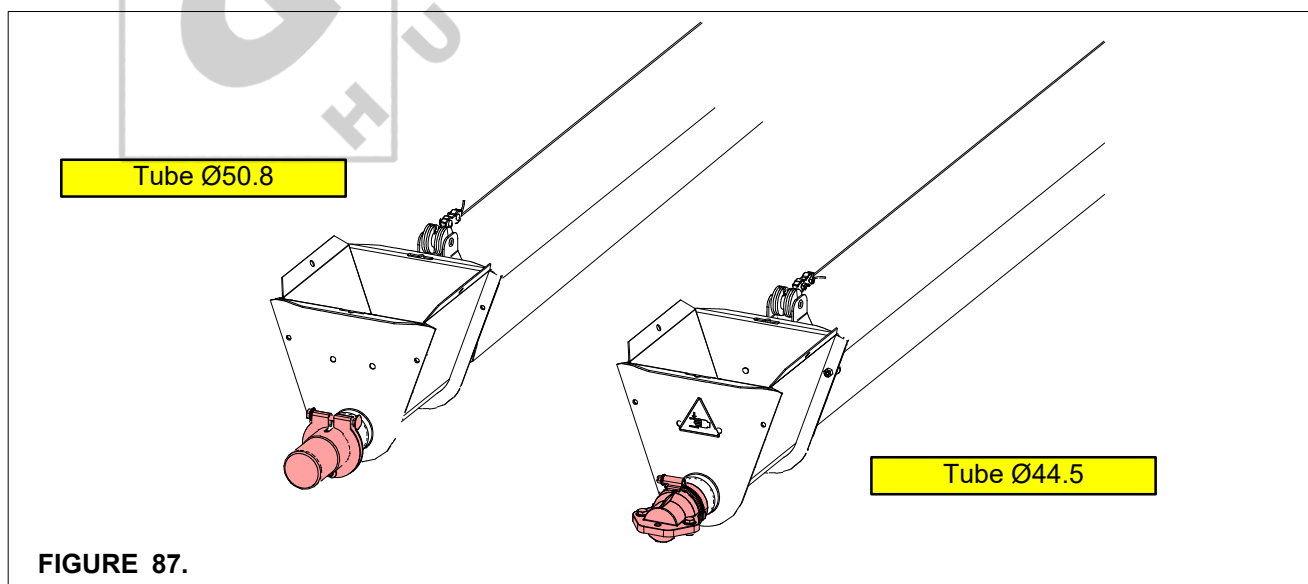
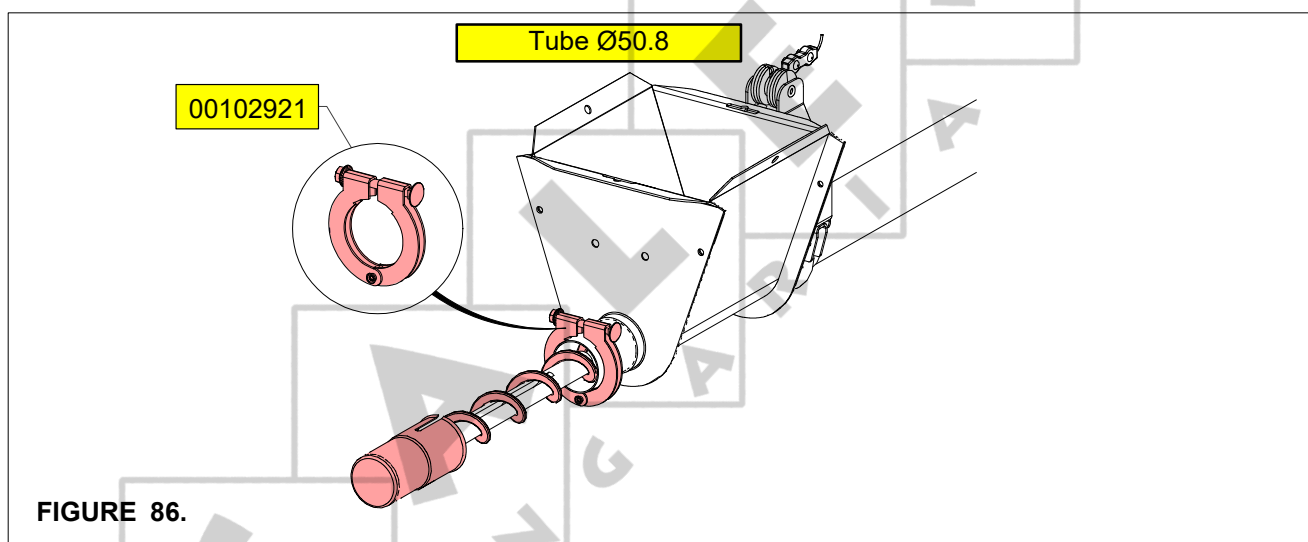
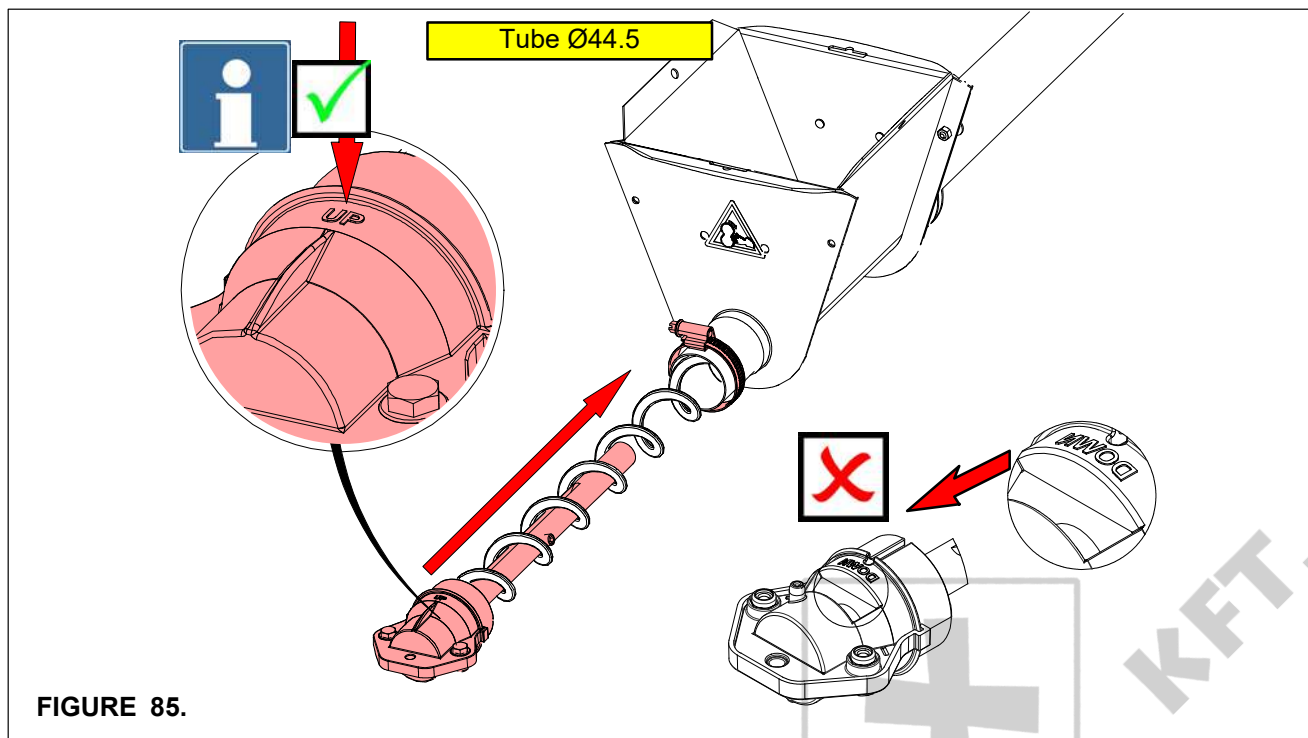


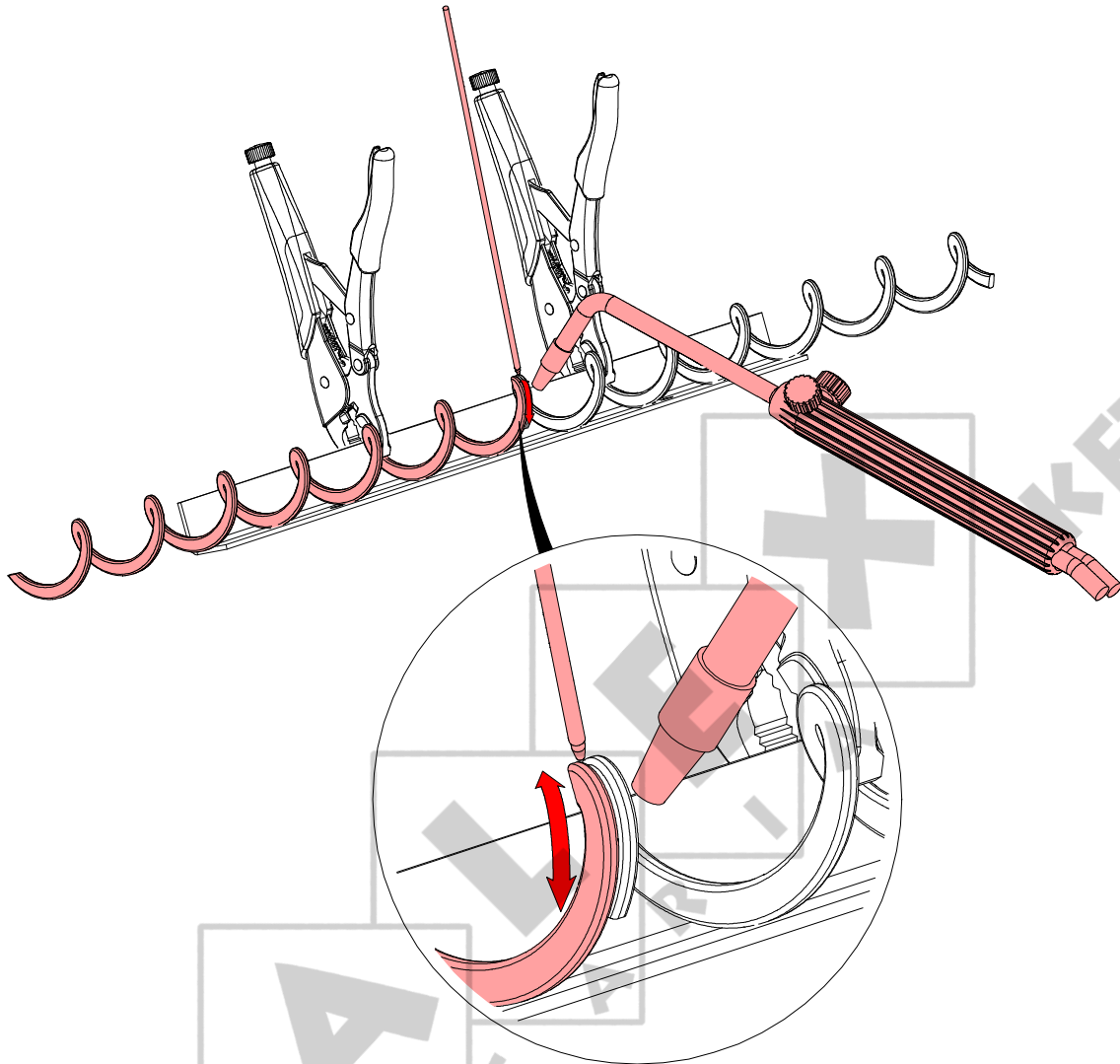
FIGURE 81.



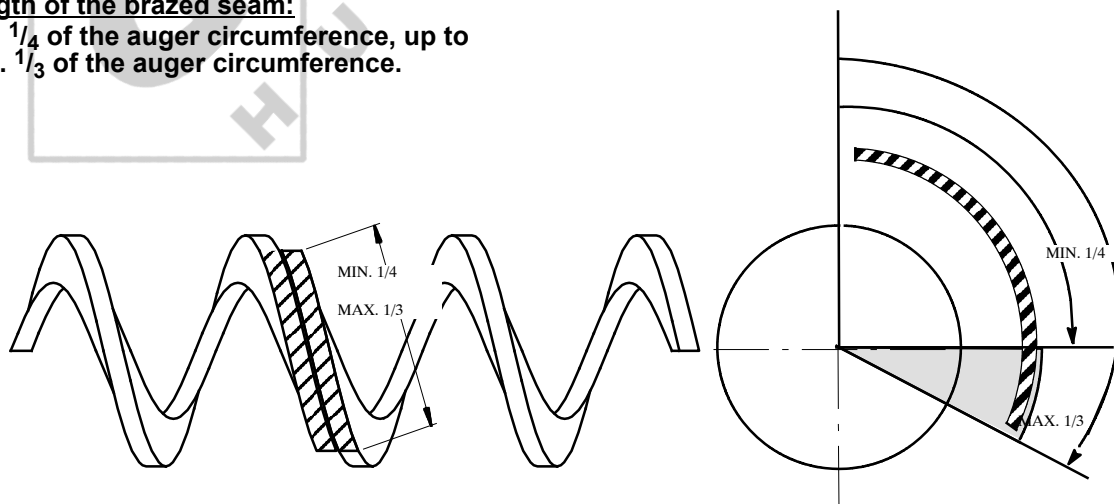


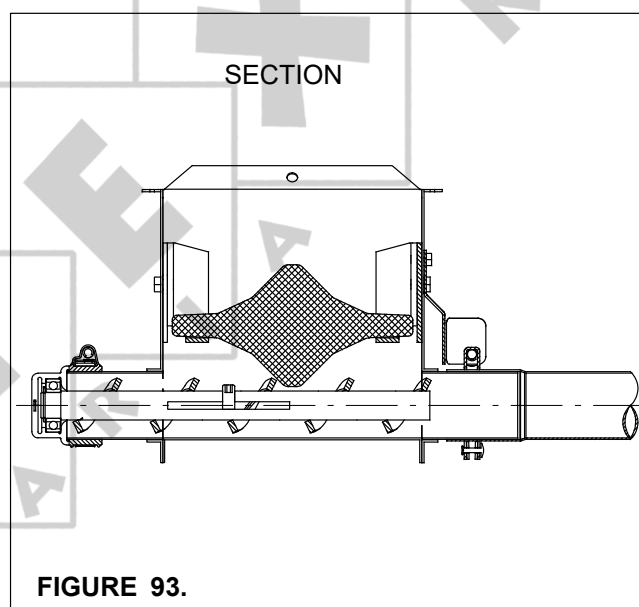
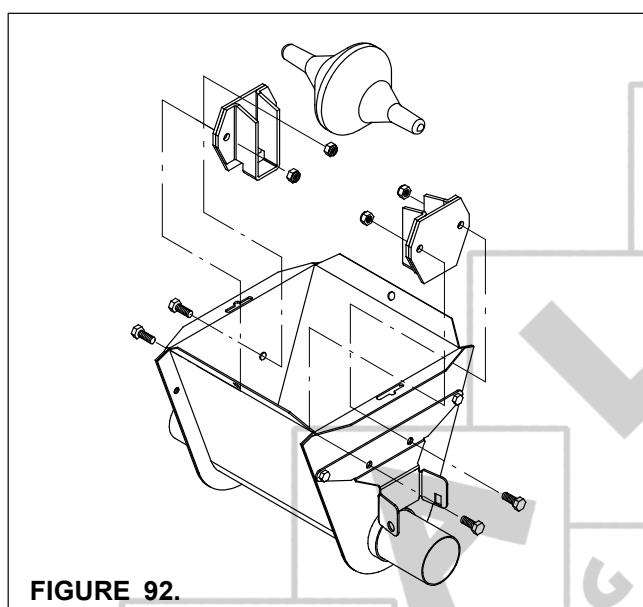
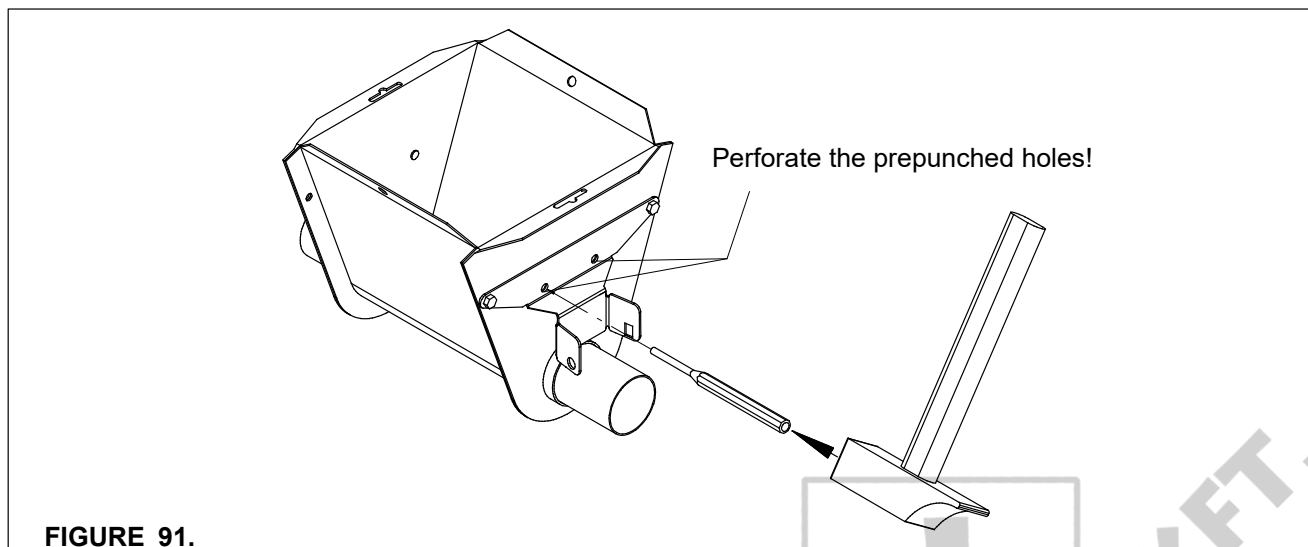
AUGER BRAZING

Always use hard solder. We recommend a bronze, flux-coated rod. Fill the solder joint well. Avoid sharp edges or rough corners: these wear out the tubes. Braze at low temperature.

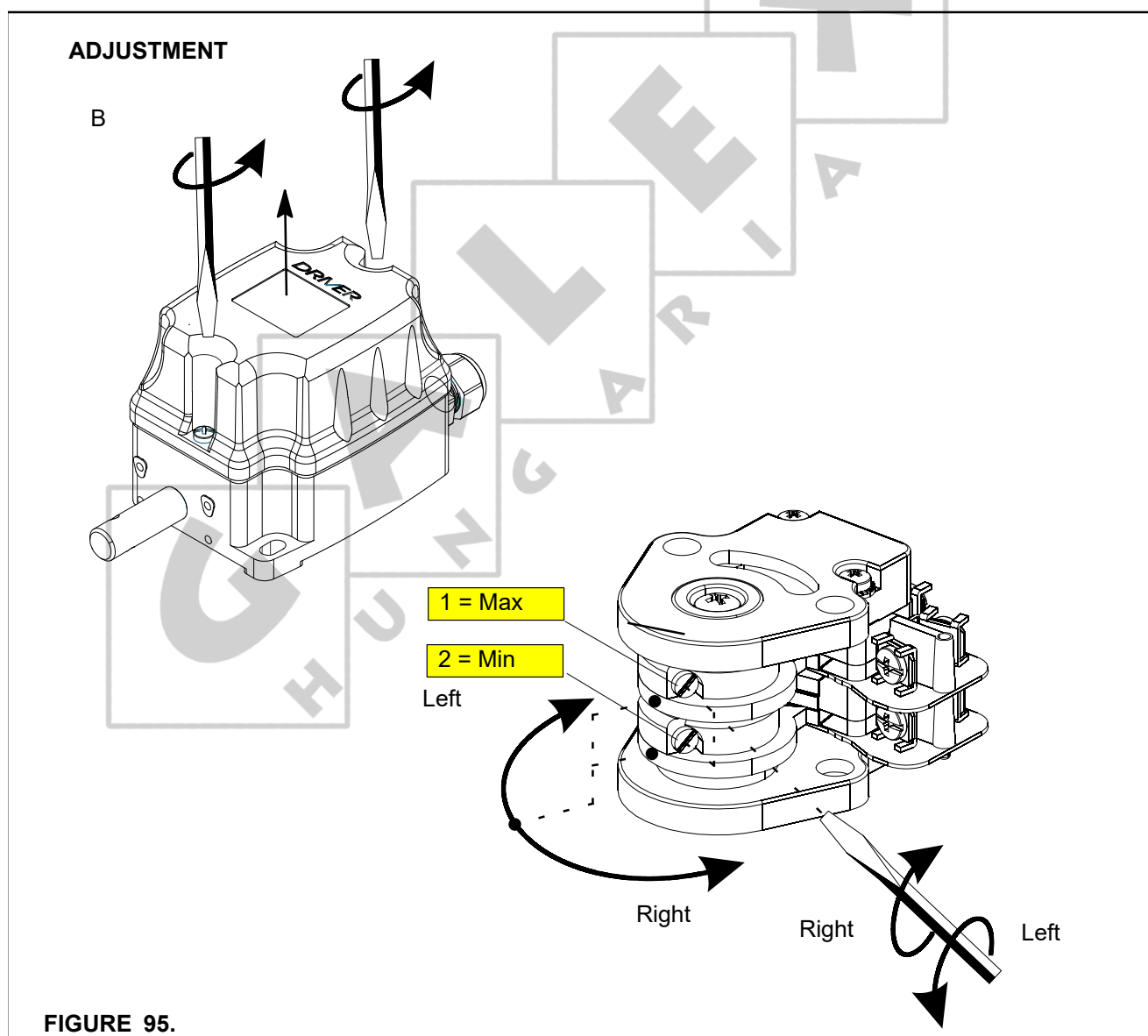
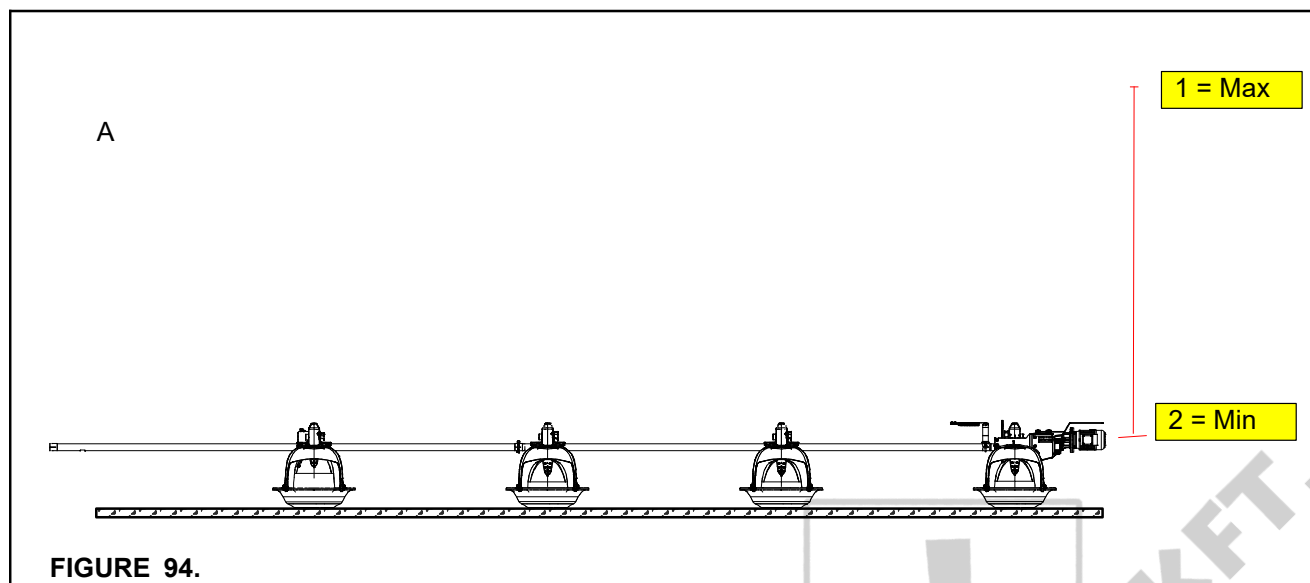
**FIGURE 88.****Length of the brazed seam:**

Min. $\frac{1}{4}$ of the auger circumference, up to
Max. $\frac{1}{3}$ of the auger circumference.

**FIGURE 89.**

OPTION: TO INSTALL THE THUMPER

ADJUSTMENT CENTRAL WINCH



ADJUSTMENT LIMIT SWITCH

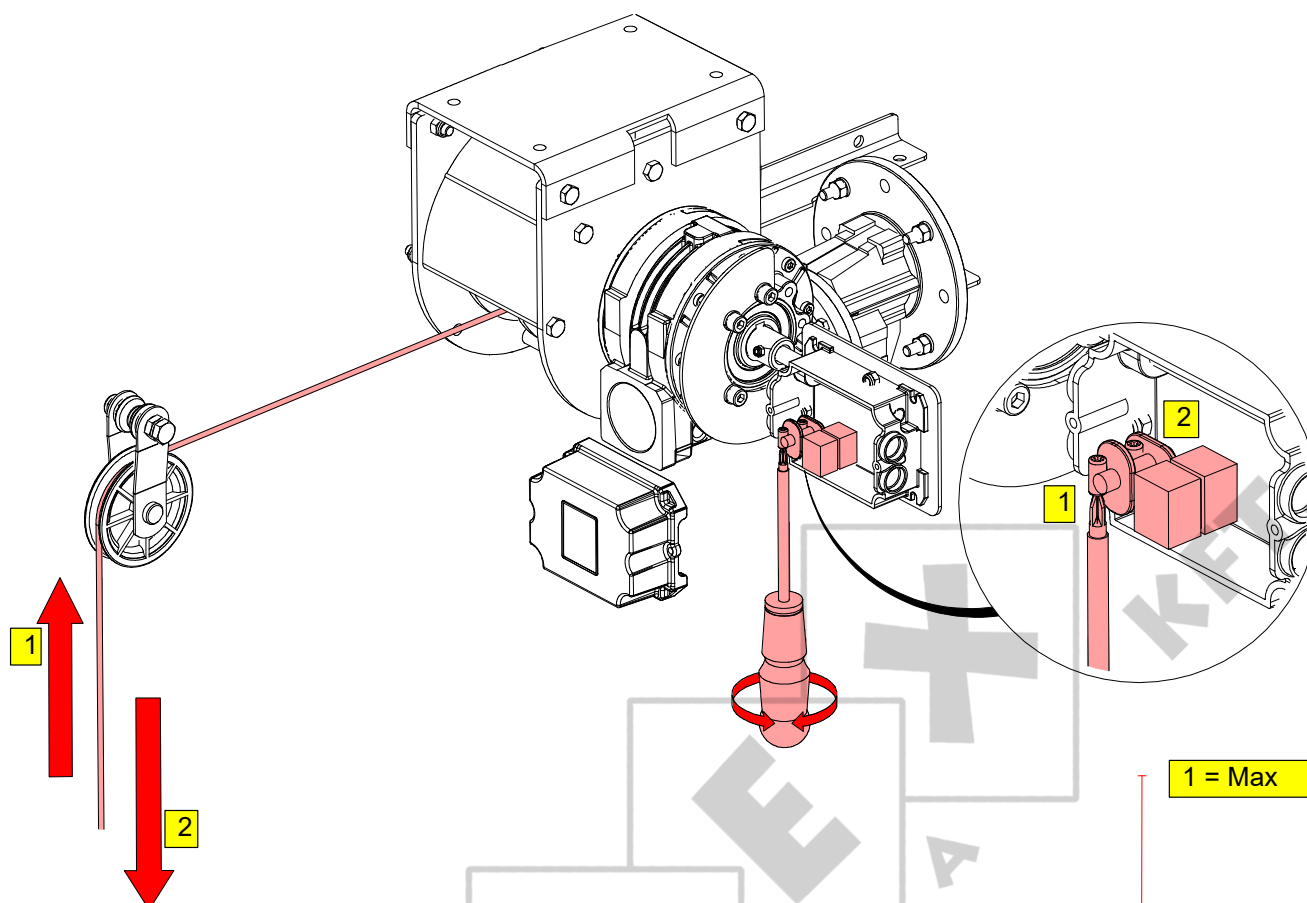


FIGURE 96.

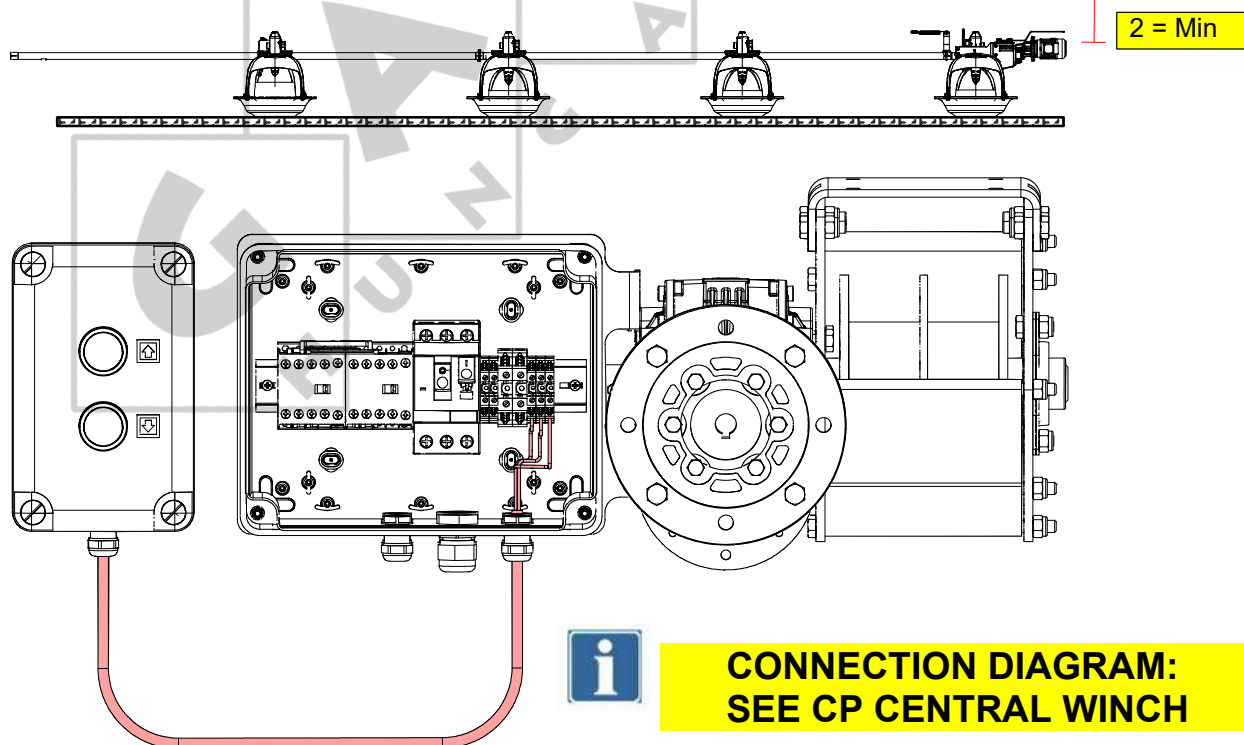
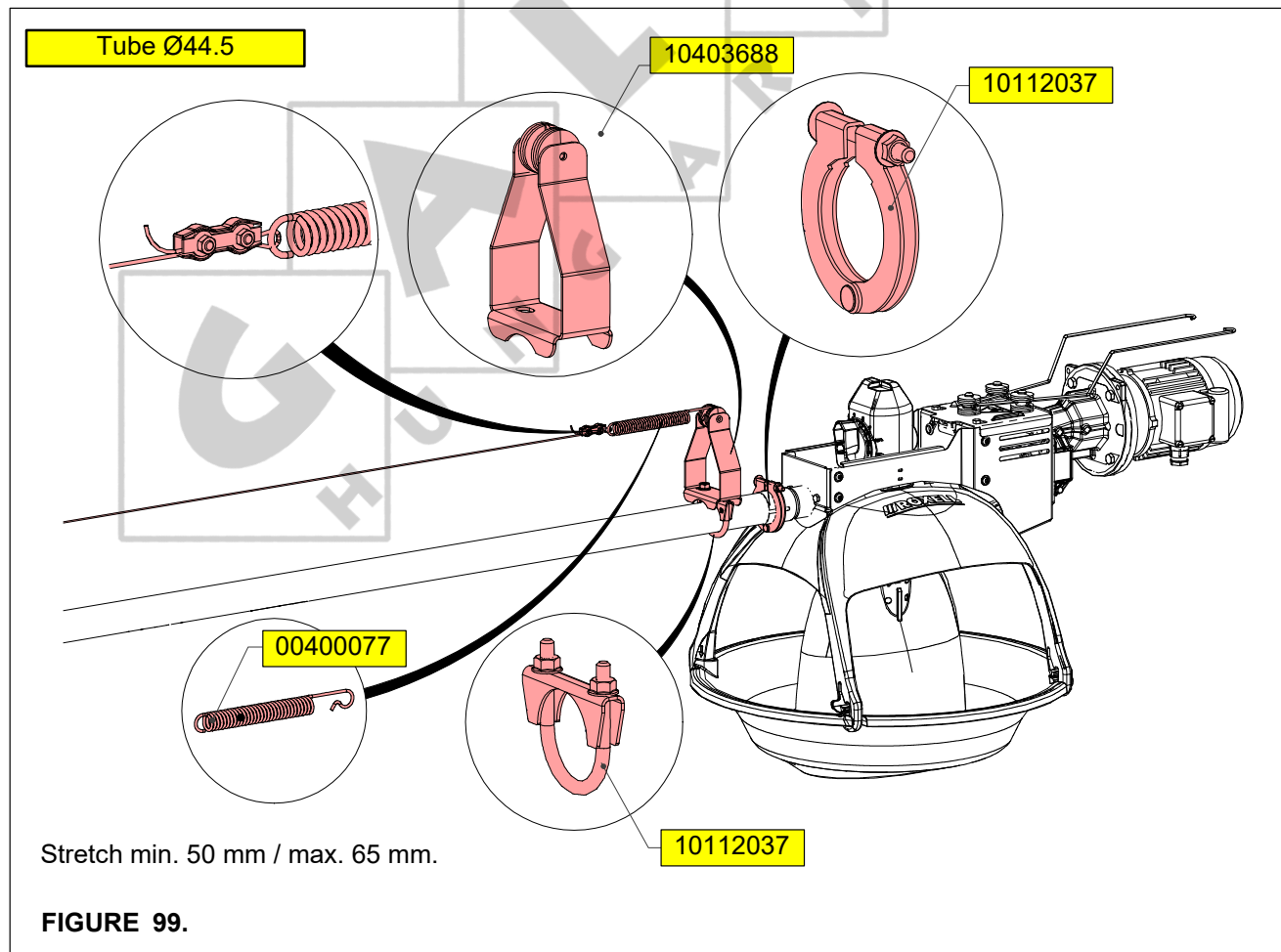
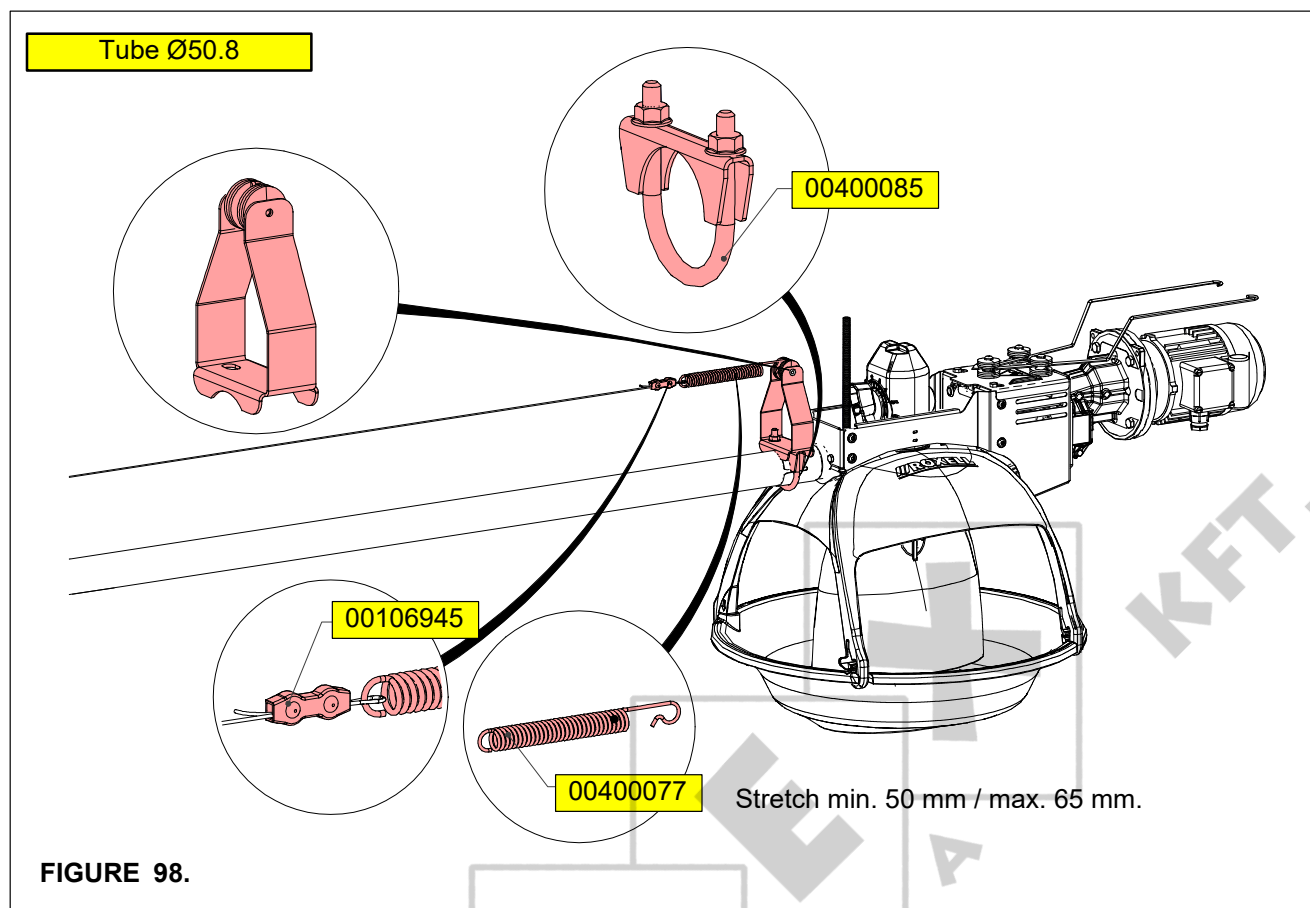
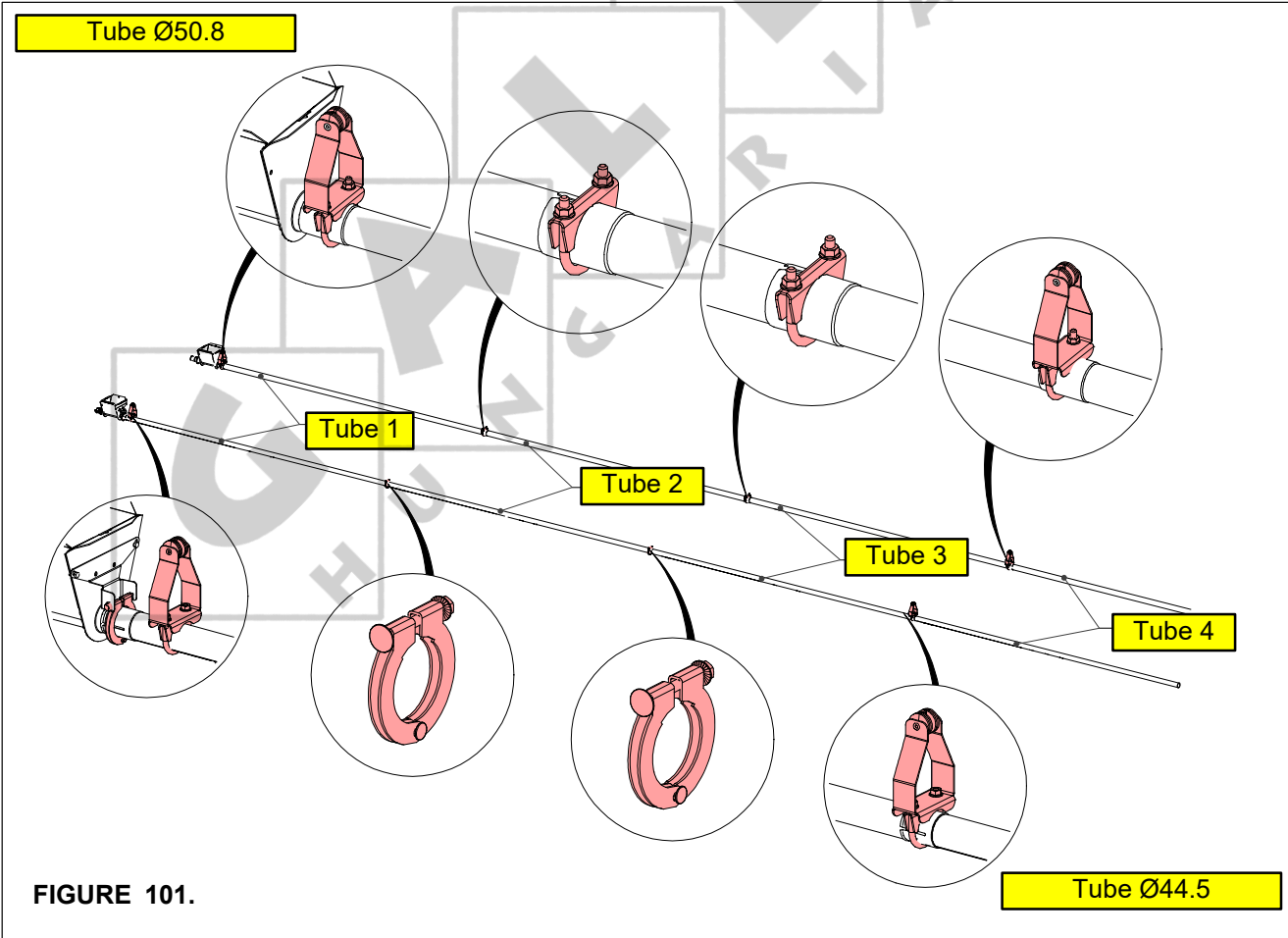
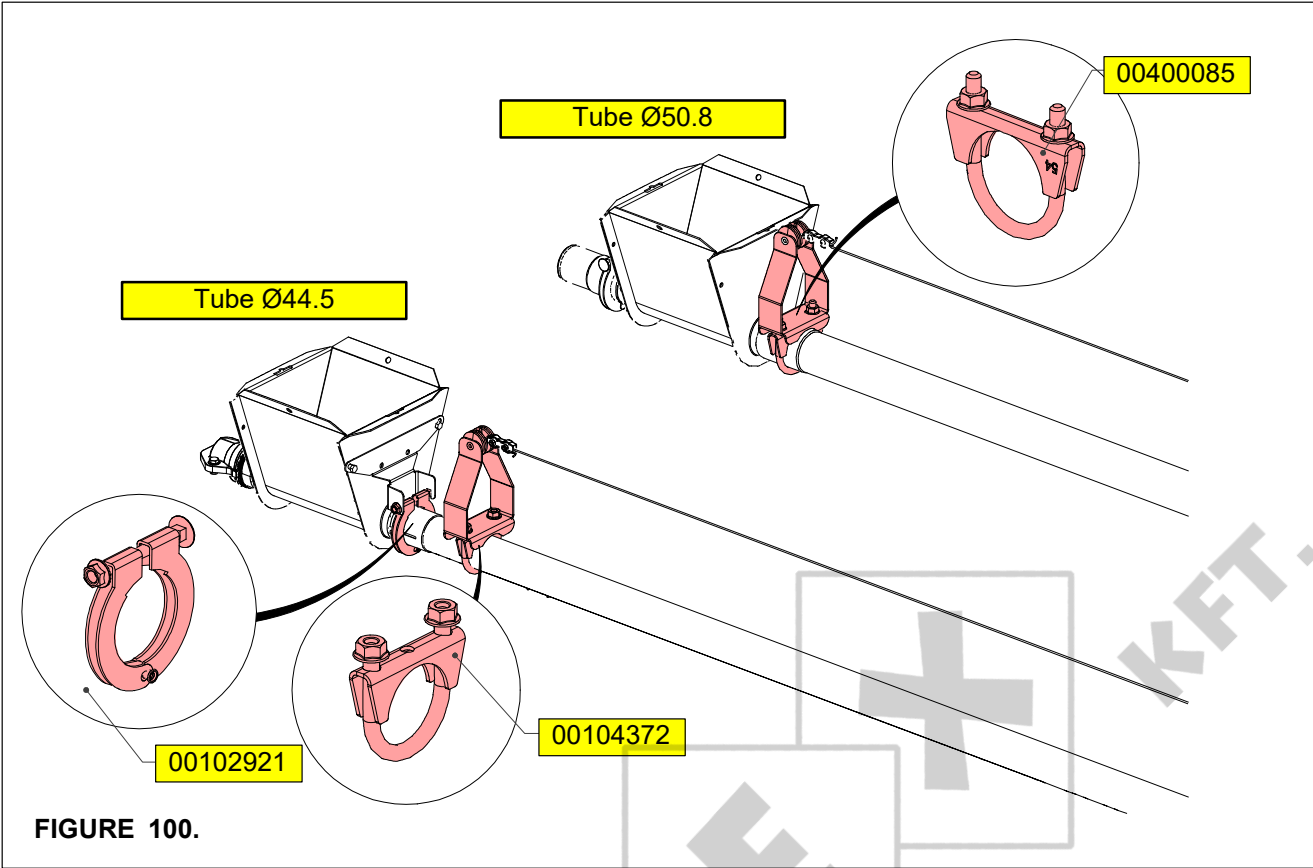
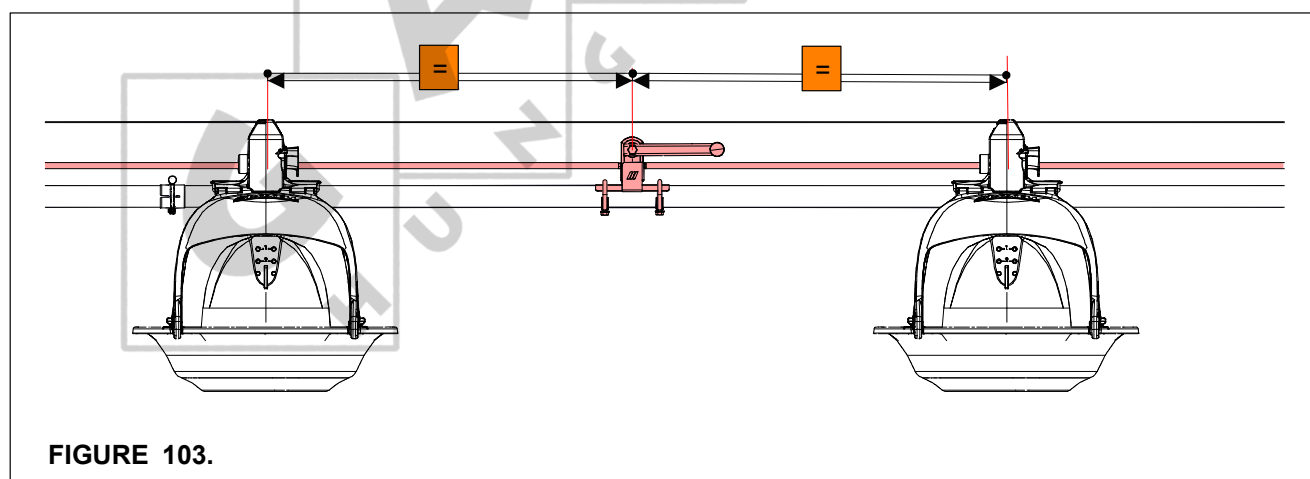
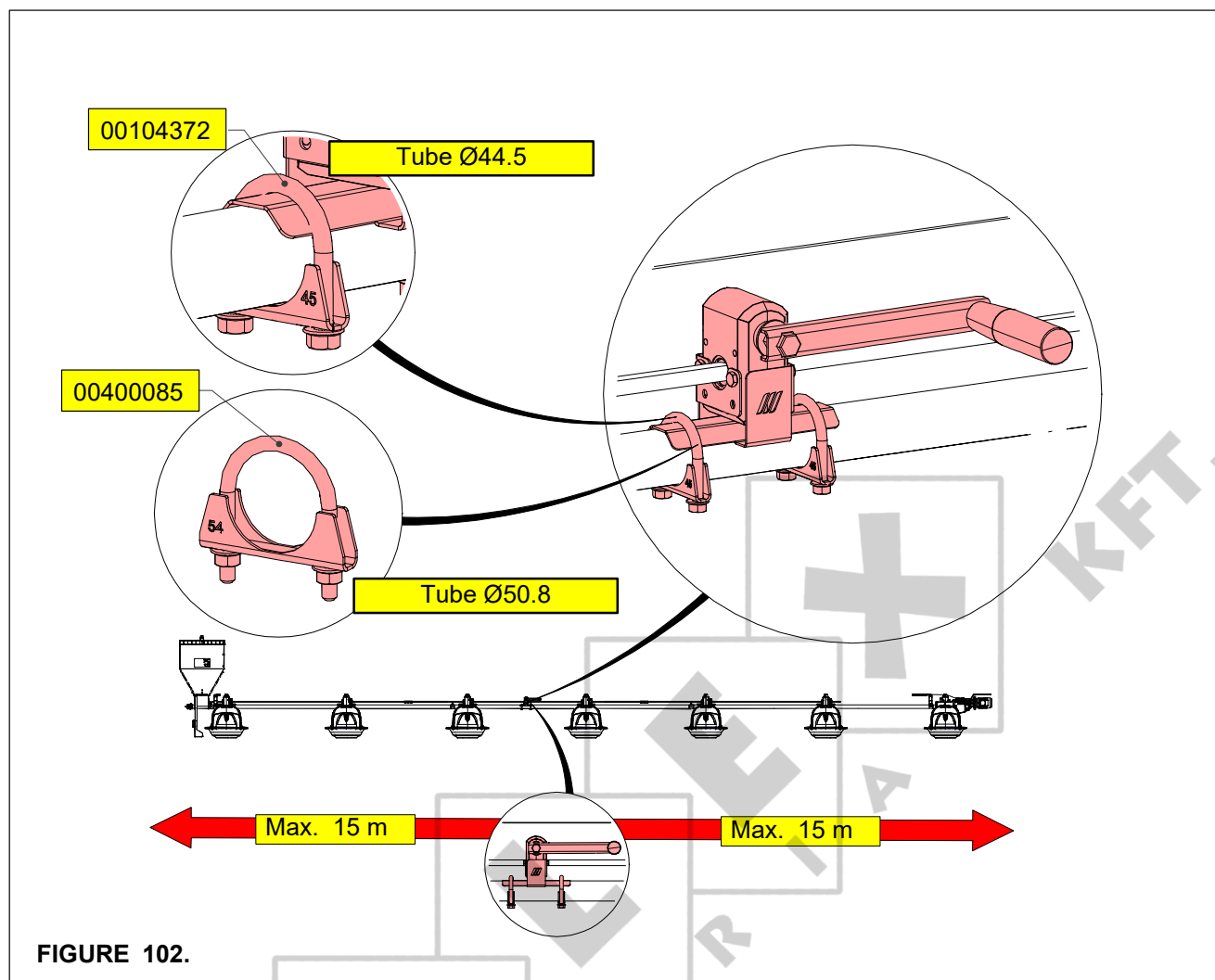


FIGURE 97.

TO INSTALL THE POULTRY PERCH GUARD





OPTION: TO INSTALL THE CENTRAL ADJUSTMENT SYSTEM

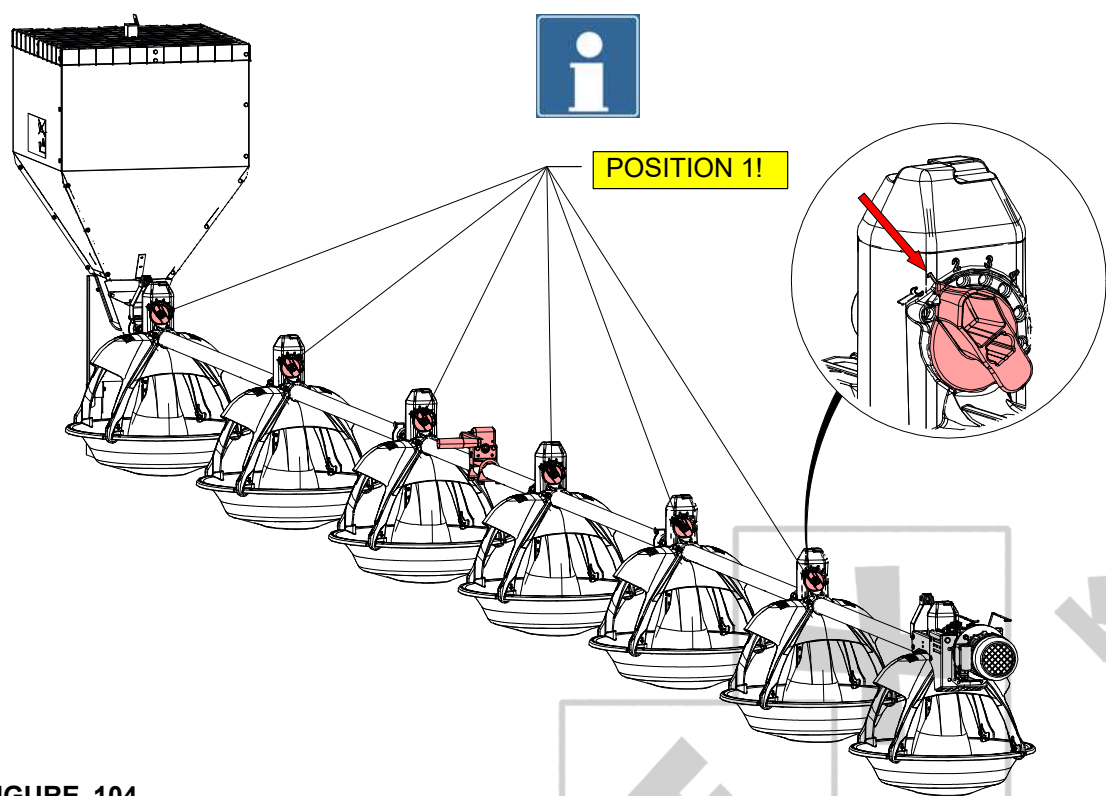


FIGURE 104.

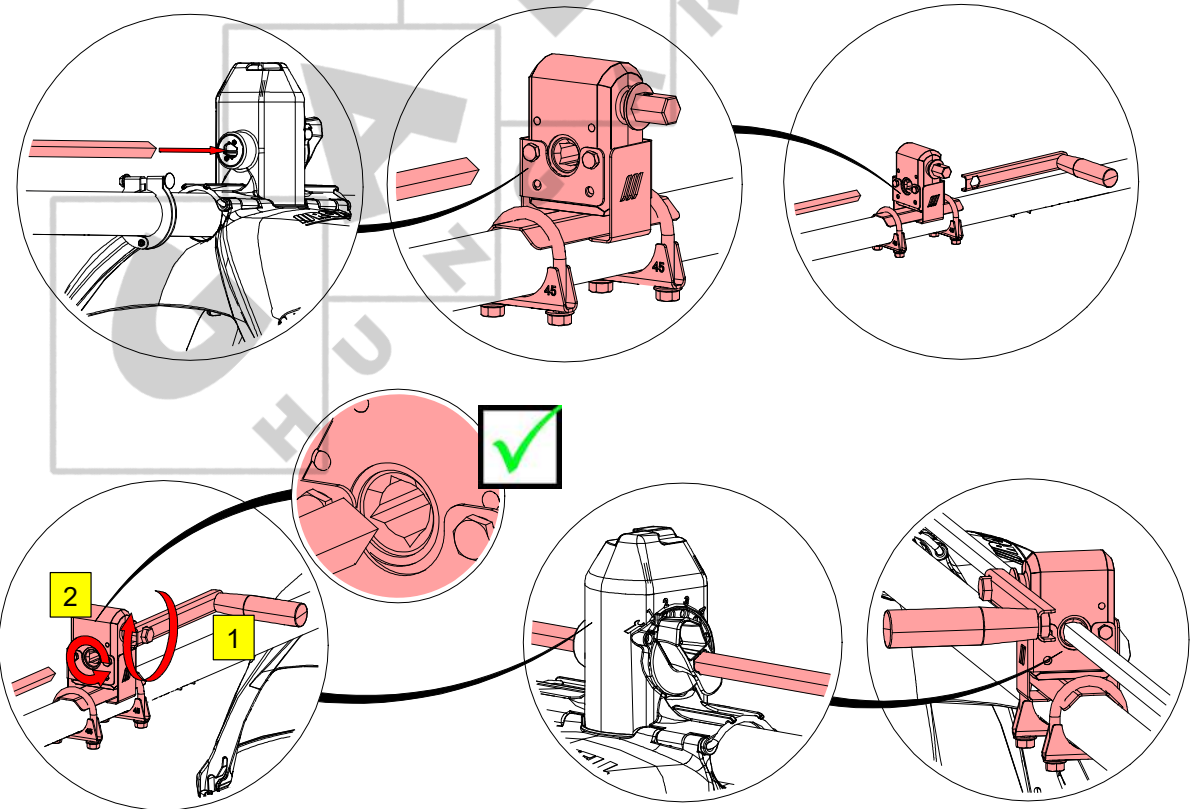
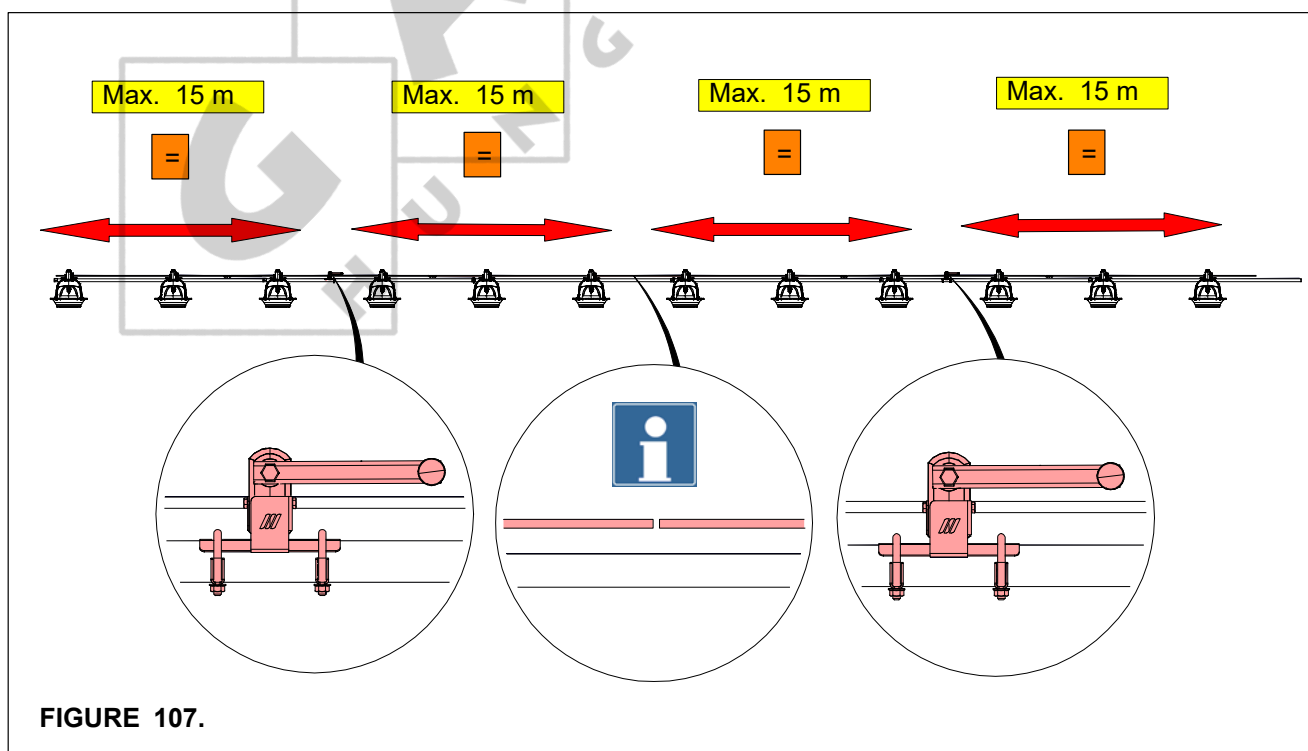
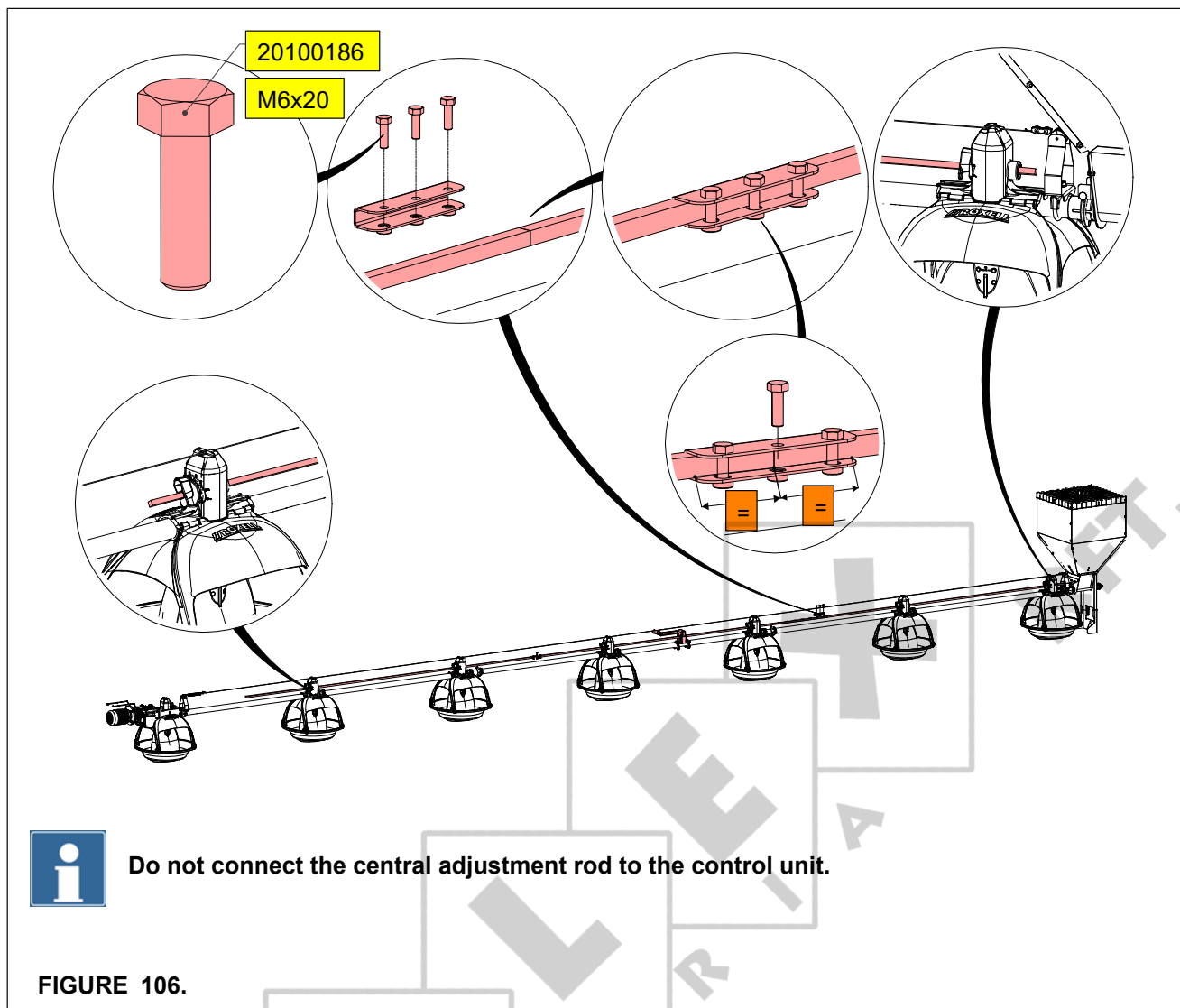


FIGURE 105.



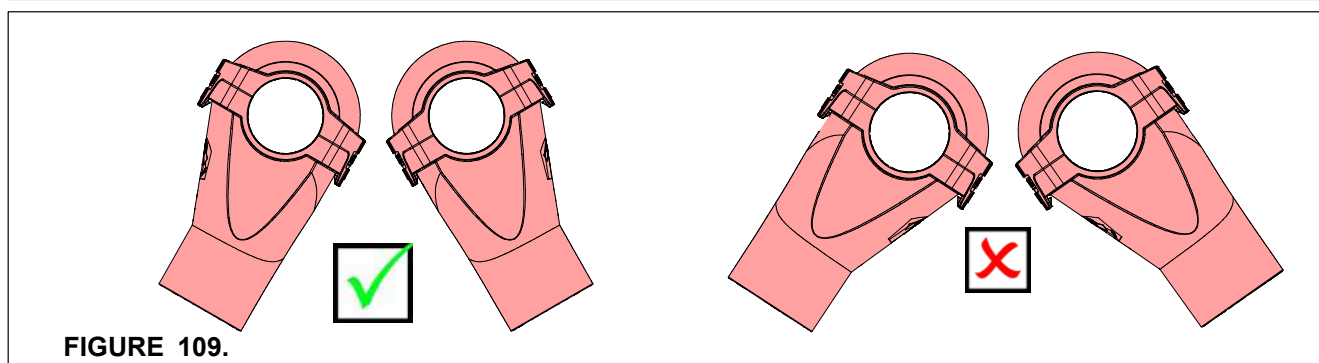
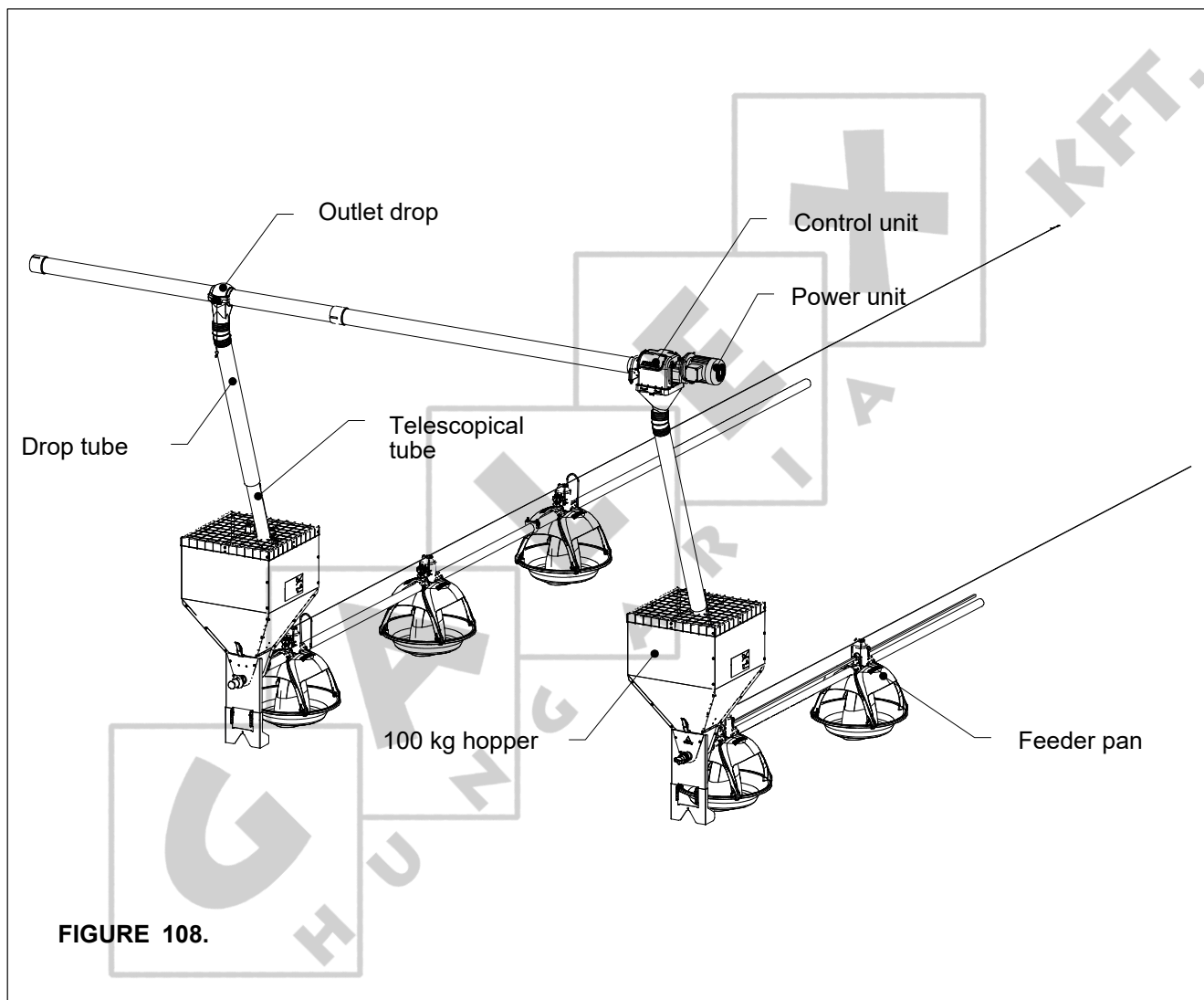
TO INSTALL THE FLEX-AUGER FEED SUPPLY SYSTEM

Installation instructions: see our Flex-Auger operator's manual.
Attentively read these instructions.

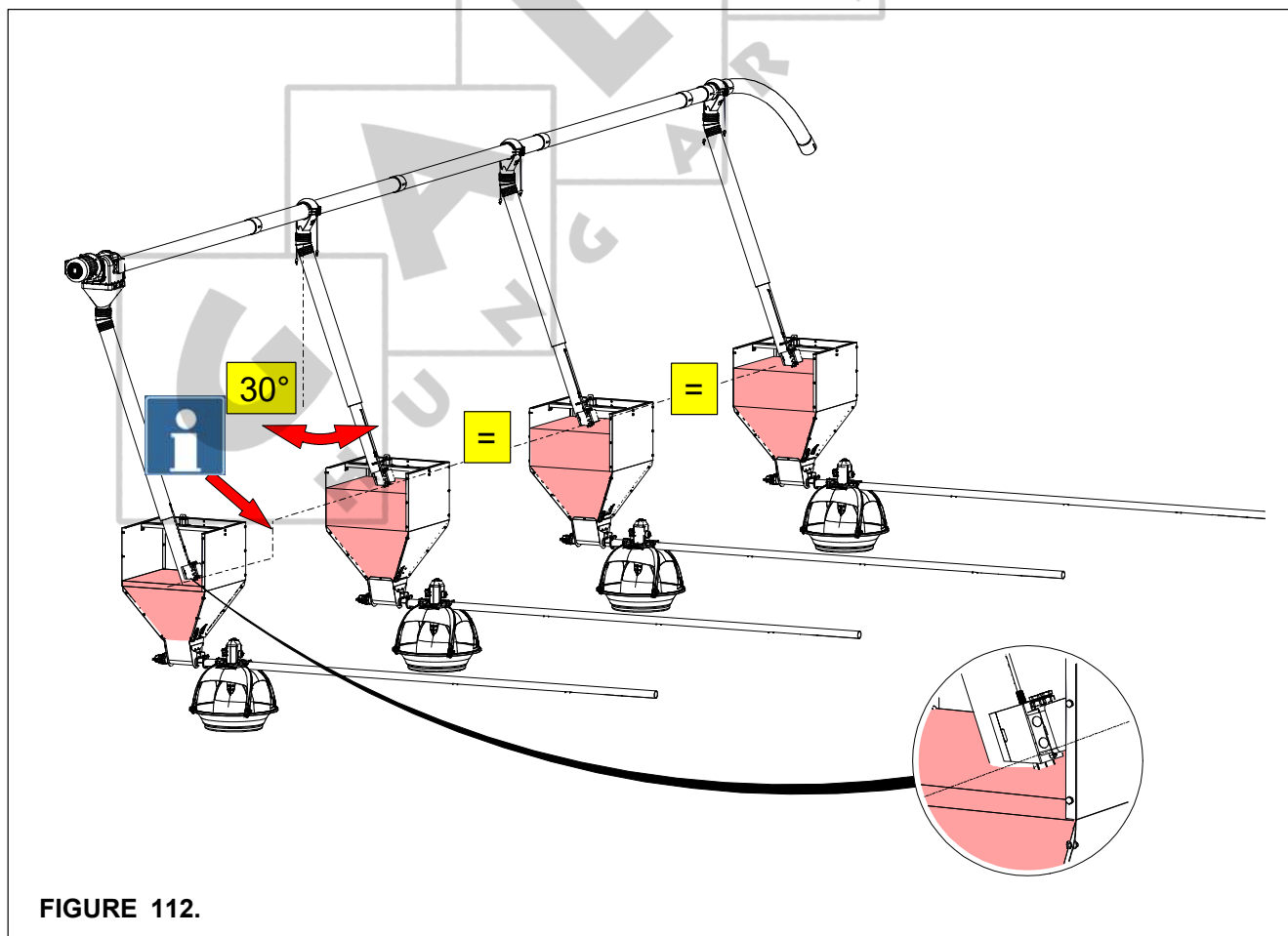
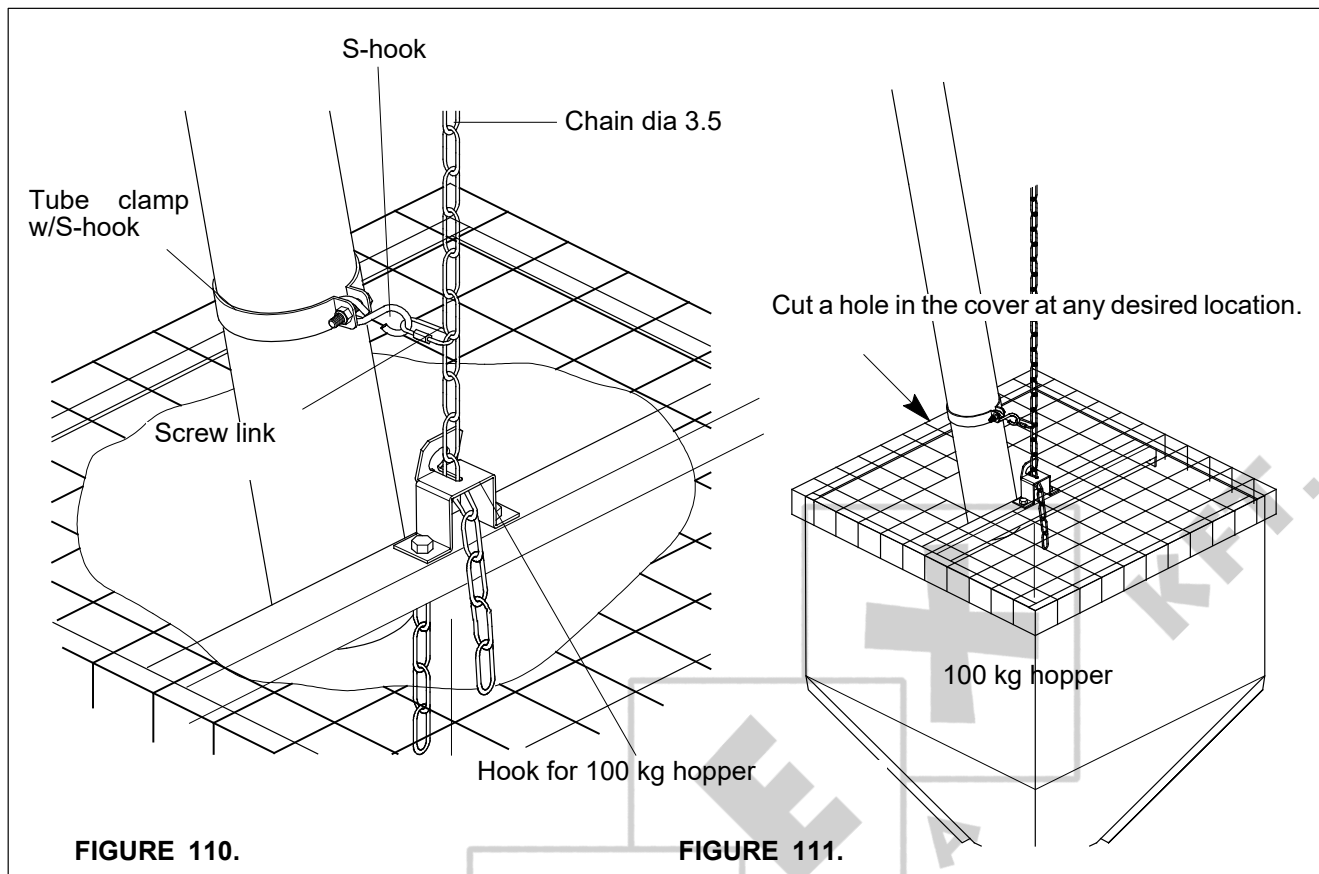
Attention:

Use as little elbows as possible.

Make sure that there are no tube connections at locations where you need outlet drops!

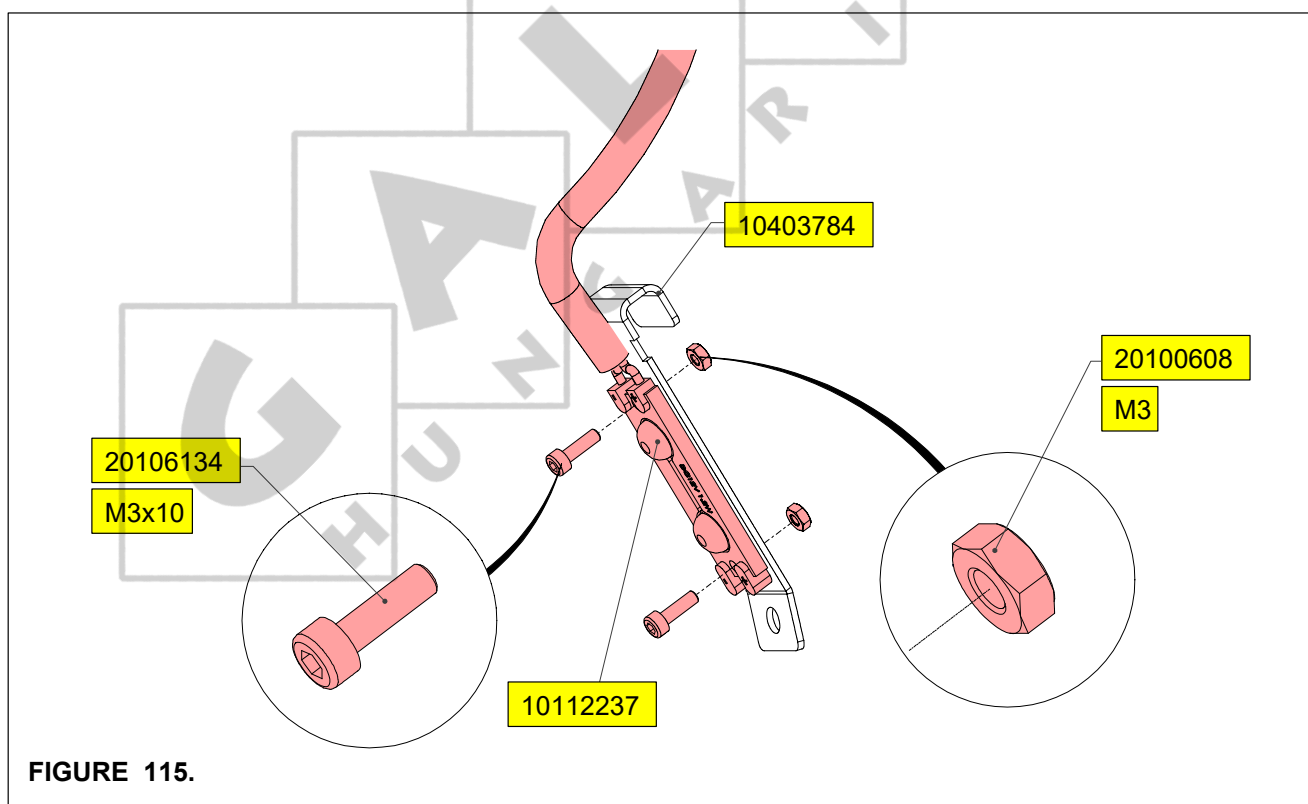
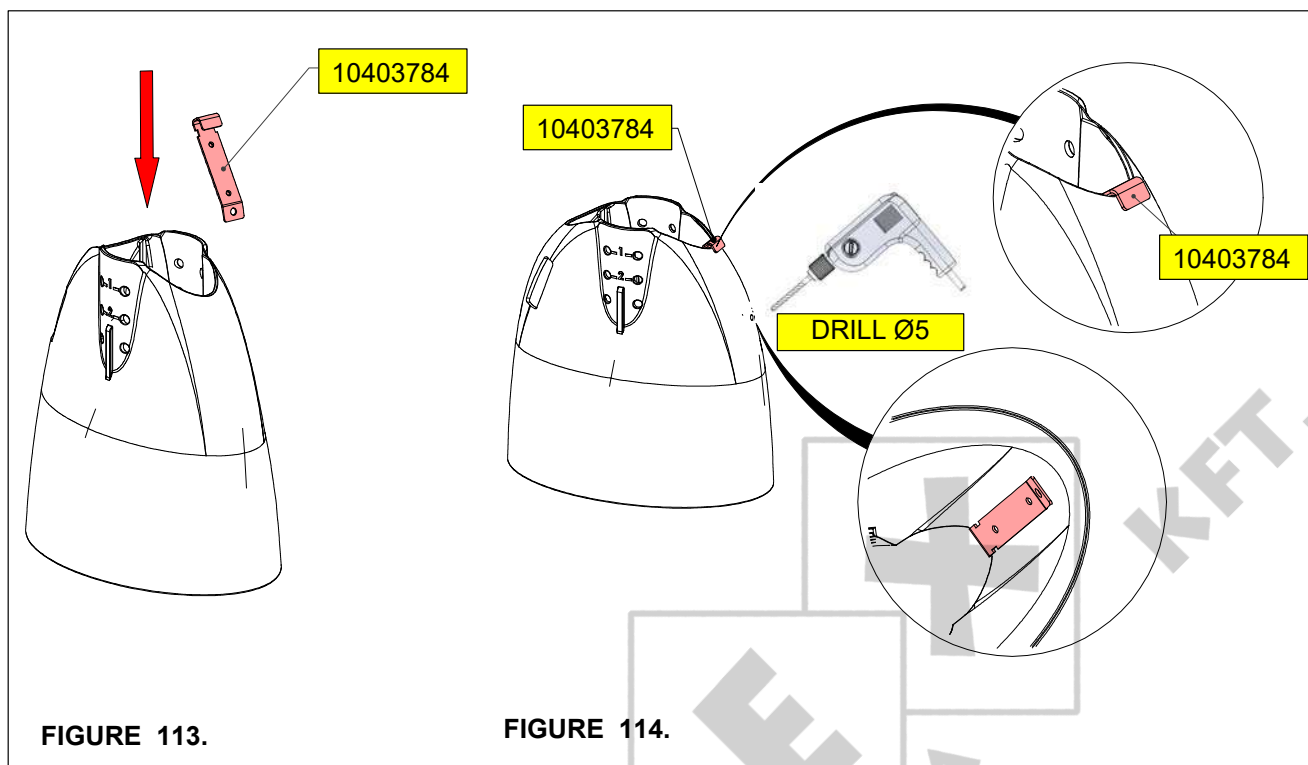


TO INSTALL THE TELESCOPICAL TUBE



LED LIGHT KIT FOR CONTROL UNIT

Connect the power supply to 100 - 240 VAC, 50/60 Hz; 0,22 A / CU



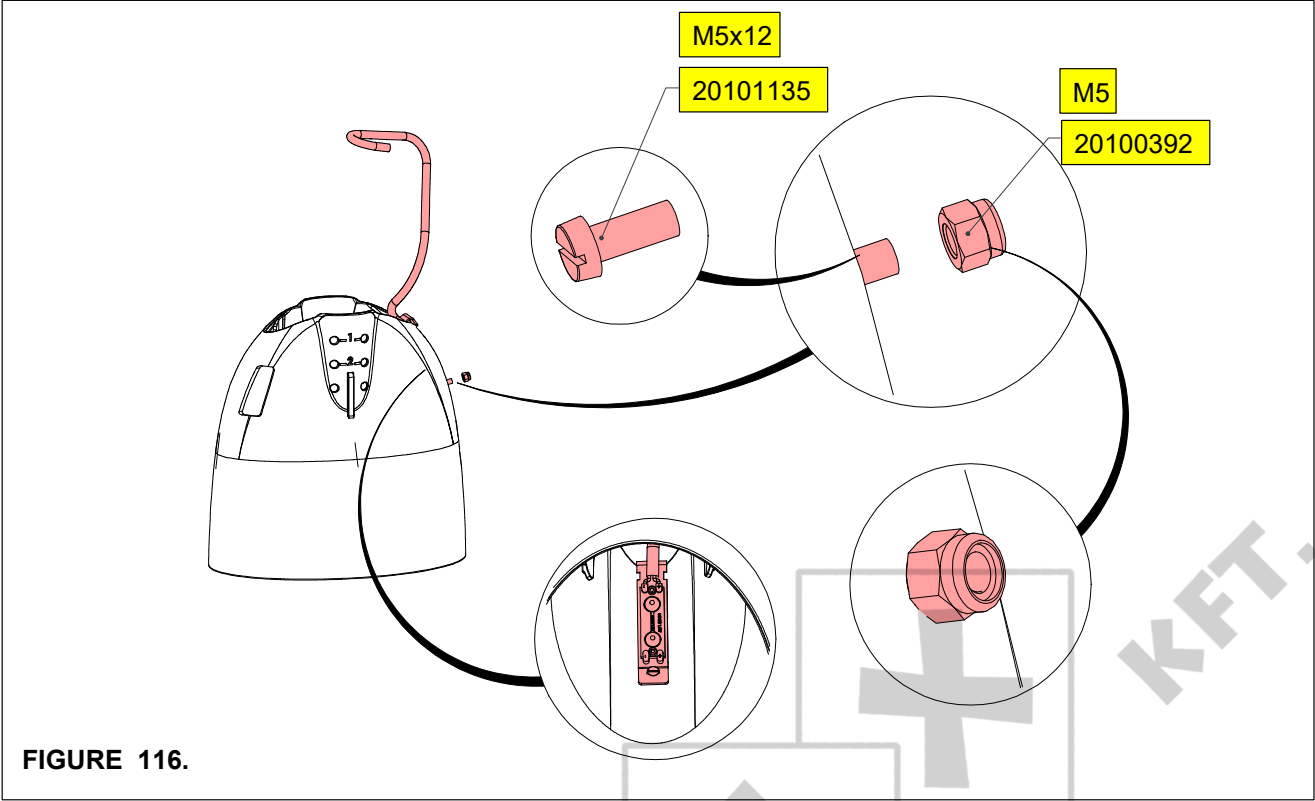


FIGURE 116.

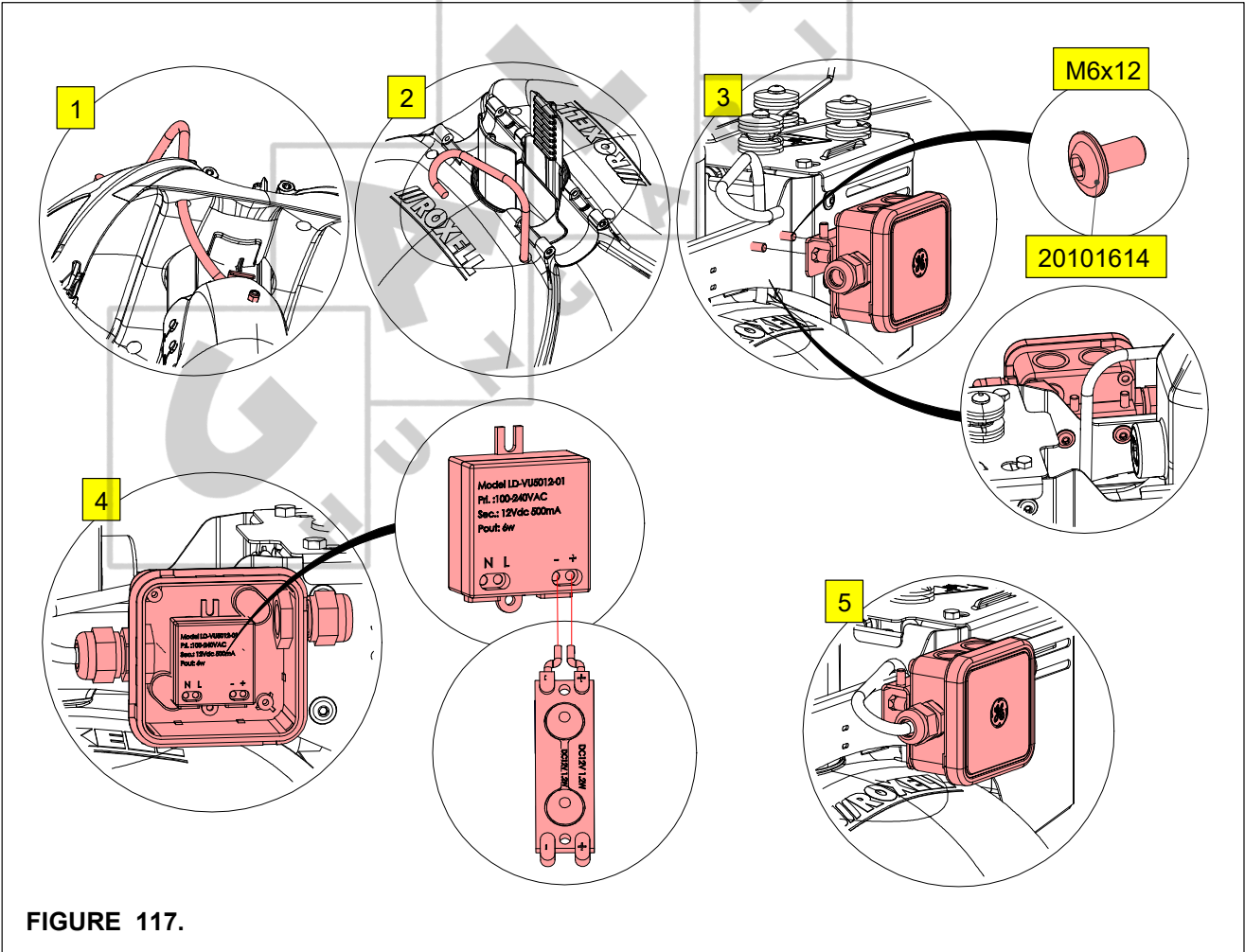
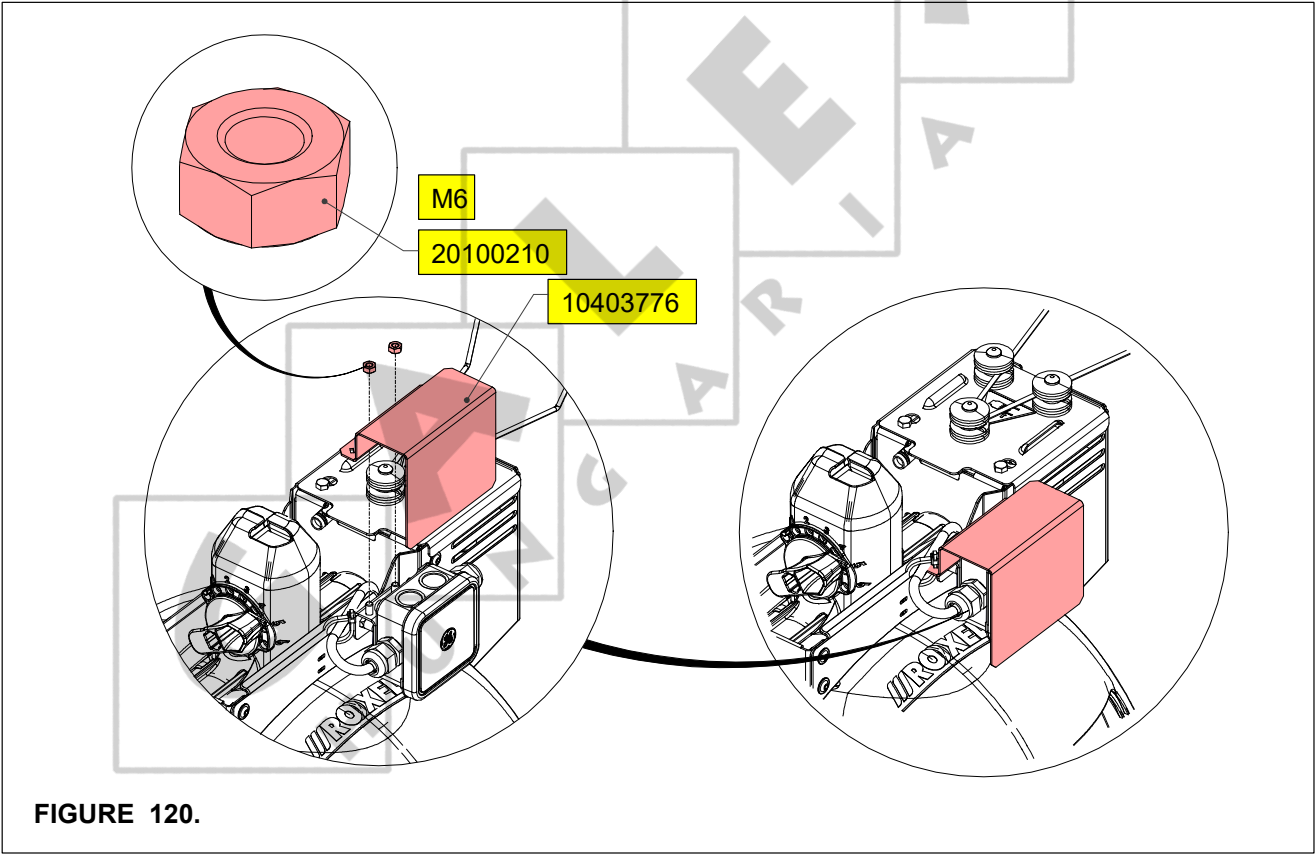
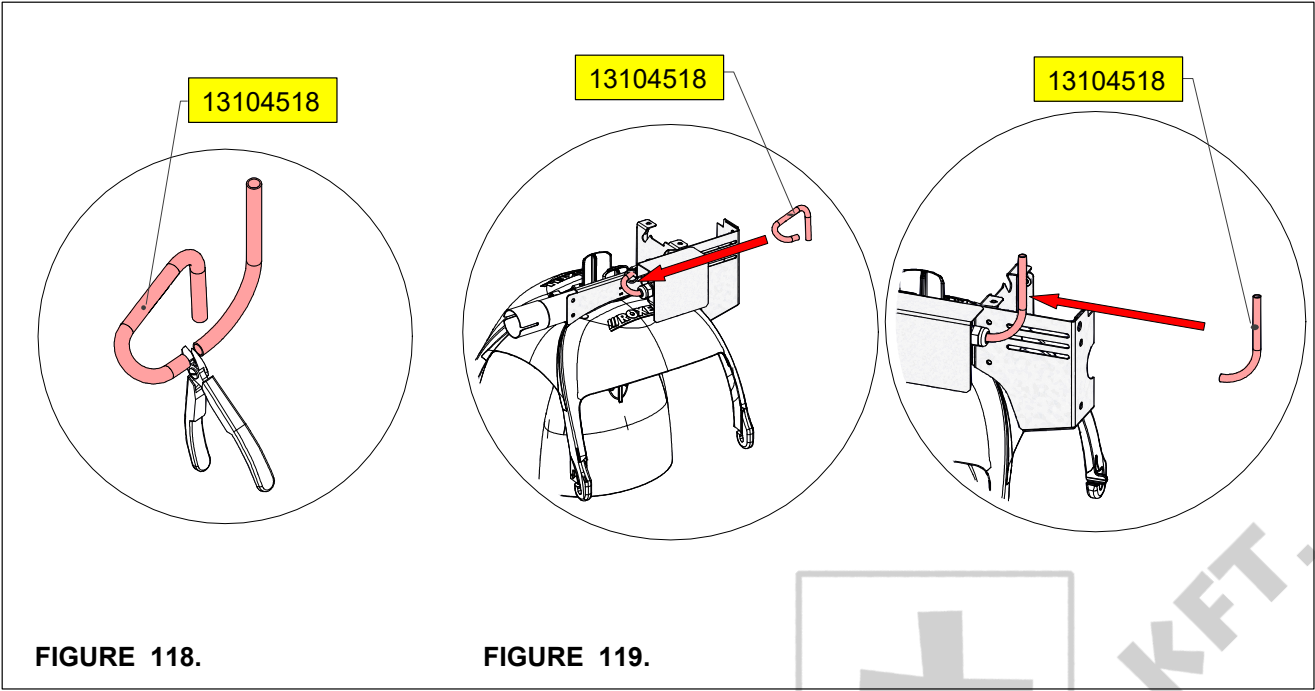
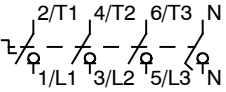
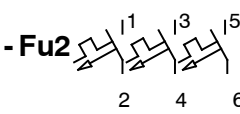
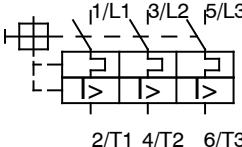
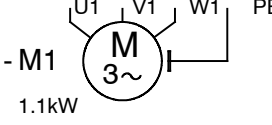
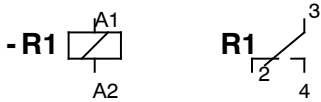

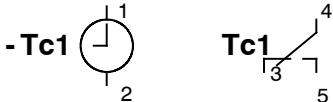
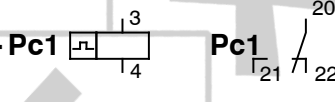

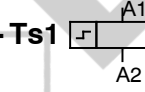
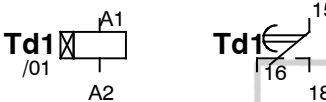
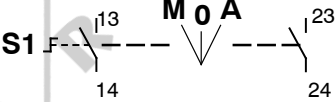
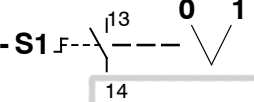
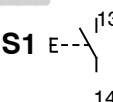
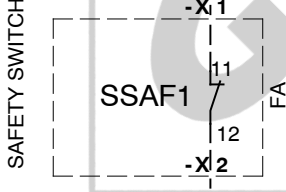
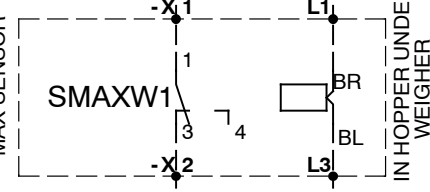
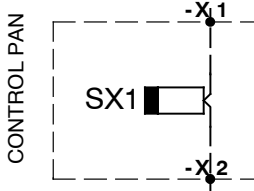
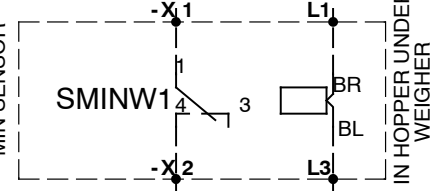


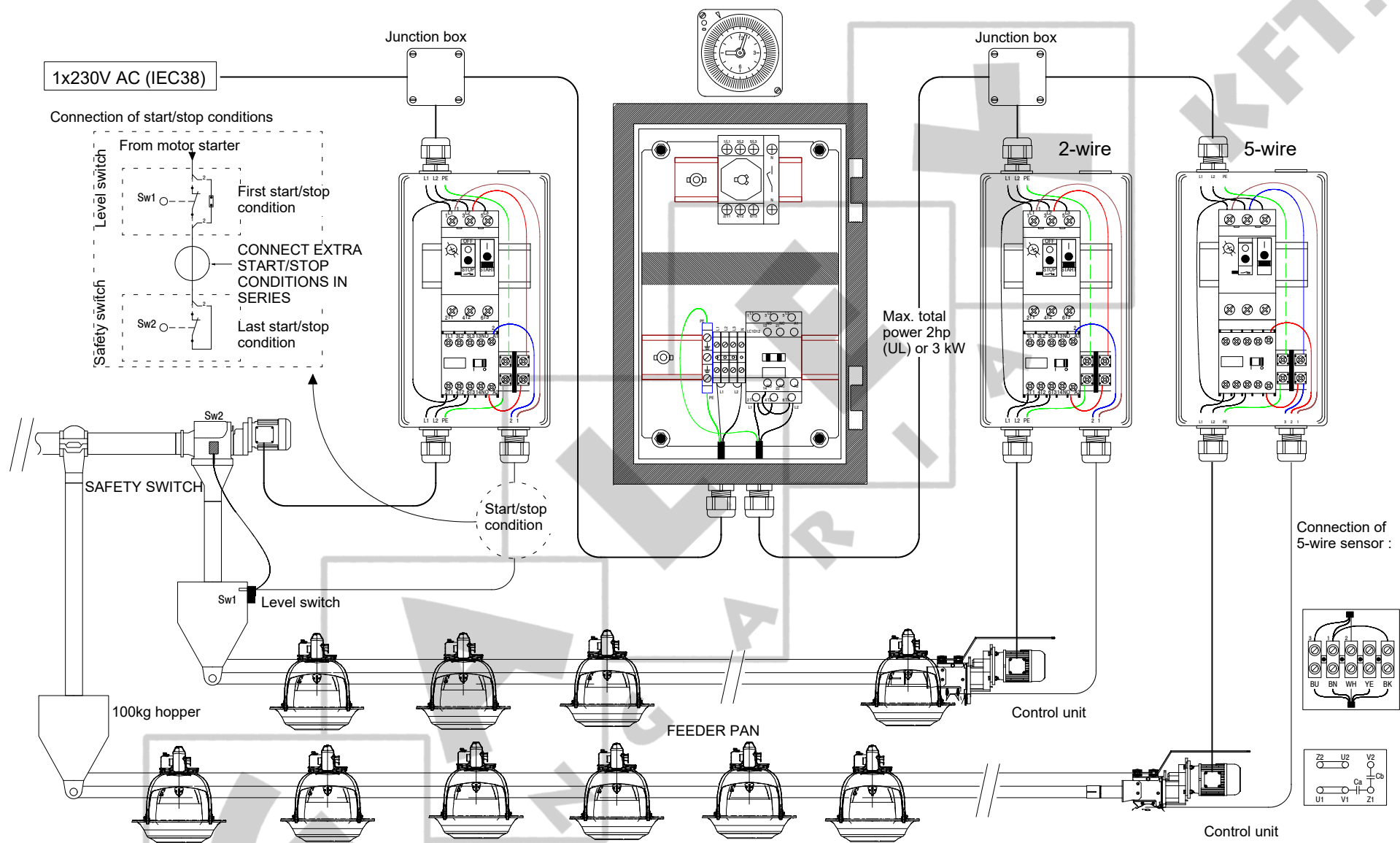
FIGURE 117.



ELECTRICAL SYMBOLS

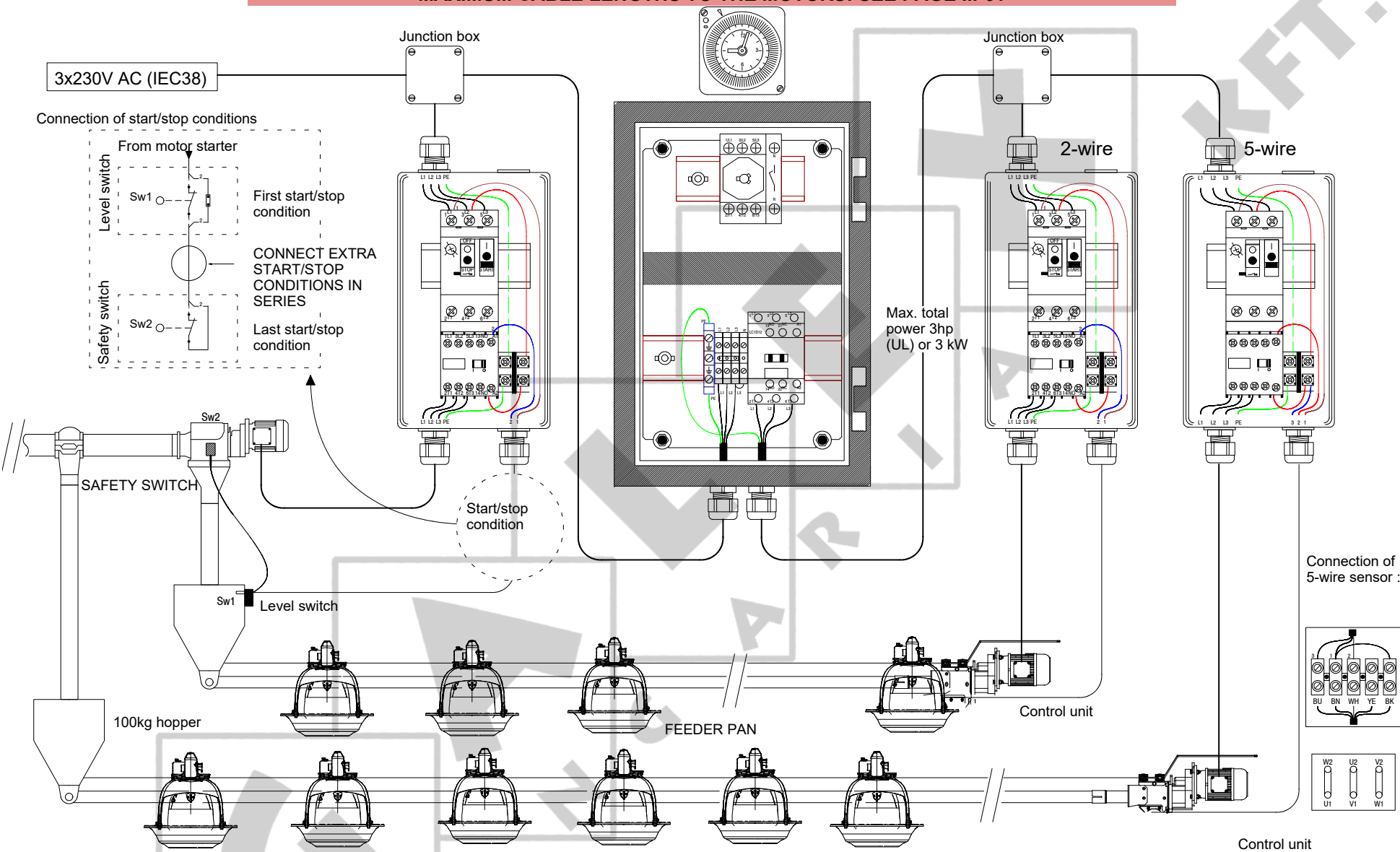
 - Si1 Main Switch	 - Fu2 Automatic fuse
 - Q1 Thermal-magnetic motor protection with auxiliary contacts	 - M1 Motor 1.1kW MOTOR
 - R1 Control circuit relay	 - K1 Contactor
 - Tc1 Time clock	 - Pc1 Preset counter
 H1 Signal Lamp	 - Ts1 Serial timer
 Td1 Adjustable timer with mode selection	 - S1 3-position switch with M/O/A indication plate
 - S1 2-position switch with 0/1 indication plate	 - S1 Push button
 - X1 Safety or level switch for Flex-Augers, Discafex, ...	 - X1 Sensor with NC-contact (supply on)
 - X1 Control sensor for Kixoo or Booztzer pans	 - X1 Sensor with NO-contact (supply on)

MAXIMUM CABLE LENGTHS TO THE MOTORS: SEE PAGE III-61



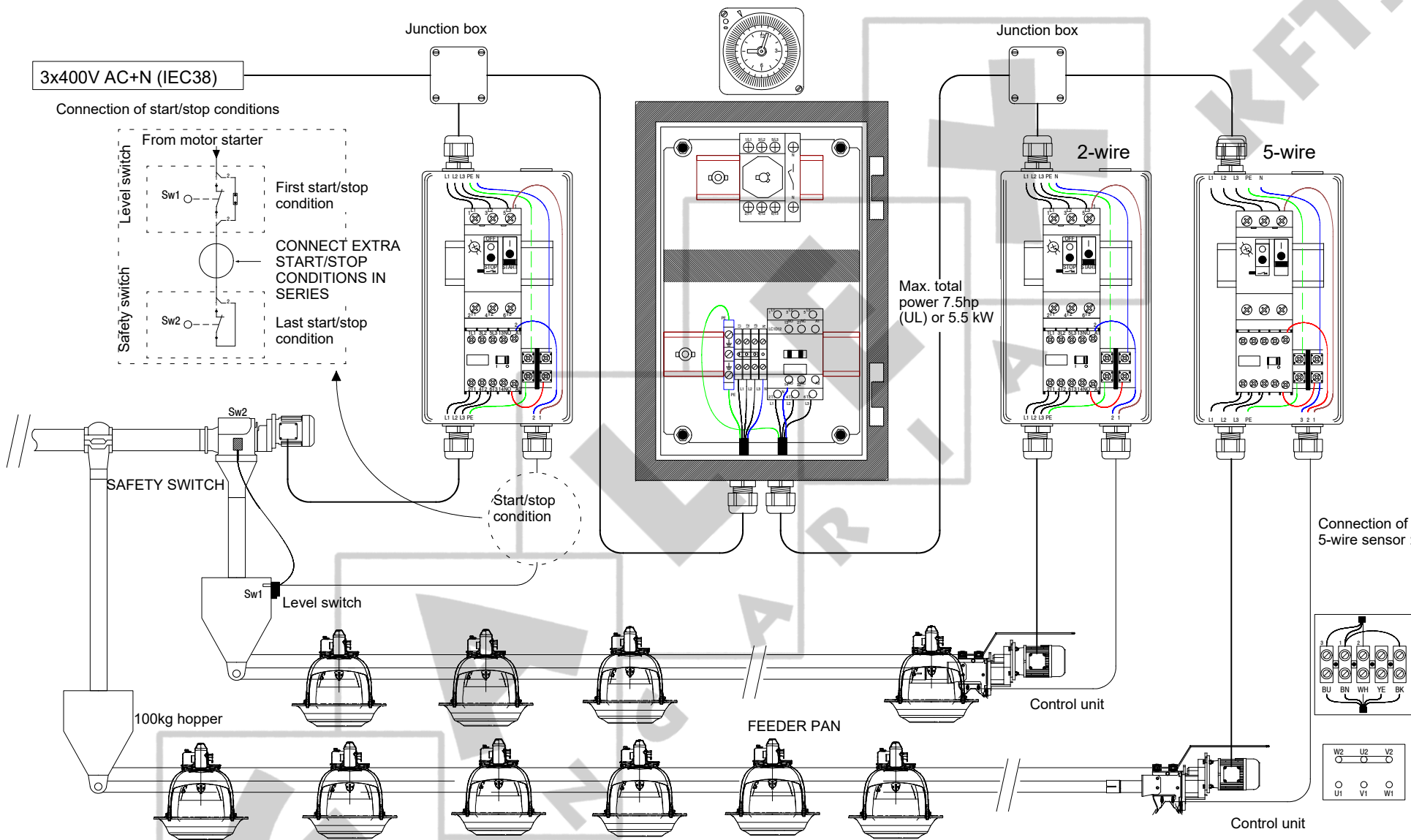
Sense of rotation of the auger : see arrow on power unit. Attention : Compare setting of motor protection with data on motor name plate.

WIRING DIAGRAM FOR 3 X 230 V



Sense of rotation of the auger : see arrow on power unit. Attention : Compare setting of motor protection with data on motor name plate.

MAXIMUM CABLE LENGTHS TO THE MOTORS: SEE PAGE III-61



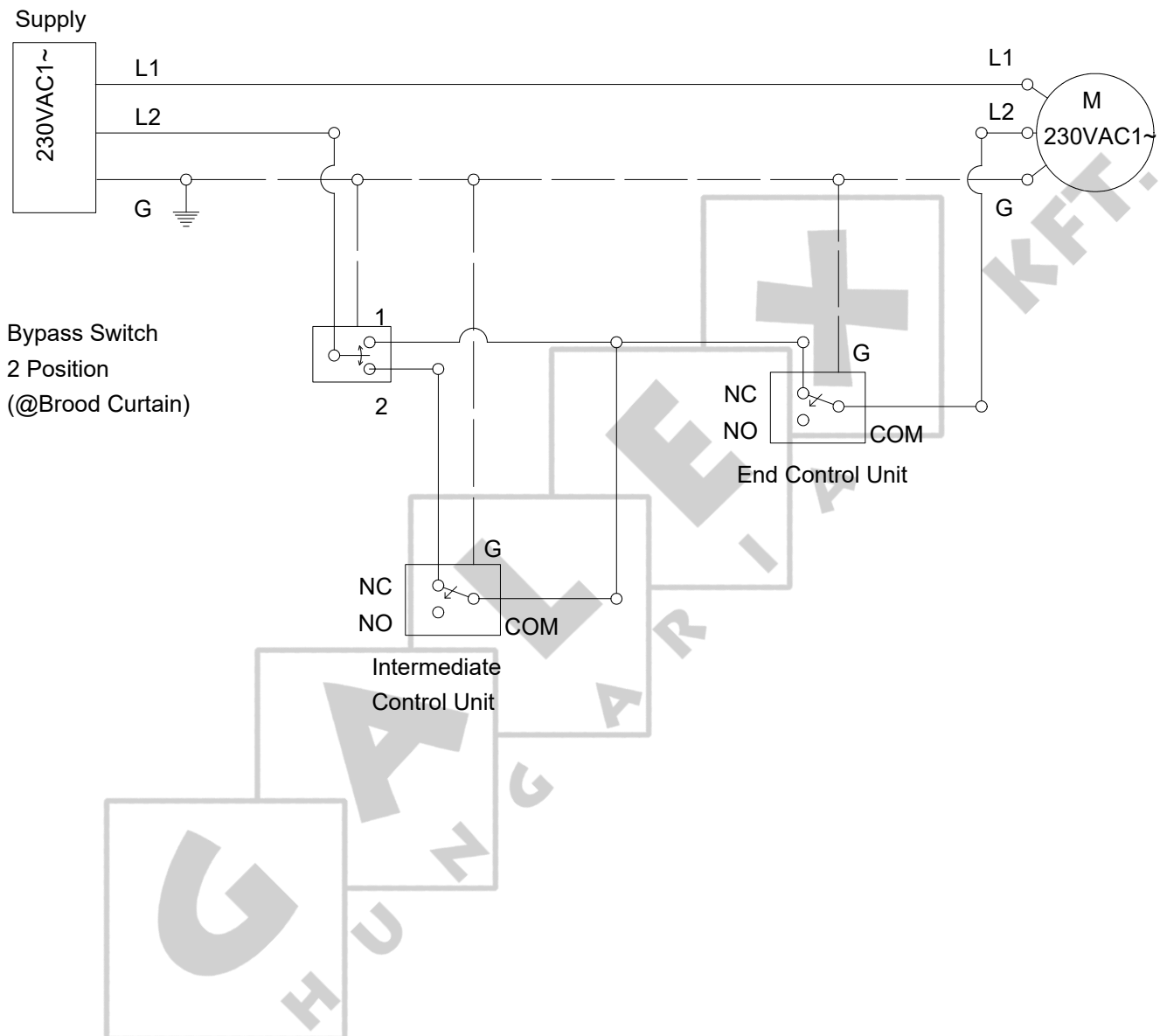
Sense of rotation of the auger : see arrow on power unit. Attention : Compare setting of motor protection with data on motor name plate.

WIRING DIAGRAM FOR 3 X 400 V

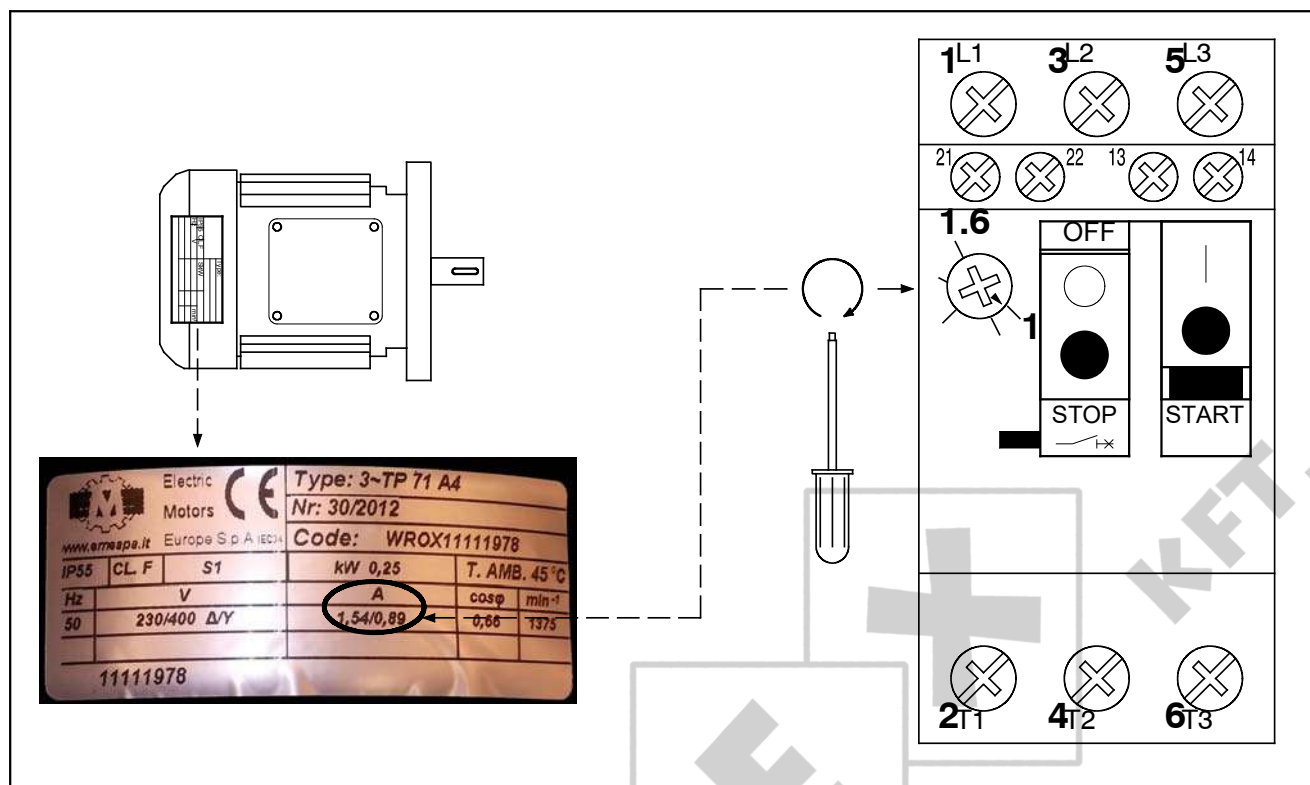
WIRING DIAGRAM FOR SINGLE PHASE MOTORS (SWITCH)

(FOR US ONLY)

MAXIMUM CABLE LENGTHS TO THE MOTORS: SEE PAGE III-61



MOTOR PROTECTION



MAXIMUM CABLE LENGTHS TO THE MOTORS

Calculation method:	IEC-HD 60364-5
Cable type:	PVC – XLPE – Silicon
Placing:	Open cable trough
Materials used:	Schneider Electric GV2 motor protections

Please be aware that you have to follow the local regulations for your country!

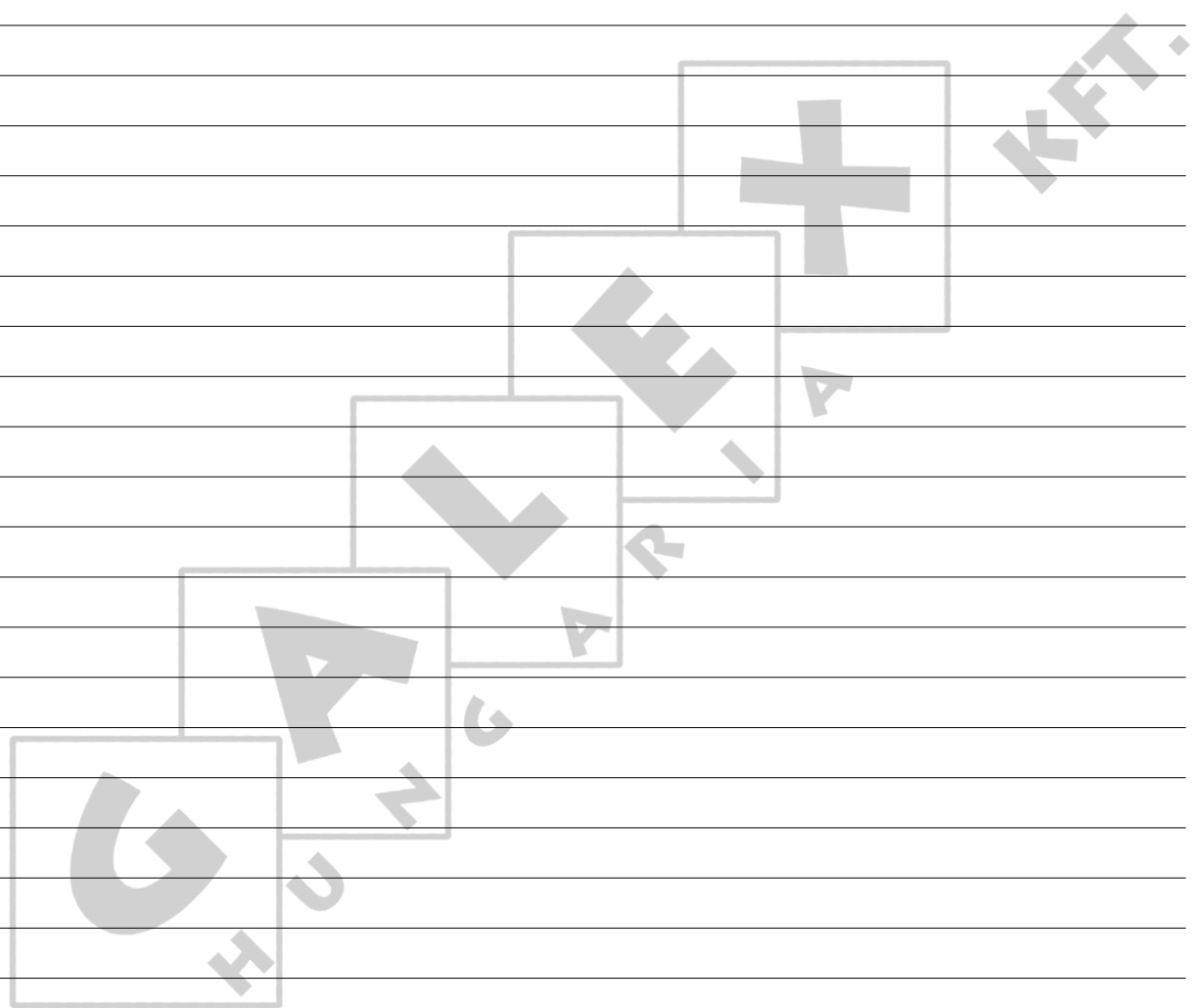
Motor Power (kW)	Net voltage	Protection	Max. cable length (m)	Wire gauge (mm ²)
0.12	3x230V 50Hz	GV2ME04	0 - 442	1.5
			443 - 736	2.5
			737 - 1179	4
	3x400V 50Hz	GV2ME03	0 - 1232	1.5
			1233 - 2053	2.5
			2054 - 3285	4
0.18	1x230V 50Hz	GV2ME07	0 - 110	1.5
			111 - 185	2.5
			186 - 297	4
	3x230V 50Hz	GV2ME06	0 - 174	1.5
			175 - 290	2.5
			291 - 464	4
	3x400V 50Hz	GV2ME05	0 - 492	1.5
			493 - 821	2.5
			822 - 1314	4
0.22	3x220V 60Hz 3x230V 60Hz	GV2ME06	0 - 167	1.5
			168 - 279	2.5
			280 - 446	4
	3x380V 60Hz 3x400V 60Hz	GV2ME05	0 - 471	1.5
			472 - 785	2.5
			786 - 1257	4
0.25	1x230V 50Hz	GV2ME07	0 - 110	1.5
			111 - 185	2.5
			186 - 297	4
	3x230V 50Hz	GV2ME06	0 - 174	1.5
			175 - 290	2.5
			291 - 464	4
	3x400V 50Hz	GV2ME05	0 - 492	1.5
			493 - 821	2.5
			822 - 1314	4
0.37	1x230V 50Hz	GV2ME08	0 - 69	1.5
			70 - 116	2.5
			117 - 185	4
	3x230V 50Hz	GV2ME07	0 - 111	1.5
			112 - 185	2.5
			186 - 297	4
	3x400V 50Hz	GV2ME06	0 - 308	1.5
			309 - 513	2.5
			514 - 821	4

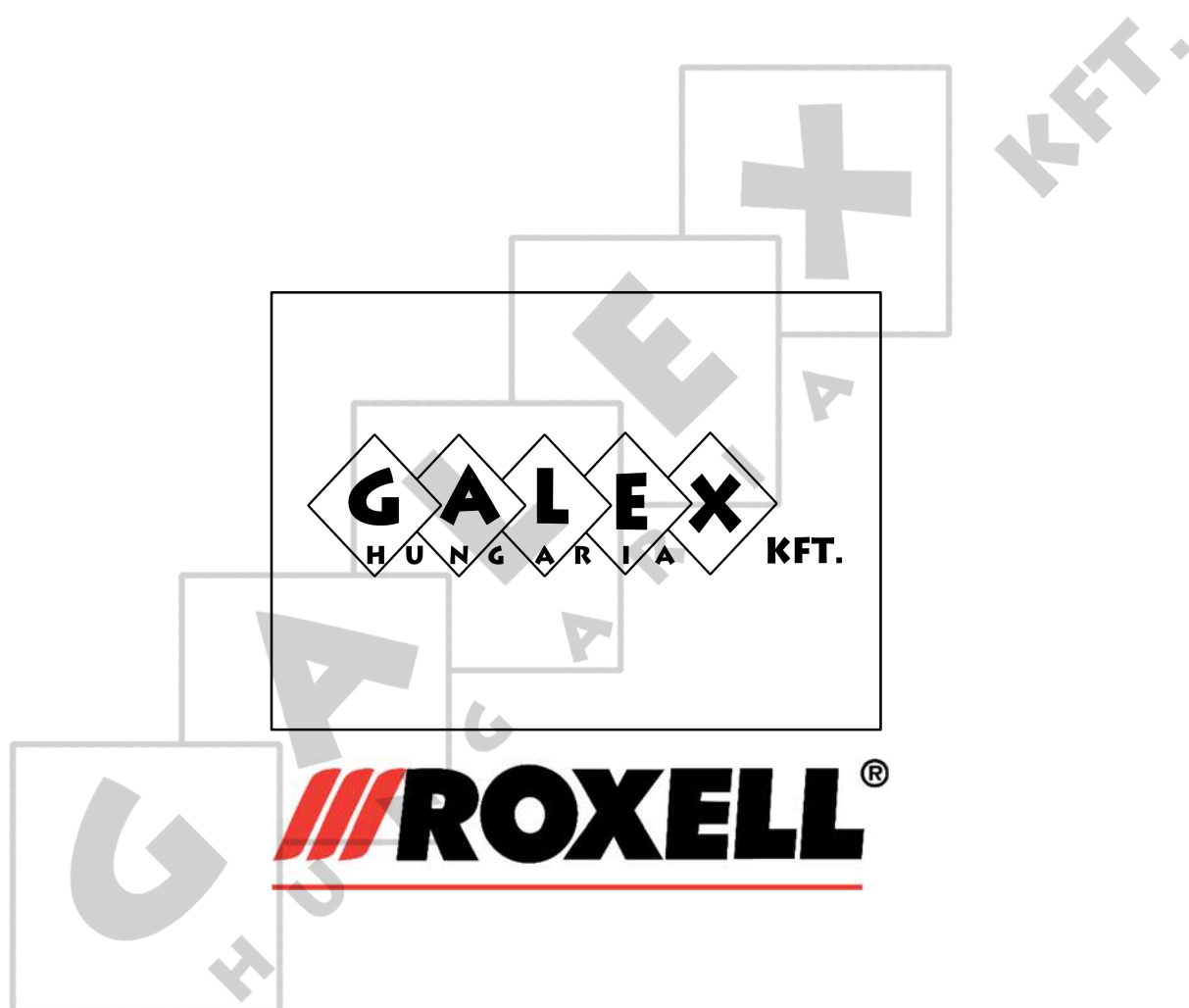
Motor Power (kW)	Net voltage	Protection	Max. cable length (m)	Wire gauge (mm ²)
0.45	3x220V 60Hz 3x230V 60Hz	GV2ME07	0 - 107	1.5
			108 - 178	2.5
			179 - 285	4
	3x380V 60Hz 3x400V 60Hz	GV2ME06	0 - 294	1.5
			295 - 491	2.5
			492 - 785	4
0.55	3x230V 50Hz	GV2ME08	0 - 69	1.5
			70 - 116	2.5
			117 - 185	4
	3x230V 50Hz	GV2ME07	0 - 111	1.5
			112 - 185	2.5
			186 - 297	4
	3x400V 50Hz	GV2ME07	0 - 197	1.5
			198 - 328	2.5
			329 - 525	4
	3x400V 50Hz	GV2ME06	0 - 308	1.5
			309 - 513	2.5
			514 - 821	4
0.75	1x230V 50Hz	GV2ME10	0 - 44	1.5
			45 - 73	2.5
			74 - 117	4
	3x230V 50Hz	GV2ME08	0 - 69	1.5
			70 - 116	2.5
			117 - 185	4
	3x400V 50Hz	GV2ME07	0 - 197	1.5
			198 - 328	2.5
			329 - 525	4
0.9	1x220V 60Hz 1x230V 60Hz	GV2ME14	0 - 26	1.5
			27 - 44	2.5
			45 - 71	4
	3x220V 60Hz 3x230V 60Hz	GV2ME10	0 - 42	1.5
			43 - 70	2.5
			71 - 113	4
	3x380V 60Hz 3x400V 60Hz	GV2ME08	0 - 117	1.5
			118 - 196	2.5
			197 - 314	4
1.1	3x230V 50Hz	GV2ME10	0 - 44	1.5
			45 - 73	2.5
			74 - 117	4
	3x400V 50Hz	GV2ME08	0 - 123	1.5
			124 - 205	2.5
			206 - 328	4
1.32	3x220V 60Hz 3x230V 60Hz	GV2ME14	0 - 26	1.5
			27 - 44	2.5
			45 - 71	4
	3x380V 60Hz 3x400V 60Hz	GV2ME08	0 - 117	1.5
			118 - 196	2.5
			197 - 314	4

Motor Power (kW)	Net voltage	Protection	Max. cable length (m)	Wire gauge (mm ²)
1.5	1x230V 50Hz	GV2ME14	0 - 27	1.5
			28 - 46	2.5
			47 - 74	4
	3x230V 50Hz	GV2ME10	0 - 44	1.5
			45 - 73	2.5
			74 - 117	4
	3x400V 50Hz	GV2ME08	0 - 123	1.5
			124 - 205	2.5
			206 - 328	4
1.8	3x220V 60Hz 3x230V 60Hz	GV2ME14	0 - 26	1.5
			27 - 44	2.5
			45 - 71	4
	3x380V 60Hz 3x400V 60Hz	GV2ME10	0 - 74	1.5
			75 - 124	2.5
			125 - 199	4
2.2	3x230V 50Hz	GV2ME14	0 - 27	1.5
			28 - 46	2.5
			47 - 74	4
	3x400V 50Hz	GV2ME10	0 - 78	1.5
			79 - 130	2.5
			130 - 208	4
2.64	3x380V 60Hz 3x400V 60Hz	GV2ME14	0 - 47	1.5
			48 - 78	2.5
			79 - 125	4

In reality, if the cable lengths are longer than the ones given in the tables above, then you have to take one of the following actions:

- Double the section of the PE (earth connection)
- Increase the section of the phases AND the PE (earth connection)
- Place a earth-leak circuit breaker





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