



HK

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# multi**pack** D14

BALE BUNDLER

INSTRUCTION MANUAL  
SPARE PARTS BOOK







First of all, we would like to express our gratitude for the confidence that you have placed in us and in **ARCUSIN's** technology by acquiring this machine.

The aim of this manual is to act as a guide for the correct use and maintenance of your machine. Carefully read it before starting up your machine or beginning any maintenance work.

We have spent many hours designing and manufacturing this machine and working to make it as efficient and safe as possible. This time will only have been well spent if the person using the machine follows the instructions laid out in this manual.

**All too often it is NOT the machine that causes an accident, but rather the person or people who use it.** A safety-conscious operator and a well-looked-after machine form a safe, efficient and profitable working team.

You should make yourself familiar with all of the controls and instructions and keep this manual at hand so that you can consult it whenever necessary. In this manual you will find useful hints and guidelines that will help you to get the best performance from your machine. You will also find instructions for maintenance and advice about the precautions that need you to take in order to maximise the working life of your machine.



### WARNING!

The operator must familiarise him/her-self with all of the warning stickers on the machine and make sure that they are always correctly positioned and clearly legible. Failure to do this may lead to accidents.

This instruction manual complies with the requirements of **ISO 3600:2022 "Tractors, machinery for agriculture and forestry"**.





### WARNING SYMBOL

This symbol appears in various parts of this manual accompanied by warning messages. It means "**Caution! there is a safety risk**". All messages accompanied by this symbol must be read carefully in order to avoid accidents.

## PRESENTATION

Congratulations on having acquired an **ARCUSIN** Bale Packer, the ideal machine for grouping together all kinds of small bales. This machine has been designed to provide many years of trouble-free service and to offer the highest possible work rates.

The machine also comes with all the usual ARCUSIN quality control and after-sales service guarantees. Once more we congratulate you on your choice and recommend that you read this instruction manual carefully before using your new machine. In this way you will get the most out of your **MultiPack D14** Bale Packer

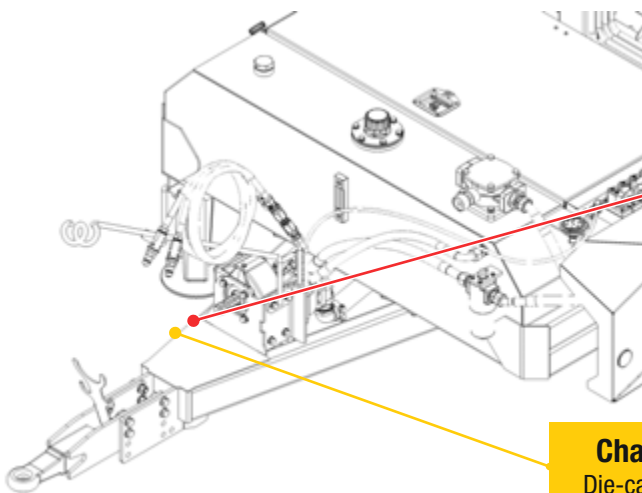


## IDENTIFICATION PLATE

Please take note of the specific details of your machine. These appear on its identification plate (see the illustration at the bottom of the page). If you should ever need to consult us about any technical questions, and when you need to order spare parts, it will save everyone a lot of time if you can quote us these details.

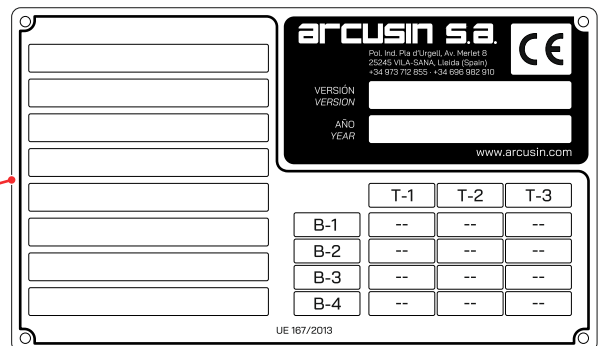
The identification plate is located on the chassis, at the front of the machine. You will find it in the middle of the main axle.

Whenever you make any enquiries, whether by telephone or in writing, always give us the following details: **VERSION, SERIAL NUMBER** and **YEAR OF MANUFACTURE**.



**Chassis number**  
Die-cast on the chassis

IDENTIFICATION PLATE





## MAINTENANCE AND SERVICING

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To optimise its performance and minimise its operating costs, this machine needs to be properly looked after. The user must therefore strictly adhere to the maintenance and servicing programmes laid out in this manual. The maintenance and servicing tasks described in this manual can be carried out perfectly well by the machine operator, providing that he/she closely follows the instructions given.

## DELIVERY INSPECTION

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Before leaving the factory, your **ARCUSIN** Bale Packer has been put through a series of exhaustive checks. We have tested each of its working cycles and have also checked all of its operational circuits, on both an individual and combined basis. We can therefore guarantee that your machine reaches you in perfect working order. Even so, it is still important to carry out a further series of preventive checks during the first few days of operation. These checks include the tightening of bolts and the making of visual inspections (to detect any possible anomalies) etc...

When you receive your machine, we still recommend that you carry out your own visual inspection, just to ensure that it has arrived in perfect condition and has not suffered any damage in transport. If you do detect any damage, bring this to the immediate attention of the transport agent and inform ARCUSIN S.A. as soon as possible.



### IMPORTANT:

This Bale Packer has been exclusively designed for use on agricultural exploitations and under normal agricultural working conditions (the machine should only be used in accordance with its specific characteristics and as indicated in this manual). **ARCUSIN S.A. CANNOT be held responsible for the possible consequences of the machine's use under any other conditions that are not normal for its design characteristics.**

If this machine is used for any other purposes, such use takes place entirely at the user's own risk.

The correct use of this machine also implies following the manufacturer's instructions with regards to handling, maintenance and repair.

This Bale Packer must only be handled, maintained and repaired by people who are familiar with its specific details and operations and who are fully aware of the potential risks that these may imply.

All of the safety procedures outlined must be strictly observed, as must all of the legal requirements relating to public health and road traffic.

**ARCUSIN S.A.** shall not be responsible for any potential modifications to the Bale Packer carried out without previous express permission.

Example of the **EC Declaration** of conformity according to the Directive 2006/42/CE, delivered together with the documentation of the machine. Detailed in it are the **Harmonised Directives and Standards used to produce the Technical file of the machine.**



**ARCUSIN s.a.**

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Telf.: +34 973 71 28 55 · Fax: +34 973 60 42 57

**Declara bajo su única responsabilidad que la máquina**

Marca:  Tipo:

Variante:  Versión:

Denominación comercial:

Nº de serie:  Año de fabricación:

Persona facultada para elaborar el expediente técnico establecida en la comunidad:

Responsable Oficina Técnica ARCUSIN: Pere Corral Vistué

A la que se refiere en este certificado se halla en conformidad con los requisitos esenciales de seguridad y salud incluidos en:

· EIANEXO 1 del R.D. 1644/2008 de 10/10/2008 de aplicación a la Directiva de máquinas 2006/42/CE.  
(desde el 29/12/2009)

**Para la correcta aplicación de los requisitos de salud y seguridad establecidos en las directivas de referencia se han tenido en cuenta las siguientes normas técnicas armonizadas:  
ISO 12100:2010**

Para la correcta aplicación de los requisitos de seguridad y las verificaciones que hay que tener en cuenta en el diseño y construcción de las máquinas agrícolas se ha tenido en cuenta la norma técnica armonizada:

**EN 1853:1999.- Maquinaria agrícola. Remolques con caja basculante. Seguridad**

Identificación de la persona apoderada para redactar la declaración en nombre del fabricante o su representante autorizado:

Nombre: **Manuel**  
Apellidos: **Cusiné Barber**  
Cargo: **DIRECTOR TÉCNICO**

FIRMA:

Vila-Sana, \_\_\_\_ de \_\_\_\_ de \_\_\_\_



**For your warranty to be valid** (and receive the guaranteed services you require), **it is essential that:**



The manufacturer is in possession of the "**certificate of delivery and warranty**", duly completed with all details of the final customer.

**The warranty conditions are described in the back of the "Certificate of delivery and warranty".**



**CERTIFICADO DE ENTREGA Y GARANTÍA**  
**CERTIFICATE OF DELIVERY AND WARRANTY**

Ingeniería y fabricación de maquinaria agrícola

---

**INFORMACIÓN DE LA MÁQUINA - MACHINE SPECIFICATIONS**

<p>MARCA - BRAND</p> <input type="text" value="ARCUSIN"/>	<p>TIPO - TYPE</p> <input type="text"/>
<p>Nº DE SERIE - SERIAL No.</p> <input type="text"/>	<p>VARIANTE - VARIANT</p> <input type="text"/>
<p>AÑO - YEAR</p> <input type="text"/>	<p>VERSIÓN - VERSION</p> <input type="text"/>

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**INFORMACIÓN DEL CLIENTE/COMPRADOR - CUSTOMER/BUYER DETAILS**

<input type="checkbox"/> Cliente <b>DIRECTO</b> - DIRECT Customer	<input type="checkbox"/> Cliente <b>DISTRIBUIDOR</b> - DEALER Customer
---	--

**DATOS DEL CLIENTE FINAL / END CUSTOMER DETAILS:**

**NOMBRE COMPLETO - FULL NAME**

<p><b>DIRECCIÓN - ADDRESS</b></p> <input type="text"/>	<p><b>CÓDIGO POSTAL - POSTAL CODE</b></p> <input type="text"/>
<p><b>POBLACIÓN Y PROVINCIA - TOWN AND PROVINCE</b></p> <input type="text"/>	<p><b>PAÍS - COUNTRY</b></p> <input type="text"/>

<p><b>TELÉFONO/S DE CONTACTO - CONTACT TELEPHONES</b></p> <input type="text"/>	<p><b>E-MAIL</b></p> <input type="text"/>
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La entrega ha sido efectuada correctamente y queda entendido que la garantía, cuyas condiciones figuran en el dorso, me han sido detalladamente explicadas y por mi aceptadas, es efectiva a partir de la fecha de hoy, indicada a continuación.

*The delivery was made correctly and the warranty, whose conditions are on the back were fully explained and accepted by me, is understood to be effective as of today's date, indicated below.*

<p>Fecha de entrega de la máquina e <b>inicio</b> de la garantía: <i>Date of delivery of the machine and start of the warranty:</i></p> <input type="text"/>	<p>Fecha de <b>finalización</b> de la garantía: <i>End date of the warranty:</i></p> <input type="text"/>
--	---

Firma y sello del fabricante o distribuidor  
*Signature and stamp of manufacturer or dealer*

Firma del comprador o persona legalmente autorizada  
*Signature of client or a legally authorized person*



**VERY IMPORTANT**

Please note that any warranty **will be rejected if the product has not been used as authorized** in the instruction manual, **OR IF:**

- Has been handled, converted or amended, without prior authorization from your official dealer or by ARCUSIN.
- Maintenance has not been performed during the warranty period as specified by ARCUSIN in the instruction manual.
- The repair work has not been performed by an official dealer or personnel authorized by ARCUSIN.



### **Information and conditions of the guarantee**

---

For your own interest and for your guarantee to be valid (and for you to receive the services you need that are covered by the guarantee) it is fundamental that:

- The manufacturer is in possession of the document "Delivery and Guarantee Certificate", duly completed and with all the details of the end client.
- ARCUSIN guarantees all new products it has manufactured in case of any material or manufacture defects found and recognised by the Company's technical services during a period of ONE YEAR starting from the date indicated on this certificate.
- The responsibility of the manufacturer is limited to replacing or repairing any parts recognised as defective, not including the costs for displacement, transport, oils or personal damage or harm that the failure may have caused.

### **Exclusions of the guarantee**

---

- If the machine has not been used in the authorised manner described in the instruction manual.
- If it has been manipulated, converted, or modified, without previous authorisation from ARCUSIN.
- If maintenance has not been performed according to the specifications established by ARCUSIN in the instruction manual.
- If repair work has not been performed by an official concessionaire or personnel authorised by ARCUSIN.

Also excludes:

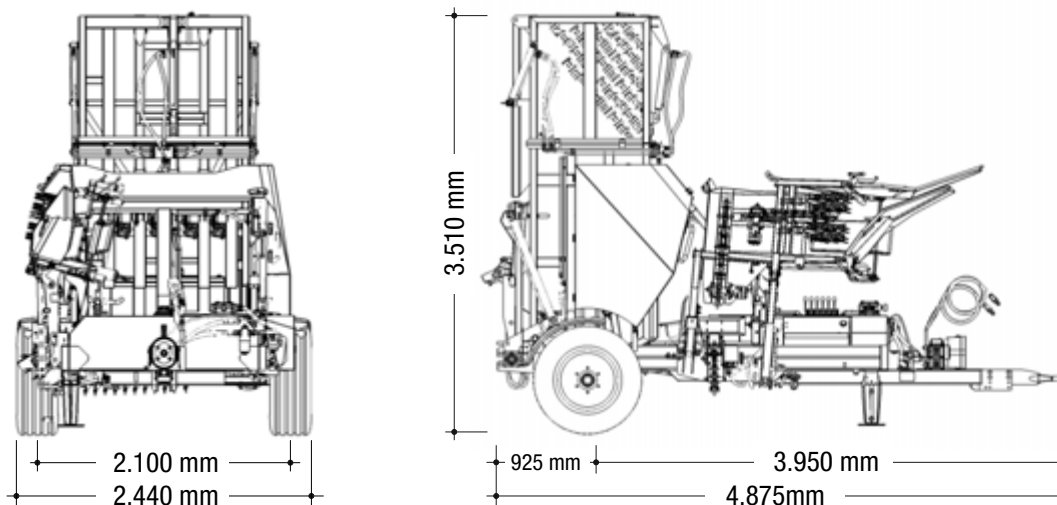
- Components manufactured by other companies (i.e. not manufactured by ARCUSIN, such as pumps, motors, other hydraulic or pneumatic components, etc.) will only be covered by the guarantee granted by those companies if any defects appear in the material or in their manufacturing process.
- Indirect consequences (down time, time lost, etc.)
- Replacement of worn parts due to use (consumables, such as power take-offs, filters, covers, brake discs, rubber, friction guided elements, etc.)
- Damage caused by external influences or force majeure, such as accidents, impacts, scratches, scuffs, bad weather, lightning strikes, fire, floods, earthquakes, war, etc.
- Damage caused by insufficient or inadequate maintenance.
- Damage caused by handling hydraulic control components without previous authorisation from the official concessionaire or ARCUSIN.
- Damage caused by using parts that are not original or authorised by ARCUSIN.
- Any attempt to manipulate the information registered in the robot or control box, as well as any operational parameters (counters, timers, rpm limiters).
- Any vehicle that is not properly registered (number plate, registered, insured, etc.) according to the minimum traffic requirements of the country of residence.

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**1.1. PHYSICAL DIMENSIONS AND CHARACTERISTICS**



**1.2. TECHNICAL CHARACTERISTICS**

**TRACTOR**

Minimum power requirement, at least **90 HP** (according to the lie of the land)

**COUPLING TO THE TRACTOR**

Mechanical: Ring coupling according to norm **UNE 68015**

Electrical: Standardised seven-pin plug **UNE 26170**

Hydraulic: 1/2" rapid plug for moving the pick up

**POWER TRANSMISSION**

Output from tractor PTO of **540 rpm**.

**HYDRAULIC SYSTEM**

Variable capacity of axial piston pump	60 cc
Multiplier relation	1:4
Maximum flow at 540 rpm	130 l/m
Oil tank capacity	150 L
Maximum temperature of hydraulic circuit	80°

**ELECTRICAL SYSTEM**

System tension **12 V**

Fuse **10 Amp**

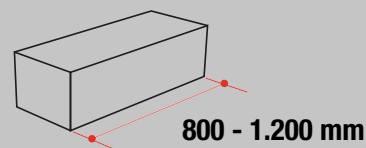
**BRAKE SYSTEM**

With chocks

**SOUND LEVEL**

The level of sound produced by the machine's **PTO** and hydraulic group is minimal in comparison with that produced by the tractor that tows the machine (**< 50 db**).

**Rectangular straw bales or other type of DRY grass**



**TABLE OF WEIGHTS AND LOADS**

On the coupling	⇒	<b>580 Kg</b>
On the wheel axle	⇒	<b>2.400 Kg</b>
TARE	⇒	<b>2.980 Kg</b>

### 1.3. WORKING PARTS

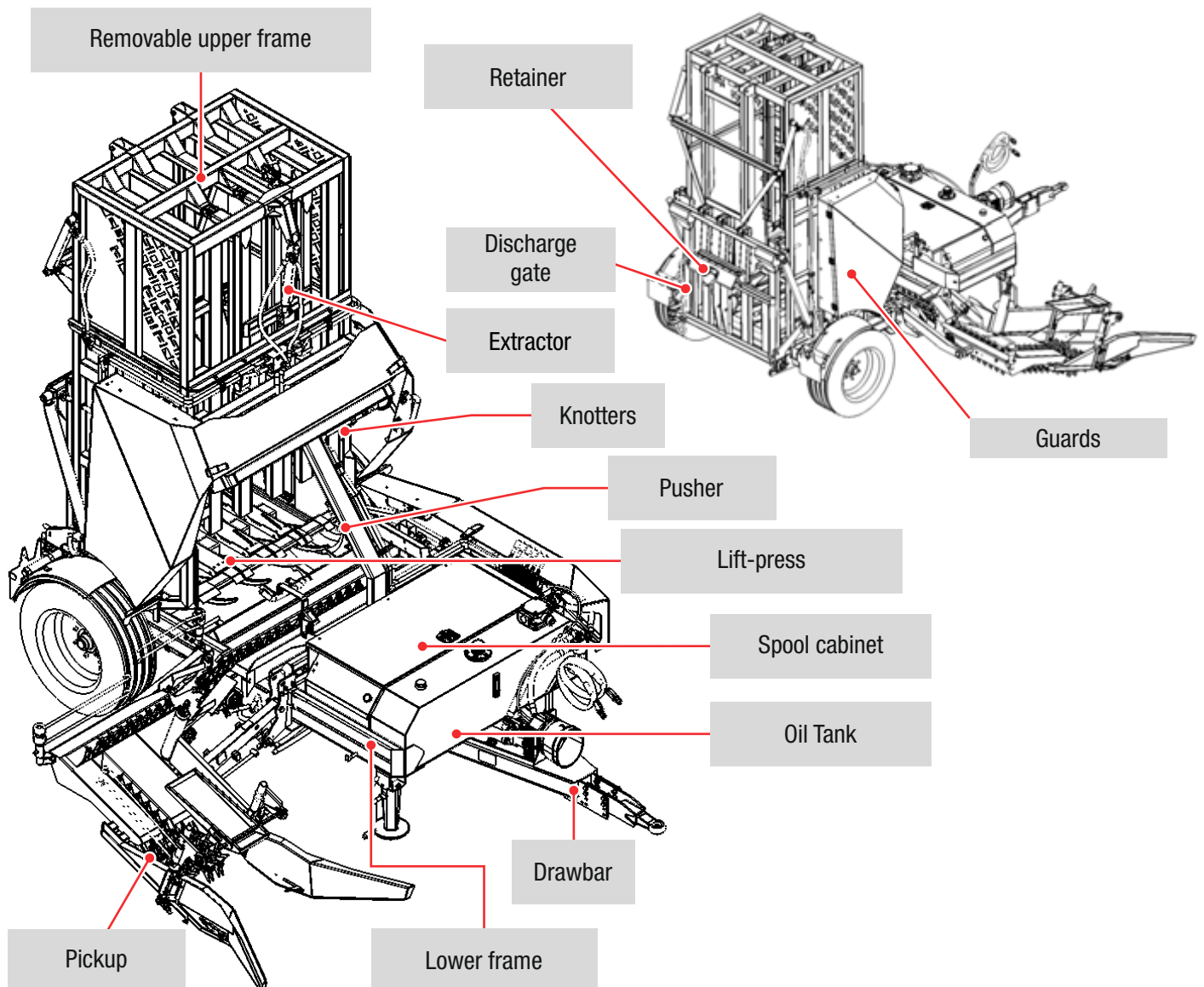


#### ATTENTION!

The **Multipack D14** is a machine that is towed behind a tractor to which it is connected by means of an offset drawbar. The power required for its operations is supplied by the tractor's PTO.

This machine has been specifically designed for agricultural use. It is a machine designed to group together small rectangular bales made of straw or other types of **DRY** fodder. The machine presses and packs small bales to make a large bale package.

This machine must not be driven or operated by anyone who is not familiar with the layout and functions of its instruments and controls. On receiving a new machine it is very important to read the instructions manual with due care and attention and to become familiar with the different parts of the machine and their functions before starting to work with it. The machine is managed and controlled by one only operator inside of the tractor. **The machine operator is the responsible of it and everything around, the operator must to control the safety limits of the machine at all times.**



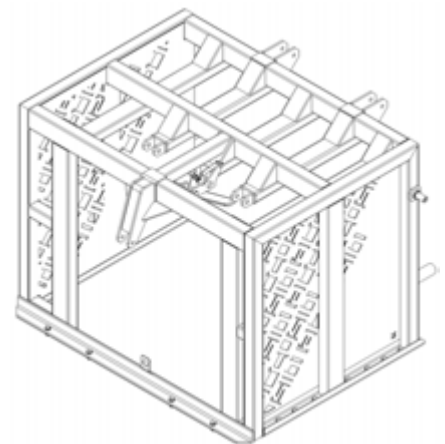


**CAUTION!**

- The operation and performance of the machine cannot be guaranteed if the bales are wet or damp as a result of water absorption (due to bad weather and/or other factors)
- The manufacturer cannot be held responsible for the consequences of inappropriate uses of the machine that are not covered by this manual. In such cases, any risks and responsibilities are assumed by the operator.
- The manufacturer cannot be held responsible for any modifications made to the Multipack without the manufacturer's prior authorisation or permission.

**REMOVABLE UPPER FRAME**

This is the upper part of the chassis structure.  
This piece can be disassembled for transportation over long distances.

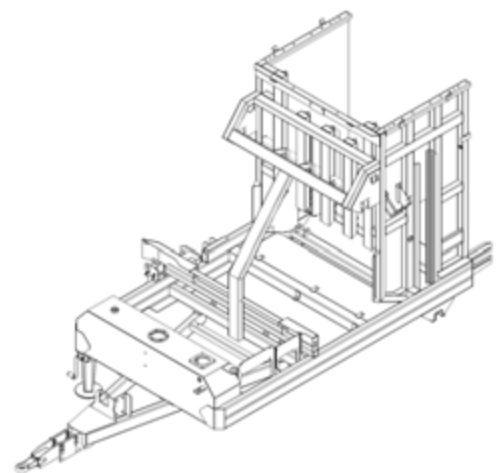


**CAUTION!**

Whenever separating the upper from the lower frame, must make sure that you dismantle all of the mechanical connecting pieces and disconnect both the electrical and hydraulic connections.

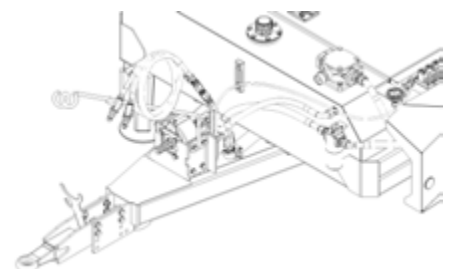
**LOWER FRAME**

This is the group of pieces on which most of the machine's components are mounted.  
It is one of the most important parts of the machine, as it gives rigidity to the whole structure.  
The frame is mounted on a two-wheeled axle and is connected to the tractor by means of a drawbar.  
It comprises a horizontal base and a vertical structure. The upper part of the latter is attached to the upper frame. The space inside the vertical frame is referred to as the bale pressing chamber.



**DRAWBAR**

This is the element that connects the machine to the tractor.





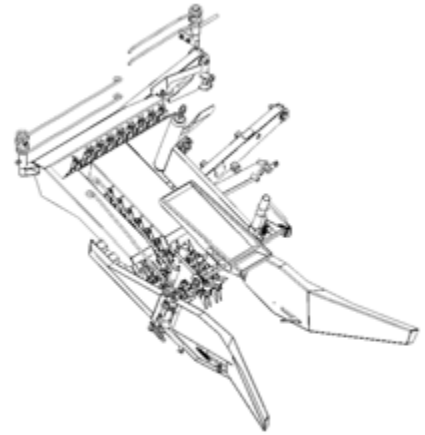
### BALE PICK UP

This is the part of the machine that picks the bales up from the ground and places them on the lower frame. The bale feeder arm makes sure that they are correctly positioned.

The pickup is mounted on the front part of the lower frame.

It has two positions:

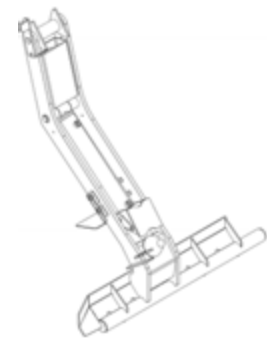
- **Working position. (down)**
- **Transport position. (up)**



### PUSHER

This is the part of the machine that feeds bales into the bale pressing chamber. It feeds each bale into the lift-press.

This piece is mounted on the lower part of the chassis and is located next to the pickup.

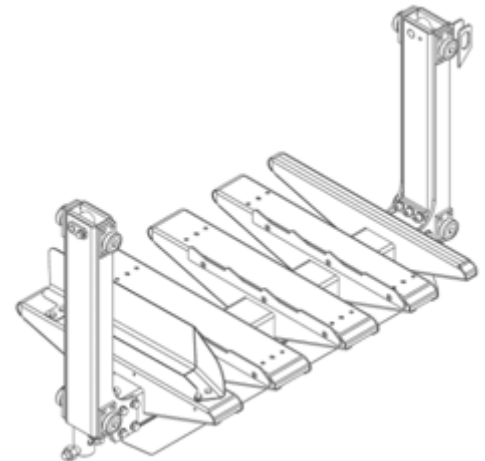


### LIFT-PRESS

**This part of the machine has a dual function:**

1. It feeds the bale pressing chamber by means of a guided vertical movement.
2. It compresses the bales once the bale pressing chamber has been filled and just before the large bale group is tied.

It is mounted inside the bale pressing chamber.



### TWINE TENSING AND RETRIEVAL MECHANISM

This mechanism is located below the lower frame.

Its function is to guide the twine as it comes off the spools and to keep it taut. It also has the function of retrieving the twine left over after every movement of the lift-press.

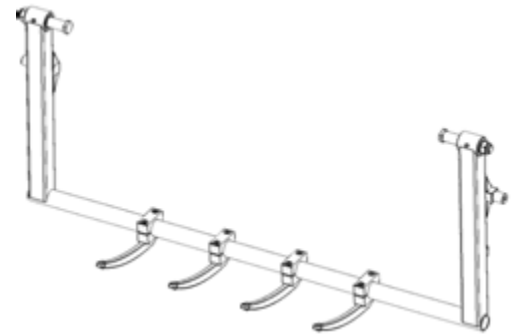


### IMPORTANT

This mechanism must be correctly adjusted in order to obtain the best possible results. Make sure that the tension is correctly set.

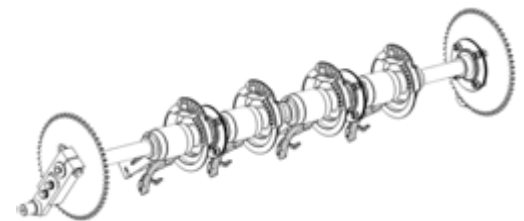
**NEEDLE SUPPORT**

In its rest position, this mechanism is located on the lower part of the frame. When operating, it describes a circular movement, taking the twine and threading it through the needles and onto the knotters. This operation is carried out after the bales have been compressed and grouped together to form one large bale.



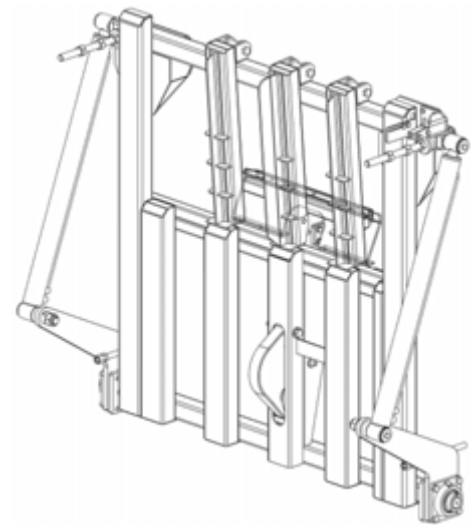
**KNOTTERS**

These synchronised mechanisms are located on the front part of the machine. Their function is to tie the bales together once they have been compressed and to thereby form one large bale.



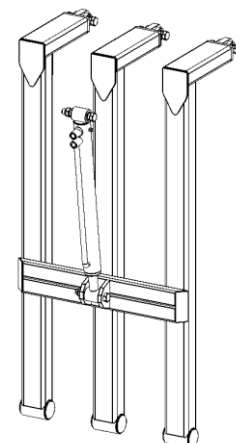
**DISCHARGE GATE**

The discharge gate is located at the rear end of the lower frame. It forms the back of the bale pressing chamber and also closes it. Once the bales have been compressed and tied, the resulting large bale is rotated and pushed out through this gate and deposited on the ground. The retaining frame is mounted on the structure of the discharge gate.



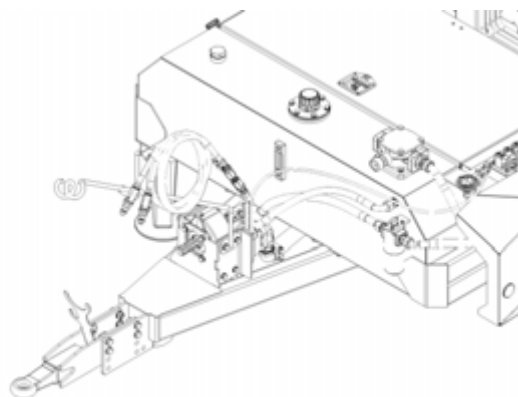
**EXTRACTOR**

The extractor is a mechanism which helps to unload the large bale group once it has been compressed and tied. It is located above the knotters on the front part of the upper frame.



**HYDRAULIC UNIT**

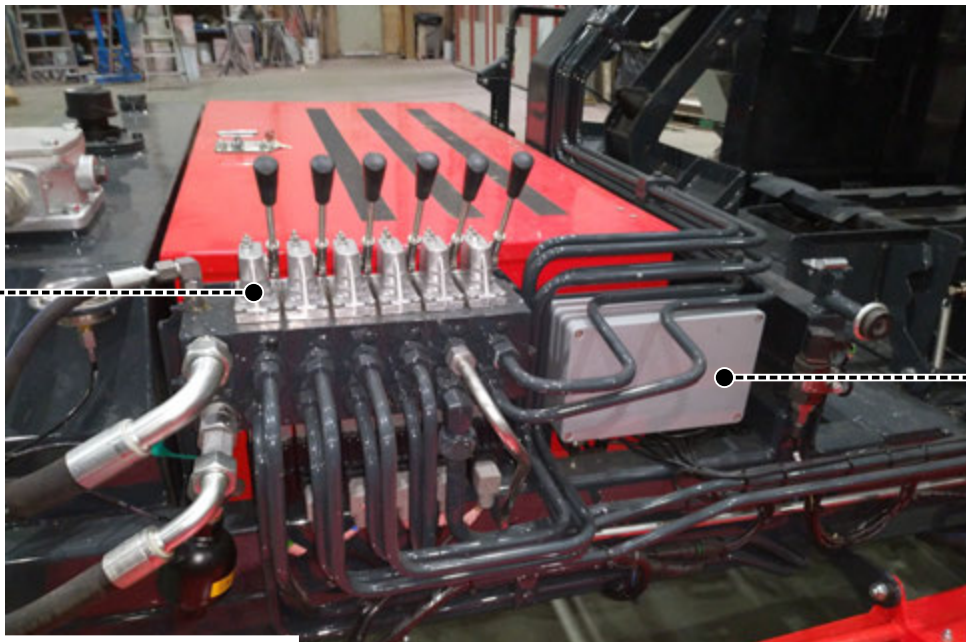
This is the set of elements responsible for supplying the power that the machine requires to carry out its functions.  
It is supplied via the tractor's PTO.  
It is located on the front part of the lower frame

**WARNING !**

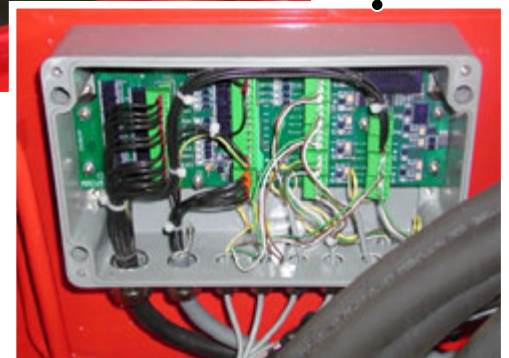
Always run the PTO at 540 rpm.  
ARCUSIN S.A. cannot be held responsible for any failure to comply with these instructions.

1.4. HYDRAULIC CIRCUIT AND CONTROLS

This is the combination of a series of elements that combine together to operate the different parts of the machine in a controlled and automatic way. The working sequence of each movement is indelibly recorded in the memory of a microprocessor and cannot be altered by the machine user.



Central wiring console



Hydraulic block



Control console



**WARNING !**

The regulated pressures of the different circuits **MUST NOT** be modified.

The settings of the machine's electronic components **MUST NOT** be modified.

Do **NOT** wash the area around the central wiring console using pressurised water.

**ARCUSIN S.A.** cannot be held responsible for any failure to comply with these instructions.

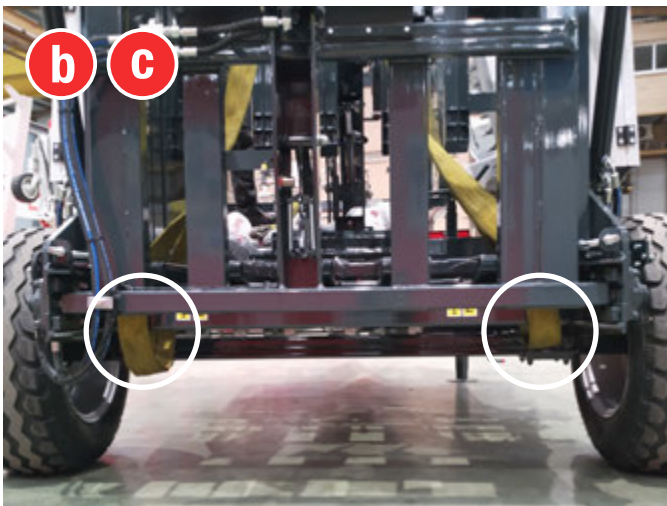
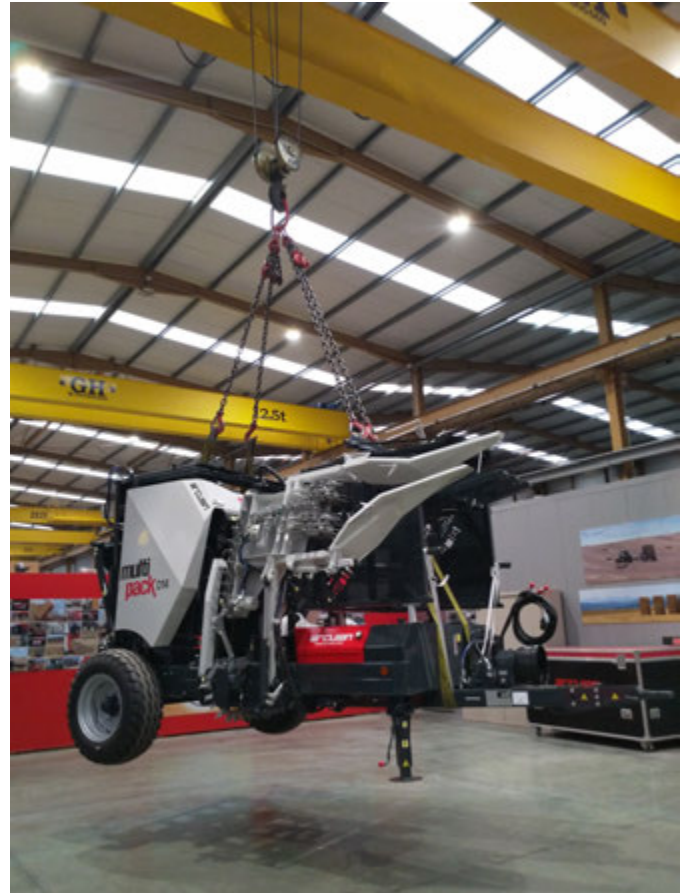
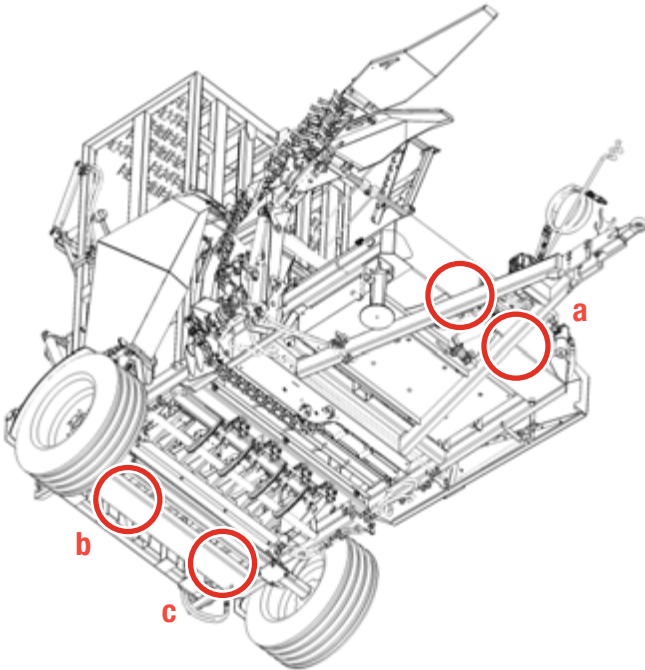




2.1. LIFTING POINTS



If the machine needs to be raised or suspended, fasten it by the lifting points. These are marked with the corresponding stickers.



**WARNING! VERY IMPORTANT**

The bale packer has a weight of **3,000 kg** (approximately); **make sure that suitable lifting elements are used.** *The company will not be held responsible for any breach of this rule or for any possible damages caused by such breach.*

### 2.2. BALE PACKER ASSEMBLY

Your **MultiPack D14** packer for small bales will be delivered with some of its parts disassembled for transportation reasons. All the steps to be followed in order to unpack and assemble your new purchase are detailed below.



**IMPORTANT!** Use personal protective equipment

The assembly process must be performed **by TWO operators** for reasons of **safety and practicality**.

#### 2.2.1. UNPACKING THE BALE PACKER



**IMPORTANT!**

Before cutting the safety and securing elements, secure the load by holding the removable upper frame.

Once the removable upper frame has been secured, disconnect it from the transport tool (*remove fasteners between the transport tool and upper frame*) and then, **using extreme caution, lift it using a lifting tool** (*gantry crane, forklift etc.*) and place it in the desired location. Once the upper frame has been unloaded, proceed to completely remove the transport tool.

#### Parts and material inside the spool cabinet:

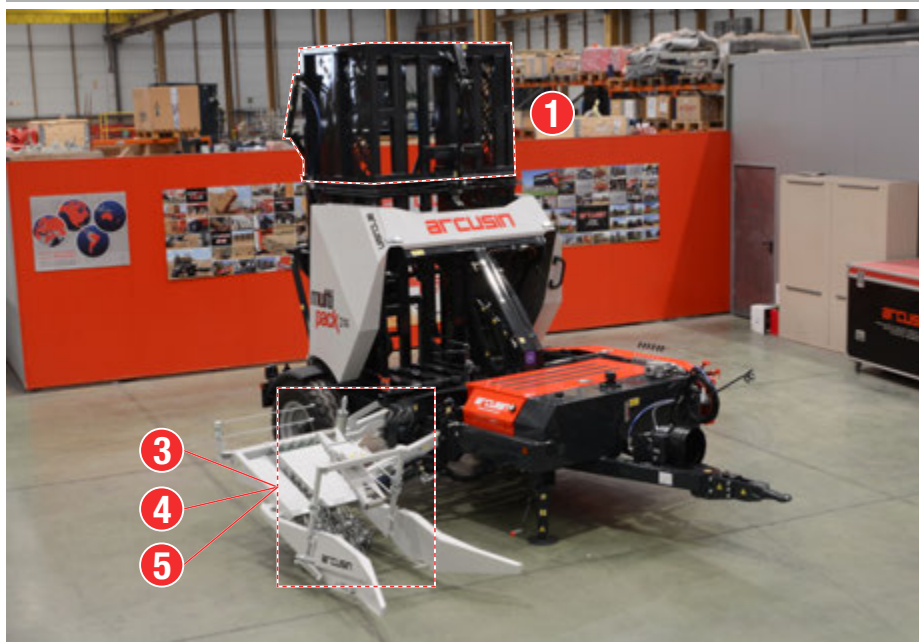
1. Pick-up side spring pillars
2. Lift base side rail (See Adjustments section)
3. Pick-up upper follower.
4. Pick-up bale turner pivot
5. Cable support
6. Hitch safety chains (See Startup section)
7. Control box support
8. Control box (See Start up section)
9. Distribution block levers.
10. Screws
11. Dark grey spray paint and Arcusin grey spray paint.

**NOTE:** The key to open the box is located inside the bag that contains the documentation.





2.2.2. ASSEMBLING THE BALE PACKER



**Please assemble the following:**

1. Upper frame
2. Mudguards (both sides)
3. Upper follower
4. Side springs
5. Bale turner pivot

2.2.2.1. **1** UPPER FRAME



**Support the extractor before cutting the securing elements.** With the extractor in a safe position, cut the securing elements and lower it to the ground slowly to prevent it hitting hard. *(use the lift)*

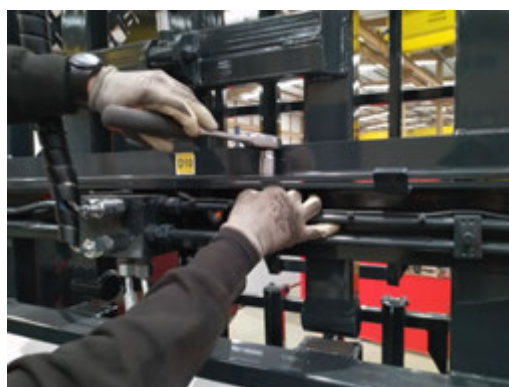


**FITTING THE UPPER UNLOADING HATCH**

Safely support the upper unloading hatch on the upper removable frame using a lift.

**Locate and bolt in place.**

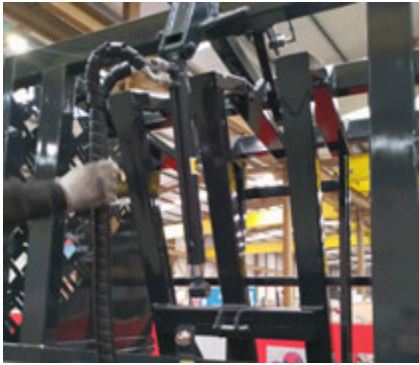
When assembled, lower it to the ground slowly to prevent it hitting hard.



**UPPER FRAME**

Assemble the removable upper frame with **extreme caution**.

Use a ladder or platform and take precautions to avoid falling. **Position and screw.**

**EXTRACTOR CYLINDER**

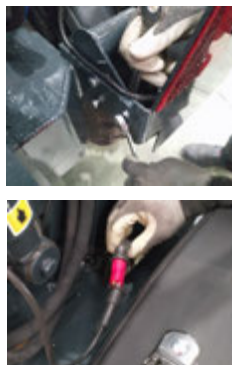
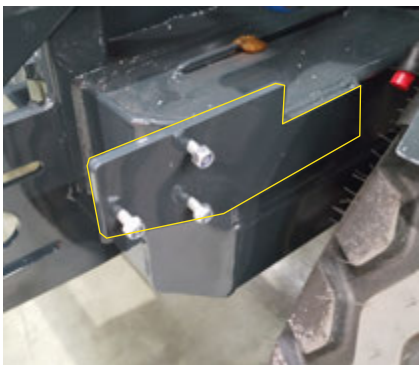
Assemble the extractor cylinder, located in the removable upper frame.

**DISCHARGE GATE CYLINDERS**

Assemble the upper discharge gate cylinders (x2), located in the removable upper frame.

**D10 DETECTOR**

Connect the D10 detector.

**2.2.2.2. 2 MUDGUARDS**

**Screw mudguard assembly**, signal lights and registration plate onto the plate shown (*both sides*).

Next, **connect** the signal light connectors.



2.2.2.3. **3 4 5** PICK UP



Traba seguridad

The safety cover must be removed from the pick up and then lowered to its working position in order to proceed with the assembly of the parts.



**WARNING!**

See the **ADJUSTMENTS** section of this instruction manual.

**FOLLOWER SUPPORT PILLAR**

Fit the outer pillar with the spring in the position shown (until the inner stop). Adjust the pillar so that the spring is in the desired position

Use the fixing screws to lock it in place on the bottom of the pick-up frame.



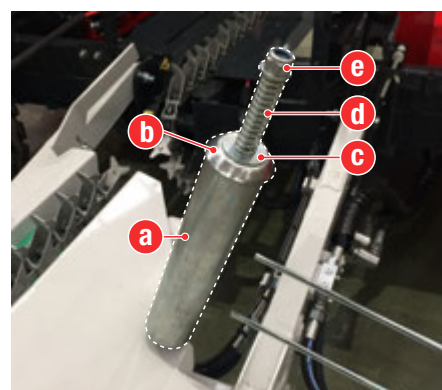
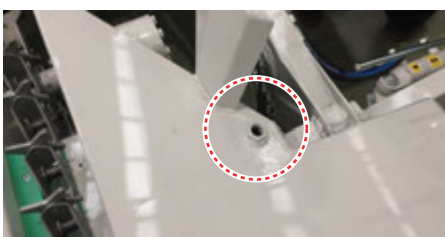
**UPPER FOLLOWER**

Mount the follower mechanism at the desired height and fix to the support pillars with the round steel U-bolts.



**BALE TURNER PIVOT**

Fit the bale turner pivot in place.



1. Locate the bar and fix it in place with the nut at the bottom.

2. Proceed by fitting the parts on the bar:

- a. Pivot cylinder
- b. Cup
- c. Washer
- d. Spring. Attention! Danger. Take suitable precautions when fitting the spring.
- e. Fix the assembly with the nut.



## 2.2.2.4. OTHERS


**BLOCK LEVERS**

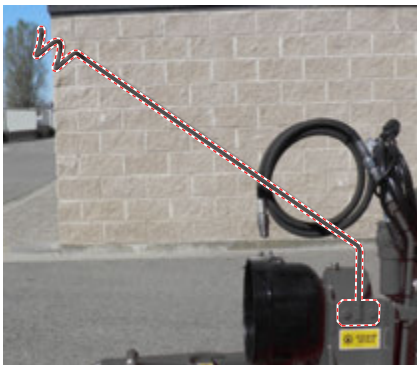
Assemble the distribution block levers.


**SHUTTLEMOTOR PROTECTOR**

Assemble/Screw on the motor protector plate of the shuttle chain.


**SHUTTLE INFEED GUIDE**

Locate and fit the shuttle infeed guide.


**CABLE SUPPORT**

Close to the PTO protective housing.


**CONNECT D6 DETECTOR**

## IF TRANSPORTED IN A CONTAINER:

If transported in a container, as well as following the steps for assembly described above, you must also:


**SHUTTLE CHAIN**

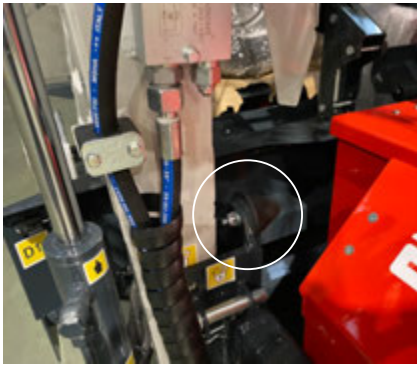
 Fit the shuttle chain (*kept inside the spool cabinet*).

**UNLOADING HATCH**

 The unloading hatch will be fully closed. It must be adjusted again in order to work. *Refer to the ADJUSTMENTS chapter.*

**HITCH**

Fit the hitch at the front part of the machine.



**PICK-UP UP STOPPER  
SILENTBLOCK**

Fit the pick-up “up” position stopper silentblock so it is facing the other way.



**WHEELS AND HUBCAPS**

Fit the wheels and hubcaps. The wheels are held in the lift-press and the hubcaps are in a bag, near the axle.



**PICK-UP EXTERNAL GUIDE**

Fit the pick-up external guide. It is kept inside the spool cabinet.







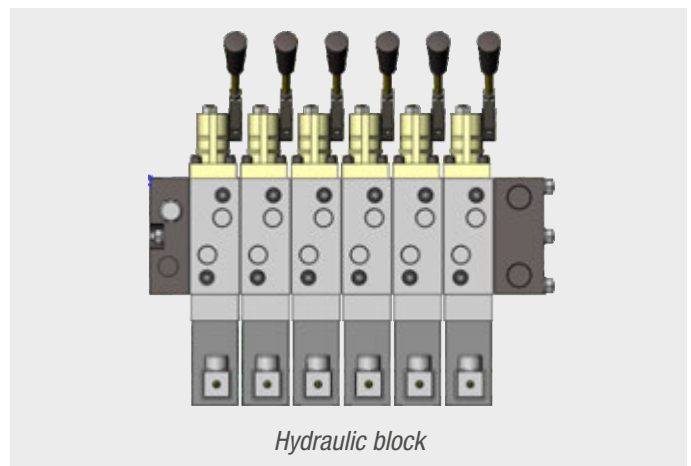
**ATTENTION!**

For both your own safety and the correct functioning of the machine, it is essential that you carefully read the information provided below and become well-acquainted with the machine's controls.

The Bale Packer has been designed for completely **automatic** (electrically controlled) operation; even so there are also two **manual modes** of operation:

- **Electrical operation**, directly from the control console.

- **Hydraulic operation**, by directly actioning the levers on the hydraulic block.



\*This supplies the control console with a continuous 12 volt current.

**3.1. FUNCTIONS OF THE CONTROL CONSOLE**



**• STOP / START**

Safety button that disconnects the electric supply to all the machine's functions and immediately stops it working.

To stop the machine, press the (RED) button down as far as it will go.

To reconnect the electrical supply and activate all of the machine's functions, turn the button slightly to the left until it is released.

**AUTO**

**• AUTOMATIC CYCLE**

Fixed position selector switch for "**automatic**" operations.

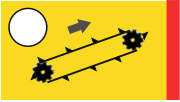
This is selected by moving the switch to the "up" position: in this mode, the machine carries out all of its functions automatically.



**• MANUAL CYCLE**

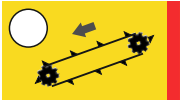
Fixed position selector switch for "**manual**" operations.

This is selected by moving the switch to the "down" position: in this mode, the machine carries out all of its functions manually, obeying commands from the control console.



• **CHAINS** (*LOADING DIRECTION*)

Touch pad button to set the chains in motion for loading.  
To activate this function, gently press the centre of the control pad.



• **CHAINS** (*OPPOSITE DIRECTION TO LOADING*)

Touch pad button to set the chains in motion in the opposite direction to that for loading.  
To activate this function, gently press the centre of the control pad.  
This control pad overrides the “automatic” cycle command with regard to controlling the movement of the chains.



• **MOVING THE PUSHER FORWARDS**

This is a spring-loaded switch which returns to its original position when not activated. If we move the switch upwards, the pusher mechanism moves forwards. This switch can be used to override some phases of the cycle when operating in automatic mode.



• **MOVING THE PUSHER BACKWARDS**

This is a spring-loaded switch which returns to its original position when not activated. If we move the switch downwards, the pusher mechanism moves backwards. This switch can be used to override some phases of the cycle when operating in automatic mode.



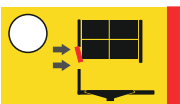
• **RAISE LIFT-PRESS**

Touch pad button to raise the lift-press.  
To activate this function, gently press the centre of the pad.  
This pad does **NOT** respond in “automatic” mode.



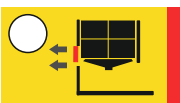
• **LOWER LIFT-PRESS**

Touch pad button to lower the lift-press.  
To activate this function, gently press the centre of the pad.  
This pad does **NOT** respond in “automatic” mode.



• **RETAINER** (*COMPRESS BALES*)

Touch pad button to push the retainer frame through the discharge gate, thereby applying pressure to the bales that are inside the bale pressing chamber.  
To activate this function, gently press the centre of the pad.  
This pad does **NOT** respond in “automatic” mode.



• **RETAINER** (*RELEASE BALES*)

Touch pad button to withdraw the retainer frame from the discharge gate, thereby releasing pressure upon the bales inside the bale pressing chamber.  
To activate this function gently press the centre of the pad.  
This pad does **NOT** respond in “automatic” mode.





• **NEEDLES** (TIE, RAISE)

Touch pad button to raise the needle support (taking the twine to the knotter). In manual mode this operation is carried out intermittently for safety reasons. To activate this function gently press the centre of the pad. This pad does **NOT** respond in “automatic” mode.



• **NEEDLES** (UNTIE, LOWER)

Touch pad button to lower the needle support (used to position the needle support). To activate this function gently press the centre of the pad. This pad does **NOT** respond in “automatic” mode.



• **DISCHARGE GATE** (CLOSE, RAISE)

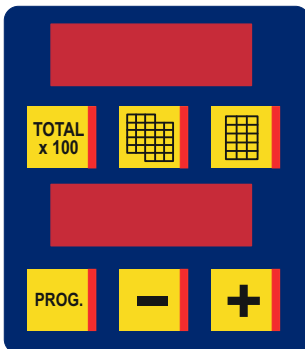
Touch pad button to close the discharge gate. To activate this function gently press the centre of the pad. This pad overrides certain phases of the “automatic” mode connected with the closing of the discharge gate.



• **DISCHARGE DOOR** (OPEN, LOWER)

Touch pad button to open the discharge gate. To activate this function gently press the centre of the pad. This pad overrides certain phases of the “automatic” mode connected with the opening of the gate.

3.1.1. DISPLAY AND PROGRAM SCREENS



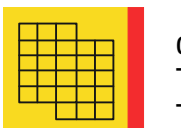
This is the part of the control box that provides constant information about the number of bales loaded into the Packer and the number of large bale packs that have already been made. In both cases, operating statistics are provided since the most recent start up of the machine and also from the beginning of its working life.

It also provides access to the database of the programme's microprocessor, with which it is possible to change the Bale Packer's timings and its compaction pressure.



• **TOTAL X 100**

Touch pad button that shows the number of large bale packs produced since the beginning of the machine's working life. This information is displayed on the upper screen. To calculate the total number of bales, multiply the displayed figure by **100**. To activate this function, gently press the centre of the pad.



• **PARTIAL**

Touch pad button that shows the number of large bale packs produced since the last time that the counter was reset to zero. This information is displayed on the upper screen. To activate this function, gently press the centre of the pad. To reset the counter to zero, press the “PARTIAL” button for five seconds: this also resets the “MACHINE” counter to zero.

**• MACHINE**

Touch pad button that shows the number of bales between one and fourteen currently loaded onto the Packer. This information is displayed on the upper screen. When the Packer is unloaded the counter automatically resets to zero.

To activate this function, gently press the centre of the pad.

To reset the counter to zero press the **“PARTIAL”** button for five seconds, this also resets the **“PARTIAL”** counter to zero.

**• PROGRAM**

PROG.

Touch pad button that makes it possible to activate different timing program modes.

The reference to the timing always appears on the upper screen, while the timing period appears on the lower screen.

Pressing this button for **5 seconds** activates **T16**, which is the timing adjuster of signal **D1**.

Pressing this pad button continuously for **60 seconds** provides access to the rest of the timings.

Once inside the system, successively pressing the pad button displays the different timings on the screen:

**3.1.1.1. TIMINGS FOR THE V32 PROGRAM**

**T1** **FUNCTION:** Waiting time between the lift-press starting to rise and the retainer starting to move backwards.  
**EFFECT:** Adjusts the layer of bales retained above the one that rises.

**T2** **FUNCTION:** Time required for the retainer mechanism to move backwards (opening).  
**EFFECT:** Makes sure that the retainer has retracted and that the layer of bales has enough space to pass.

**T3** **FUNCTION:** **(FIXED)** Duration of the action in which the retainer mechanism moves forwards (closure).  
**EFFECT:** Makes sure that the retainer is holding the layer of bales.

**TA** **FUNCTION:** Time assigned for the gate to complete the action of closure once **D8** has been activated.  
**EFFECT:** Ensures that the gate closes.

**T5** **FUNCTION:** Time check for photocell **D11** and **D12**. (Variable)

**T6** **FUNCTION:** Waiting time for the bale turner, while the lift-press rises (only when **D4** is activated).  
**EFFECT:** Ensures that the layer of bales is guided as it is lifted up into the bale pressing chamber.

**T7** **FUNCTION:** Time required for the motor that drives the knotters to lose signal **D7**.  
**EFFECT:** Ensures that the knotting action has started.

**TD** **FUNCTION:** **(FIXED)** Time remaining for the cylinder of the bale turner to return to its position after detecting **D3**.  
**EFFECT:** Ensures that the bale turner is in its initial position.

**TE** **FUNCION:** Not used.

**TH** **FUNCION:** Name of bales that can enter during the discharge.  
**EFFECT:** Reduces time to produce a bundled package.

**T11** **FUNCTION:** It is the waiting time that exists after the tying cycle between the lit starting to be lowered and the door opening.  
**EFFECT:** It ensures that the tied package is decompressed before opening the door, allowing the bale extractor to do its job.

**T12** **FUNCTION:** Duration of the action of **D8** from when the gate starts to open.  
**EFFECT:** Gives time for the bale package to be delivered to the gate while it opens.  
**CONSEQUENCE:** During the unloading process, it delays the exit of the pusher, allowing space to be created for the entry of a bale.

**T14** **FUNCTION:** Time check for sensor **D2**. (Actioned each time the pusher advances)  
**EFFECT:** Ensures that **D4** is correctly activated.

**TJ** **FUNCTION:** Delay time to stop intermediate chain at D11.  
**EFFECT:** Leave the bale positioned at the entrance of the pusher.

**T16** **FUNCTION:** Timing of signal **D1**.  
**EFFECT:** Ensures that **D1** is correctly activated.

*To exit the timer programme, do not touch any of the touch pad buttons for 10 seconds*

**• BUTTON -**



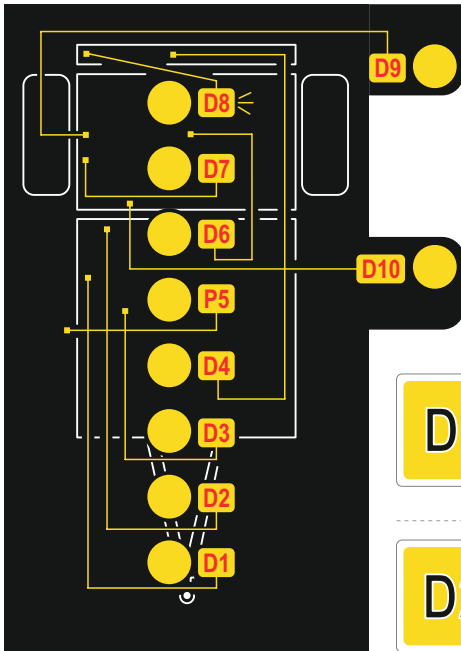
Touch pad button that allows the operator to reduce the value of the current operation. Pressing this button reduces the pressure of the bale press; this value is shown in bars and its values can range between **0 - 250 bars**. In programming mode it is possible to reduce the timing values for the different actions.

**• BUTTON +**



Touch pad button that allows the operator to increase the value of the current operation. Pressing this button increases the pressure of the bale press; this value is shown in bars and its values can range between **0 - 250 bars**. In programming mode it is possible to increase the timing values for the different actions.

## 3.1.2. INDICATORS ILLUMINATED ON THE CONSOLE



This panel constantly displays the phases of operation that the machine is carrying out at each stage of its working cycle.

In “automatic” mode, the working cycle will stop if any of the functions is not well set or is not working correctly. A flashing light or - for some functions - a warning tone alerts the operator in the case of problems.

- **Description of the end of sequence functions.**

D1

**D1 (Magnetic)**

**Detects the presence of the bale** when the bale is at the end of the shuttle and sends the signal to start the pusher's forward cycle.

D2

**D2 (Magnetic)**

Reverse the movement in the **PUSHER**.

D3

**D3 (Magnetic)**

**End of the safety sequence**, so that no bale can enter from the pickup unless the bale turner is in its starting position.

D4

**D4 (Magnetic)**

**Detects the presence of two bales** on the lift-press and sends the command to raise the load to the established height.

P5

**P5 (Pressure transducer)**

**Reverses the direction of movement of the lift-press**. On reaching the pre-set pressure, it sends an order to the lift-press to begin the descent back to its initial position.

Set the pressure:

min. 100 - **optimum 150** (depends on the material) - max. 230

D6

**D6 (Magnetic)**

**Detects the height of the penultimate layer** of bales required to form a complete bale package. When the next layer of bales is lifted into position, the whole bale package is tied when P5 reaches the correct pressure and is activated.

D7

**D7 (Magnetic)**

**Detects the starting position of the knotters**: this controls the complete cycle of the tying mechanism and stops it when it returns to its initial position.

D8

**D8 (Photocell)**

**Controls the discharge of the compressed and tied large bale**. Upon discharge it sends a command for the discharge gate to close and return to its initial position.

D9

**D9 (Magnetic)**

**Controls the position of the lift: this makes sure** that no more bales can enter the lower part of the machine from the bale turner.

D10

**D10 (Magnetic)**

**Safety sensor, that checks that the lift-press does not rise unless the extractor has been completely retracted.** This device only works when the operation is carried out in automatic mode (electrically). It is only a warning device and gives an acoustic signal when not in the correct position.



*Location of the D10 safety panel*

D11

**D11 (Photocell)**

**For the first chains when it detects a bale if the pusher isn't in position or a bale is activating D1.** Controls and regulates the operation of the pick-up chains, according to the position of the bale in the pick-up.

D12

**D12 (Photocell)**

Controls and determines operation of the pick-up chains. Enables bales at the pick-up inlet to be detected and stopped to prevent collisions. Together with D1 and D11, it acts as a sequencer to prevent bale collisions and optimise the loading cycle.

*In automatic mode, whenever an end of sequence is in the wrong position, the lights on the console emit a flashing warning signal: the console sometimes also emits an acoustic warning signal (D3-D7-D8-D10).*



**CAUTION!**

ALL ELECTRICALLY-CONTROLLED MOVEMENTS, IN BOTH AUTOMATIC AND MANUAL MODES, HAVE BEEN DESIGNED AND EQUIPPED WITH AN ELECTRONIC SAFETY CIRCUIT.

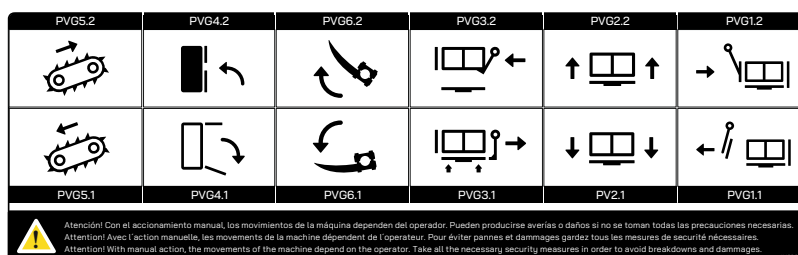


**3.2. FUNCTIONS OF THE HYDRAULIC BLOCK**

The Packer comes equipped with a hydraulic block with manually operated levers for carrying out each of the movements without the need for an electrical supply.

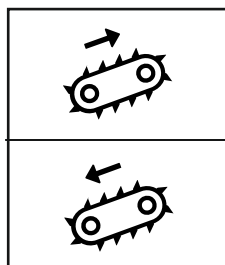
**Direct action upon any of the hydraulic block's levers overrides any other electrical command (from the control console).**

There is a sticker (on the protector) next to the hydraulic block. The meanings of the different symbols are explained below:


**ATTENTION!**

With manual action, the movements of the machine depend on the operator. **Take all the necessary security measures in order to avoid breakdowns and damages.**

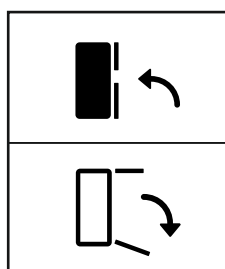
The manufacturer shall not be responsible for any modifications made to the bale loader without specific previous authorization.


**• CHAINS (loading direction) PVG5.1**

Hand lever with spring-loaded return to central position; moving the lever to this (UP) position starts the chains moving in the loading direction.

**• CHAINS (opposite direction to loading) PVG5.2**

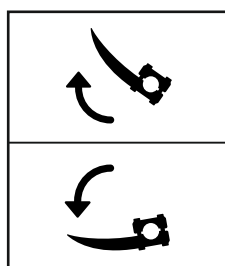
Hand lever with spring-loaded return to central position; moving the lever to this (DOWN) position starts the chains moving in the opposite direction to that of loading.


**• DISCHARGE GATE (close) PVG4.2**

Hand lever with spring-loaded return to central position; moving the lever to this (UP) position closes the upper and lower discharge gates, retracting the extractor at the same time

**• DISCHARGE GATE (open) PVG4.1**

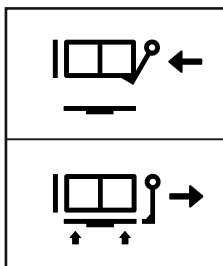
Hand lever with spring-loaded return to central position; moving the lever to this (DOWN) position opens the upper and lower discharge gates and pushes out the extractor.


**• NEEDLES (raise) PVG6.1**

Hand lever with spring-loaded return to central position; moving the lever to this (UP) position raises the needle support in preparation for tying.

**• NEEDLES (lower) PVG6.2**

Hand lever with spring-loaded return to central position; moving the lever to this (DOWN) position lowers the needle support

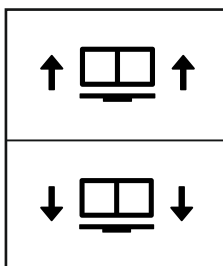


• **RETAINER (compress bales) PVG3.2**

Hand lever with spring-loaded return to central position; moving the lever to this (UP) position pushes the retainer out through the gate, compressing the bales.

• **RETAINER (loosen hold on bales) PVG3.1**

Hand lever with spring-loaded return to central position; moving the lever to this (DOWN) position, the retainer is moved away from the gate, loosening the hold on the bales.

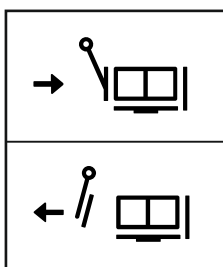


• **RAISE LIFT-PRESS PVG2.1**

Hand lever with spring-loaded return to central position; moving the lever to this (UP) position raises the lift-press.

• **LOWER LIFT-PRESS PVG2.2**

Hand lever with spring-loaded return to central position; moving the lever to this (DOWN) position lowers the lift-press.



• **MOVING THE PUSHER FORWARDS PVG1.1**

Hand lever with a spring-loaded return to the initial position; moving the lever upwards (UP) moves the pusher forwards.

• **MOVING THE PUSHER BACKWARDS PVG1.2**

Hand lever with a spring-loaded return to initial position; moving the lever downwards (DOWN) moves the pusher backwards.



**CAUTION!**

When the hydraulic block is operated manually all the machine's movements depend on the operator. Problems may occur if the operator fail to take all necessary precautions.



Before leaving the factory each of the working cycles of the **MultiPack D14** has been subjected to a series of trials and tests. In these tests, the working pressures have been measured and set, as has each of the machine's movements: this guarantees that you will receive your machine in perfect working order.

The machine has several different regulatory systems and mechanisms that allow it to adapt to a range of different working conditions: in the current market there are various different brands and models of balers and the demand for the product is also very varied.

The different ways of adjusting the machine's operating systems are detailed below.



**WARNING!**

All mechanical adjustments must be carried out with the PTO disconnected; **ARCUSIN S.A. cannot be held responsible for any failure to comply with these instructions.**

**4.1. POSITION OF SUPPORT LEG**

The machine has a support leg that helps to bear some of its weight when it is not hitched to the tractor. This allows a better distribution of the load and prevents the drawbar being subjected to excessive stress.

**The height of the support leg can be adjusted using a hand lever.**



*Leg lowered*



*Leg retracted*



**CAUTION!**

When the machine is in transit or in motion the support leg must be in the transport position (retracted). For any kind of adjustment or maintenance operation, it is necessary to lower (apply) the support leg.  
**ARCUSIN S.A. cannot be held responsible for any failure to comply with these instructions.**

### 4.2. HOOK HEIGHT

The hook is the element that mechanically links the MultiPack with the tractor vehicle and by means of which vehicle traction is provided.

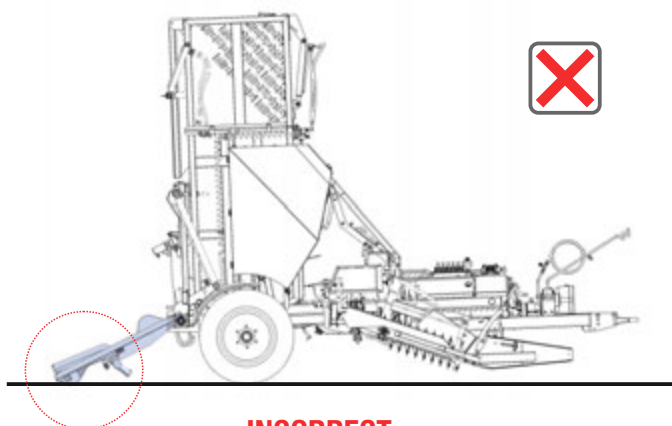
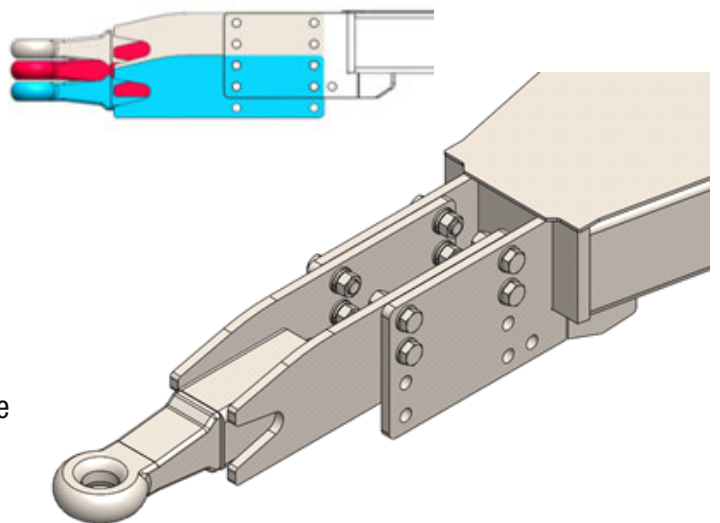
It can be adjusted in height by varying the fixing position by means of screws to achieve new positions.

It is regulated at the front part of the machine. It is very important that this is done on a flat surface.

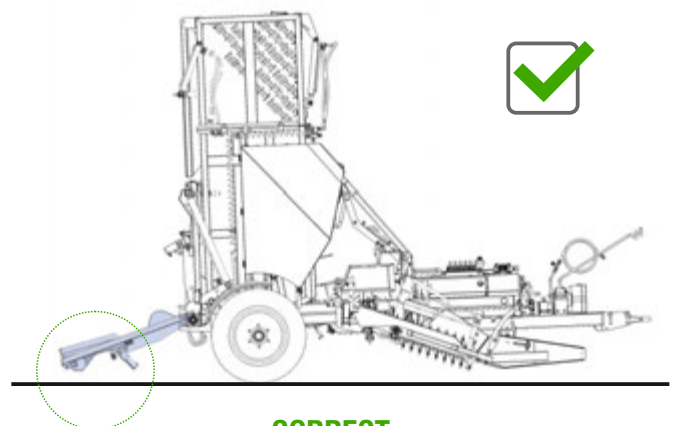
**3 positions**, the adequate height will depend on the tractor it is coupled with.

To regulate: remove screws and nuts, place at the desired height and re-screw.

For correct height adjustment, bear in mind that the discharge door must not touch the floor when fully open.



**INCORRECT**



**CORRECT**



### IMPORTANT!

Height regulation of the hook can vary depending on the tractor it is coupled with.

This regulation affects the final finish of the packet and to avoid these being deformed **the discharge door MUST NOT hit the floor.**

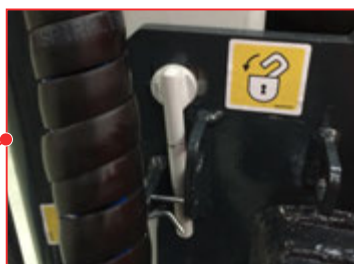


4.3. ADJUSTING THE PICK-UP

4.3.1. POSITION OF THE PICK-UP ADJUSTMENT



Pick-up in transport position (up)



Safety mechanism - enabled



Safety mechanism - disabled.



Pick-up in working position (down)

The pick-up is moved up and down by hydraulic power controlled from the tractor. Make sure you have connected the lines to the tractor to perform any manoeuvres.

1. RED "+" connector, to move the PICK-UP up.
2. RED "-" connector, to move the PICK-UP down.

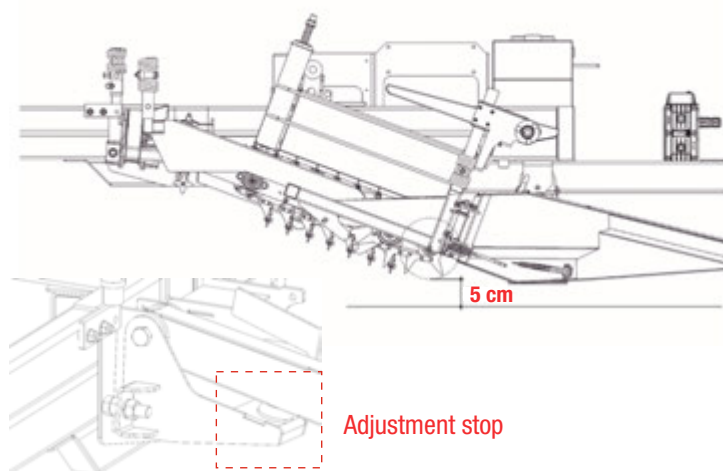


**ATTENTION!**

Depending on the tractor you may have to adjust the up and down speed using the flow regulators on the hydraulic line.



4.3.2. ADJUSTING THE PICK-UP WORKING HEIGHT

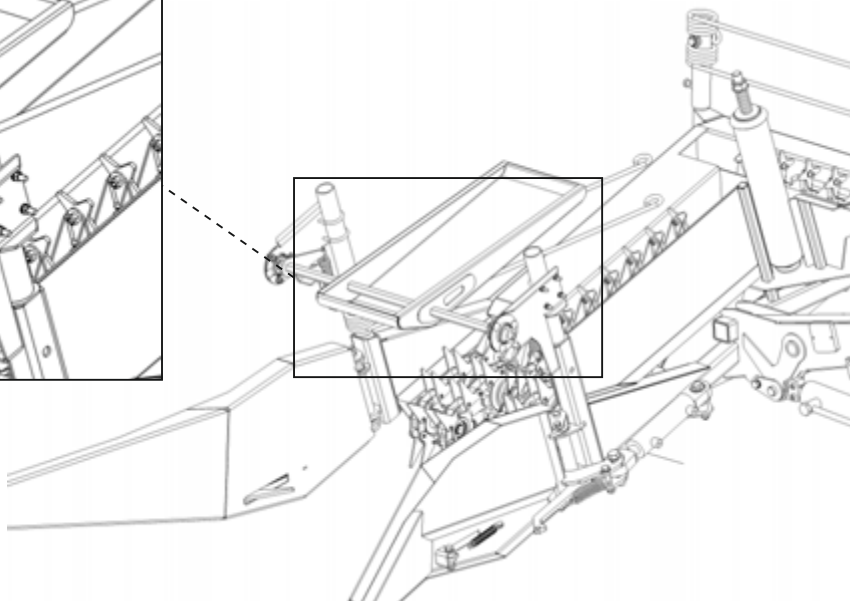
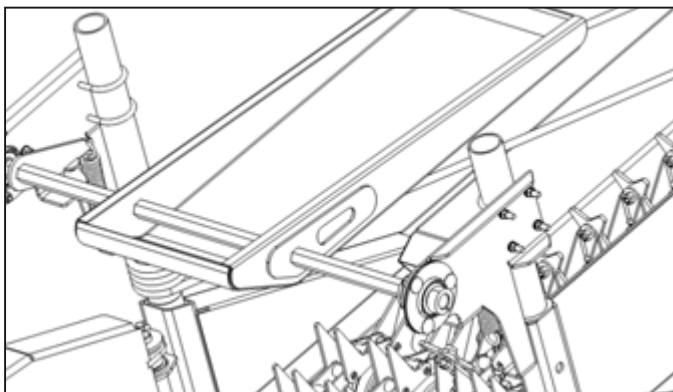


It is very important for the pick-up to be positioned correctly so it can pick up bales off the ground properly.

The tip of the pick-up fin closest to the ground should be 5 cm from it.

Once the hitch position has been determined, adjust the height using the bolts of the adjustment stop for the rear arm of the pick-up.

#### 4.3.3. UPPER FOLLOWER ADJUSTMENT



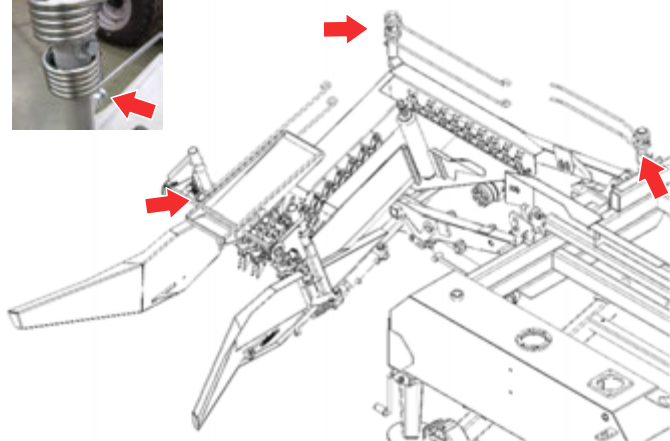
**Round steel U-bolts:**  
Loosen and then tighten  
in the desired position.

The follower mechanism is fixed in the middle of the link crossbar, and is used to guide the bale when it is positioned on the pick-up, and prevents it overturning.

The follower mechanism can be adjusted, to adapt to all types and kinds of bales on the market.

To adjust it, loosen the round steel U-bolts on both sides of the link and tighten in the desired position.

#### 4.3.4. ADJUSTING THE REAR SPRINGS



The springs that guide the bale on the pick-up path are fixed to the outside and rear of the pick-up. **If you notice that the bale tends to fall off the outer perimeter and the rear, adjust these springs.**

To adjust the outer spring, loosen the locknut on the follower pillar and adjust it so that the spring is facing the inside of the pick-up, taking into account that the function of this spring is to maintain the continuous path of the bale towards the revolving roller. Tighten the locknut again when it is in the desired position.

To adjust the rear springs, loosen the locknut and adjust the springs so the first spring is in front of the second spring, taking into account that the function of these springs is to maintain the continuous path of the bale towards the infeed of the transporter. Tighten the locknut again when it is in the desired position.



#### WARNING!

This adjustment may be affected by various factors, such as the weather, the terrain, the production or the type of material being packed.

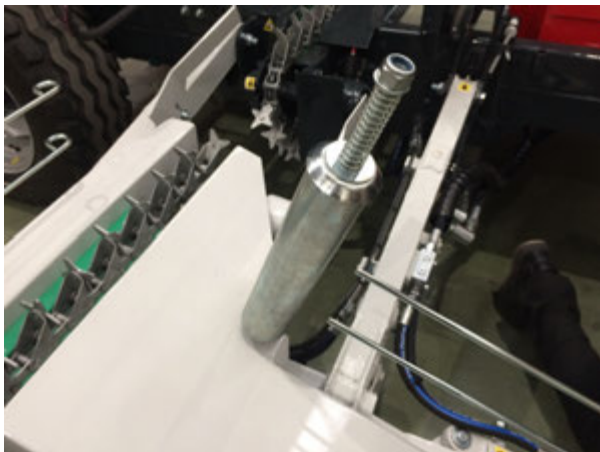
Adjust the springs to find the best position.

**4.3.5. PIVOT DRAG ROLLER ADJUSTMENT**

The pivot drag roller **helps turn the bale** when the traverse chain pulls it into the shuttle.  
**This drag roller can be adjusted to adapt it to all bale types and sizes.**

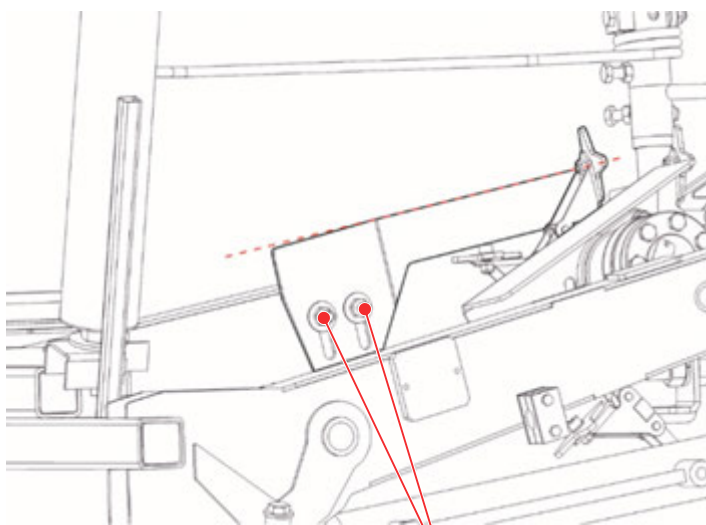
**Tighten or loosen the top nut so the spring presses more or less on the drag roller to offer more or less turning resistance.**

Normally longer bales should turn more easily so you should loosen the nut.



**4.3.6. DEFLECTOR ADJUSTMENT**

The deflector is an adjustable part, located on the arm of the inlet at the transporter entry point, and it has the function and guiding the bundle towards the inside of the transporter.



**Loosen to adjust**

Depending on the conditions and sizes of the goods to be packed, adjust the deflector to have a greater effect and condition the bale to correctly enter the transporter.

To adjust it, loosen the nuts and rearrange to align the upper edge of the deflector with the centre of the star on the transporter chain (perpendicular to the transporter).



**WARNING!**

This adjustment may be affected by various factors, such as the weather, the terrain, the production or the type of material being packed. Adjust the deflector plate to find the best position.

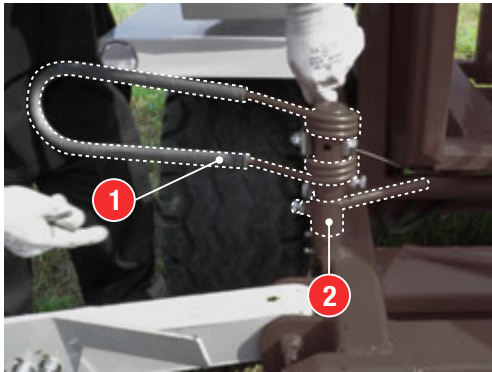
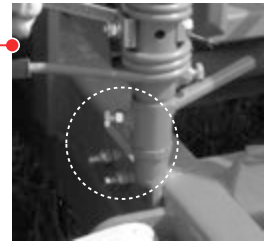


#### 4.4. CONVEYOR ENTRY GUIDE ADJUSTMENT

It ensures the entrance of the bale in the conveyor.

This mechanism has two mounting positions depending on the width of the bale.

The adjustable parts of the conveyor must be fitted depending on terrain slope and the type of material to be stacked. The regulation of this mechanism is divided into:



##### 1. TORSION SPRING

Located at the top of the mechanism, it prevents the bale from exiting the back of the arm's pick up during the transfer of the bale from the pick up to the conveyor.

##### 2. ENTRY GUIDE

Located at the bottom of the mechanism, it ensures that the bale enters aligned on the conveyor and correctly drives to the **D1** mechanism.

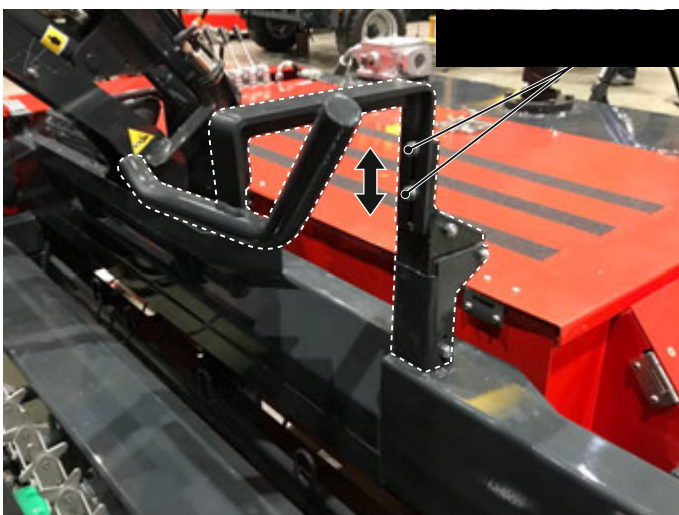
To adjust these parts; Loosen up the set screws and position as required. Adopt the "go testing" method until you get the optimal result.



#### ATTENTION!

Once regulated please check that the entry guide does not interfere with the needle support.

#### 4.5. CONVEYOR ENTRY UPPER GUIDE ADJUSTMENT



The conveyor entry upper guide has the function of keeping the bundle guided inside the transporter and ensuring this is perfectly aligned from there to the **D1** activation (presence of bundle in transporter, ready to be pressed forward).

Depending on the conditions of the terrain and the characteristics of the goods that have to be grouped together, this mechanism should be adjusted so that it more or less affects and places conditions on the bundle so as to keep it tight to the inner side of the transporter.

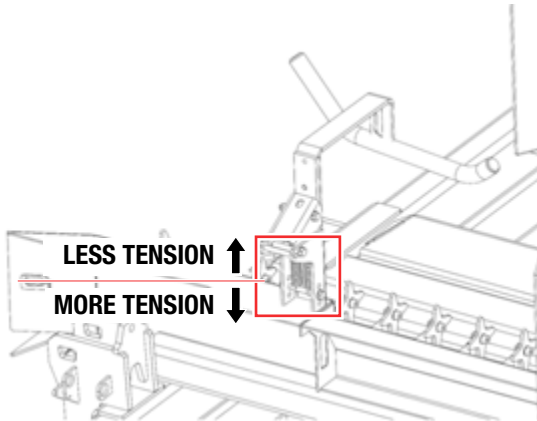
This adjustment can be carried out in a vertical direction loosening the screws of the strut.



#### WARNING!

Adjust the springs in a way that does not interfere with the movement of the push-rod.

There are three positions to give more tension to the springs. Remove the bolt and reposition as desired.



This adjustment is important for work in areas with significant inclines, because it stops the bundle going in out of line in the transporter channel.

#### 4.6. LIFT PRESS ENTRY UPPER GUIDE



**This guide has the function of preventing the rotation of the bale during its displacement into the press lift.**

This regulation depends on the bale height.

**NOTE:** To facilitate this double adjustment, a bale must be loaded.

This guiding function ensures that the bale is kept in its natural position at the entrance of the lift press. It is divided into two parts:

**1. PUSHER SUPERIOR TOP (x1)**

It is located on the bale pusher (on both sides).

**2. LIFT PRESS ENTRY UPPER GUIDE (x2)**

It is located in the vertical guides of the entrance of the compaction chamber.



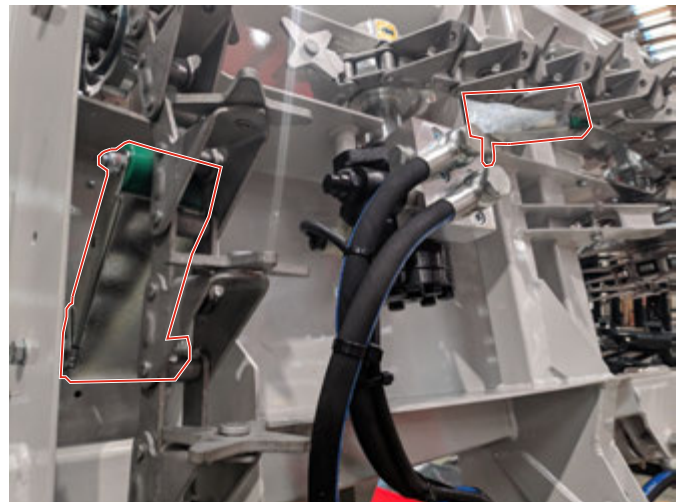
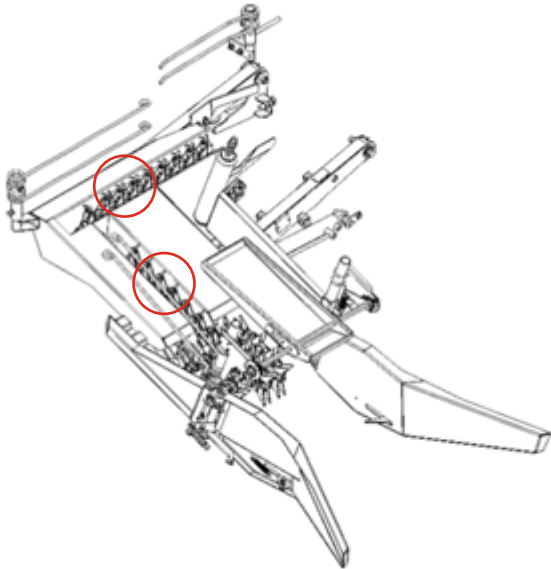
To adjust these parts loosen the side nuts, position and tighten the nuts again.

Check that the regulation is optimal by performing the displacement of the pusher while having a bale loaded. The bale must then be pushed forward and enter the lift-press without any twists or jumps, maintaining its natural position. If so, the setting is correct, otherwise it has to be re-adjusted until obtaining the desired result.



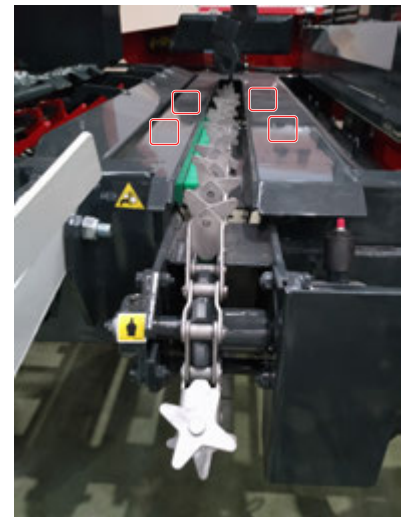
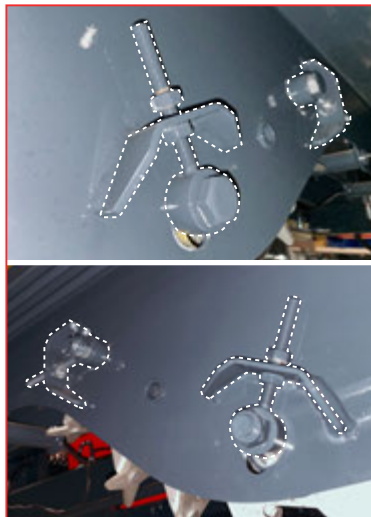
**4.7. CHAIN ADJUSTMENT / TENSIONING****4.7.1. PICK-UP CHAIN TENSION**

The pick-up conveyor chains have an **automatic tensioning system**. They are located in the bottom part of the pick-up, and **do NOT need adjusting**.

**4.7.2. SHUTTLE CHAIN TENSIONING**

The tension of the shuttle chain can be adjusted and this is done using the tensioner screws located in the bottom of the shuttle.

Adjust the chain so there is a bit of up/down play in middle of the slacker side.



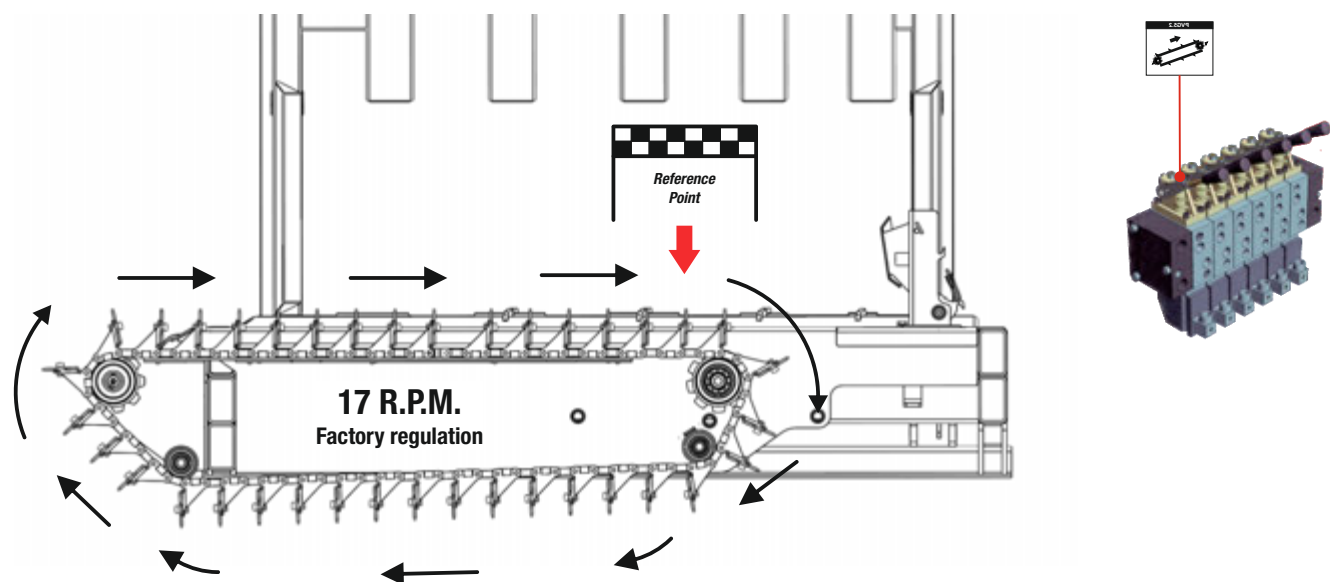
4.7.3. PICK-UP + SHUTTLE CHAIN SPEED ADJUSTMENT

For this regulation, take as reference a link of the transporter chain (make a mark to identify it from the rest with paint / insulating tape, etc.).

1. Connect the tractor power take-off to a work rate of 450 rpm (approximately).
2. Using the distributor lever, place the “marked” link of the transporter chain on the reference point (start / initiate) to be able to make the adjustment. Place the control box switch in AUTO position and check the number of turns made during 60 seconds of chronometer.

**It should be regulated to make 17 complete turns per minute.**

3. Once regulated, tighten the screw which fixes the regulation of the “chains forward” service rate in the hydraulic distributor.



	12 R.P.M.	13 R.P.M.	14 R.P.M.	15 R.P.M.	16 R.P.M.	+ 16 R.P.M.
Long bales (> 1,10 m.) <b>Moist materials</b>			<b>FACTORY ADJUSTMENT</b>			The chain speed can be increased to suit working conditions.  <b>⚠ ATTENTION!</b>  These conditions may be affected by the weather, the terrain, the production or the type of material being packed.
Long bales (> 1,10 m.) <b>Dry materials</b>						
Short bales (< 1,00 m.) <b>Moist materials</b>						
Short bales (< 1,00 m.) <b>Dry materials</b>						



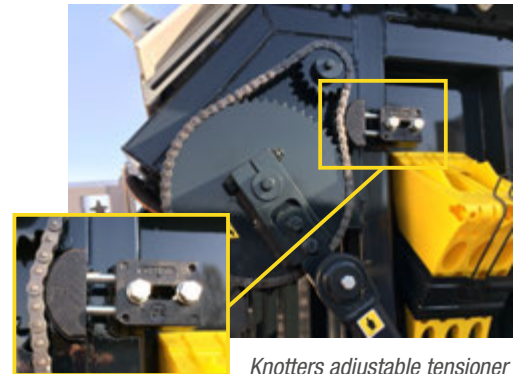
**WARNING!**

These conditions can be affected by weather conditions, terrain, production and type of material.

## 4.7.4. KNOTTERS CHAIN TENSION ADJUSTMENT

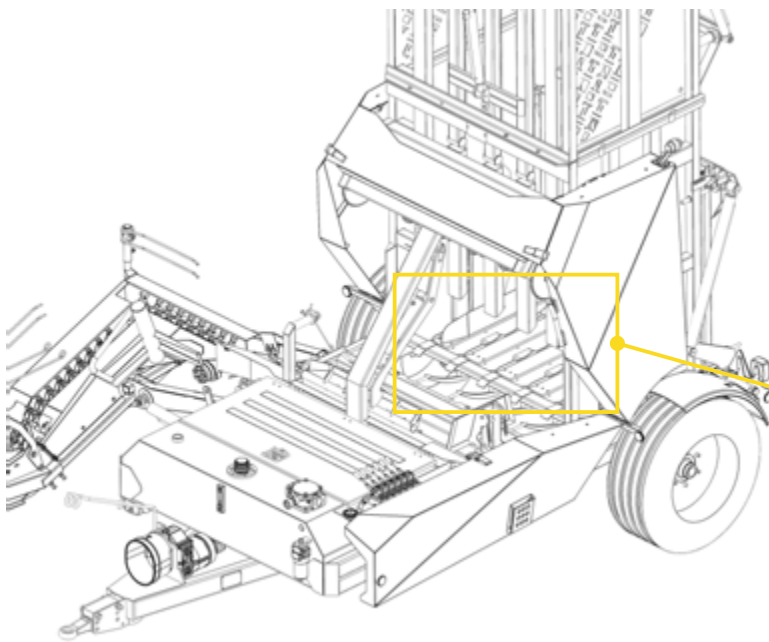
As a general rule, it can be said that over-tensing considerably increases chain wear, whereas leaving the chains too loose tends to produce vibrations.

It is therefore necessary to adjust the tension of the knotters chain in such a way as to allow the mid-point of the loosest stretch of chain a certain degree of oscillation.

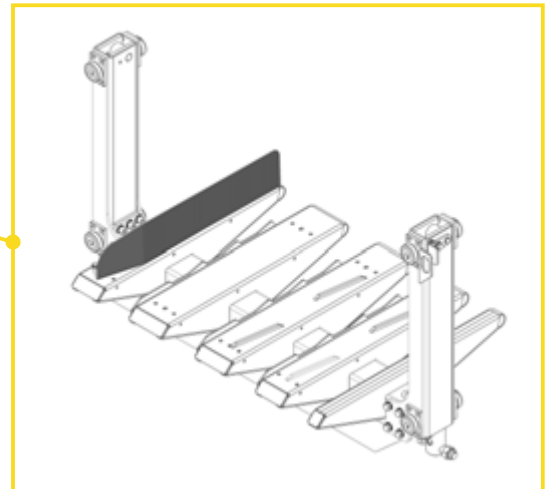


*Knotters adjustable tensioner*

## 4.8. OPTIONAL: ELEVATOR BASE SIDE RAIL ADJUSTMENT



Adjustable elevator side rail bar, optional for bundles of **LESS than 120 cm**.



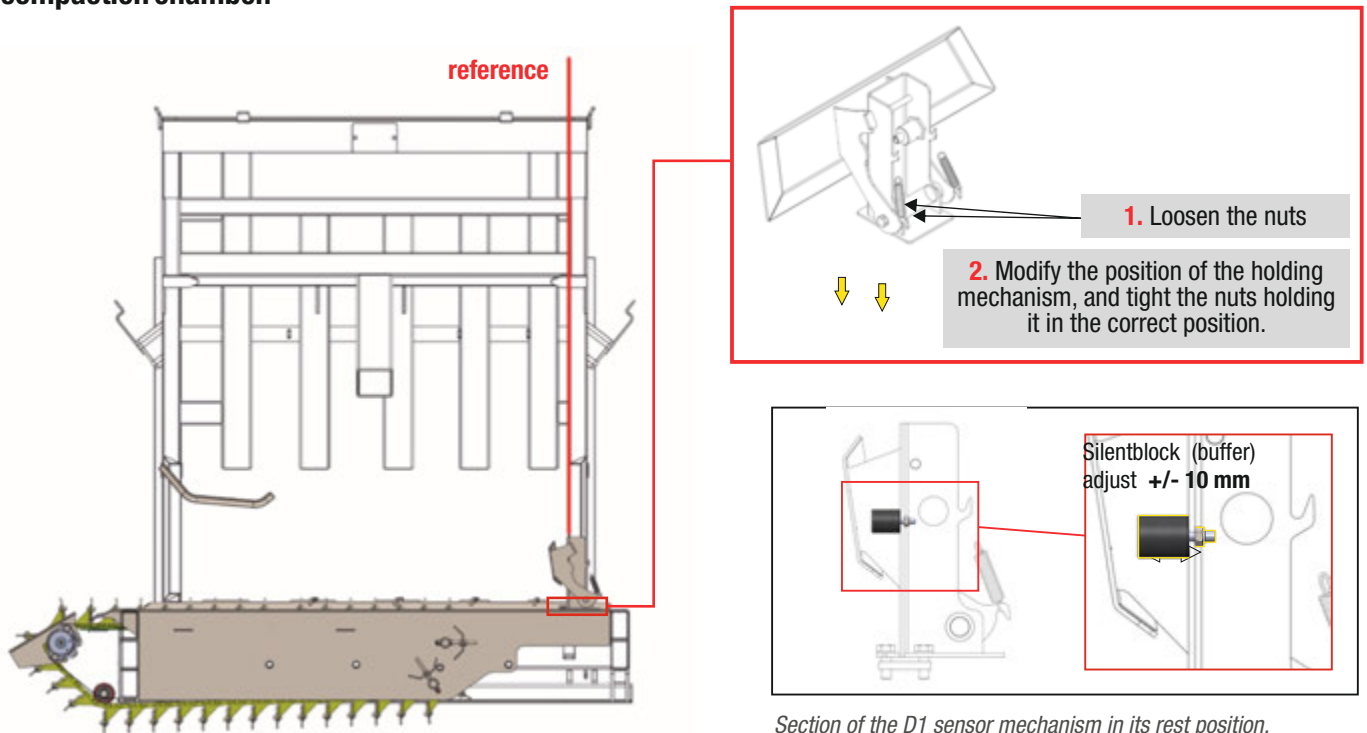
**4.9. ADJUSTABLE SHOOT D1**

The D1 mechanism has a dual function:

**STOP GUIDE:** It acts as a stop on the end of the transporter and helps to align the bale with the inner part of the compaction chamber.

**D1 SIGNAL:** Detects the presence of the bale when the bale is at the end of the transporter and sends the signal to start the pusher's forward cycle.

**This adjustment controls how far the D1 mechanism moves, to ensure that the bale enters the chamber without interference, but should always be adjusted so that the bales are aligned with the inner part of the compaction chamber.**



Section of the D1 sensor mechanism in its rest position.



**CAUTION!**

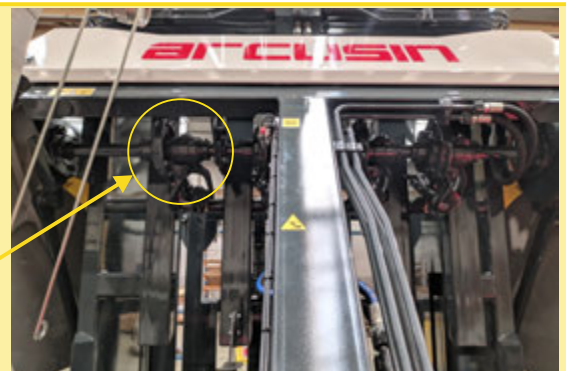
When the silentblock has been adjusted, make sure that it does not protrude beyond the sensor so that it cannot be damaged during operations.



**ATTENTION! IMPORTANT**

When the **length of the bales** you are packing is **less than 1 metre**, the pack will be a three-twine pack, and the **LEFT twine wrapper** will be disabled.

**DISABLING THE LEFT TWINE WRAPPER (BALE LENGTH less than 1 metre)**

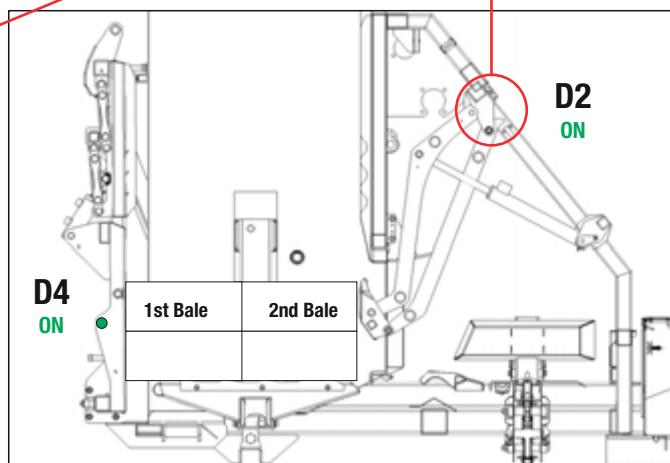
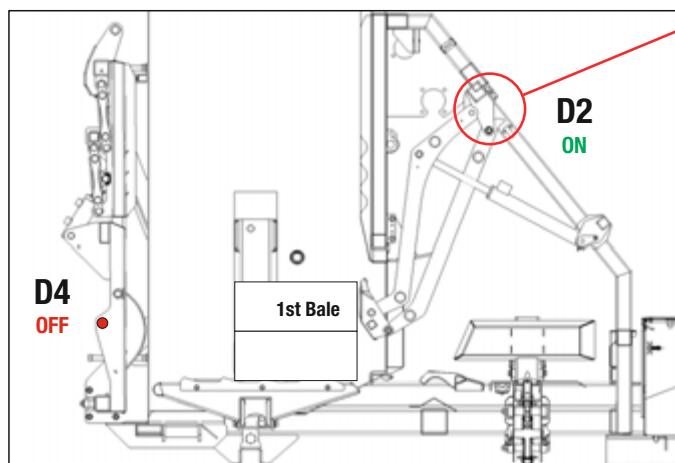
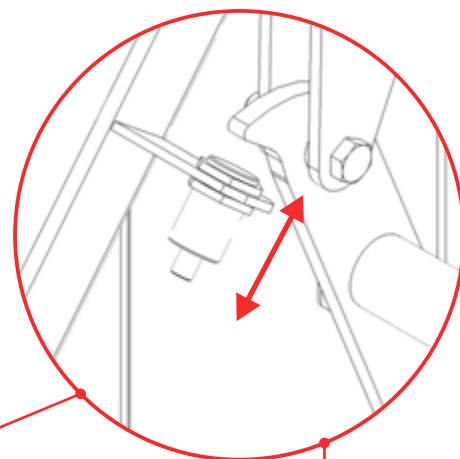


### 4.10. ADJUSTING D2

To correctly adjust the input signal of detector **D2** (which indicates the end of travel of the pusher), proceed as follows:

1. Put the tilter at its maximum limit (cylinder expanded to maximum, approximate d.e.c. 675 mm).
2. Adjust the position of inductive detector **D2** so that it detects when the pusher has reached end of travel, not before.
3. Block the detector position using fastening screws.
4. Check in automatic mode (minimum 5 cycles) that the input signal of detector **D2** lights up on the machine indicator screen once the pusher has reached end of travel, not before.

*Move the inductive detector towards / away from the detector flag when the pusher is at end of travel.*



### WARNING!

When the second bale enters, in order to ensure correct sequence and the elevator to rise, **FIRST** trigger the **D4** mechanism and then give the end of travel signal to the “**D2**” pusher.

If, on pushing the second bale, the **D2** signal is activated before the **D4** signal, **THE ELEVATOR WILL NOT RISE**, and a third bale will attempt to enter.

#### • Important settings:

1. A misregulated hatch can affect this sequence.

Depending on the bale section to be grouped, the hatch opening should be regulated correctly.

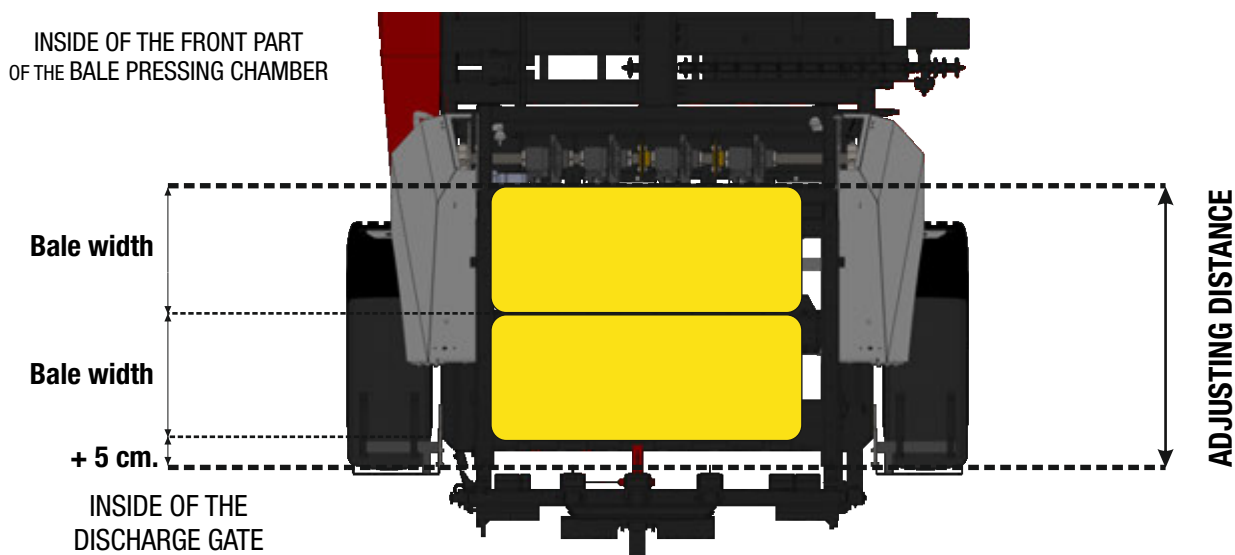
2. Timer T14 acts as filter on the D2 sensor (delaying the signal), allowing D4 to be activated in the first place, when the second bale enters, thus ensuring the elevator raising sequence.



**4.11. BALE PRESSING CHAMBER ADJUSTMENT**

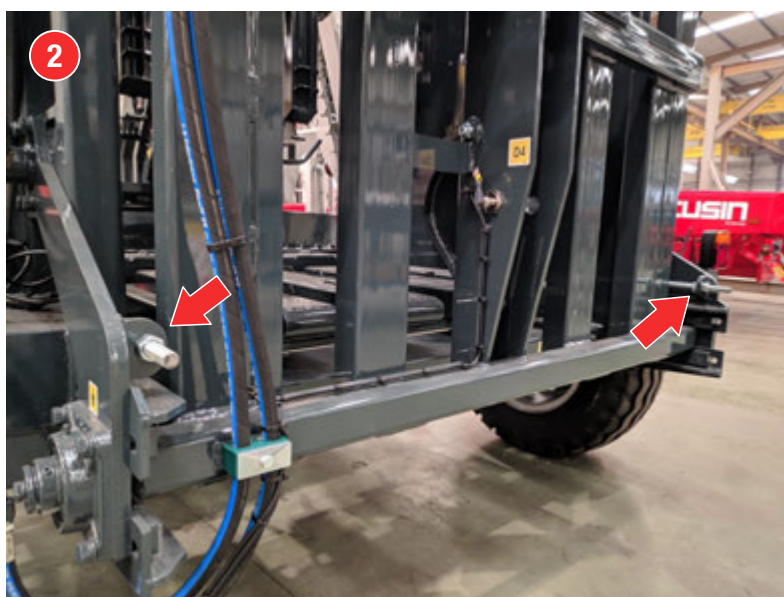
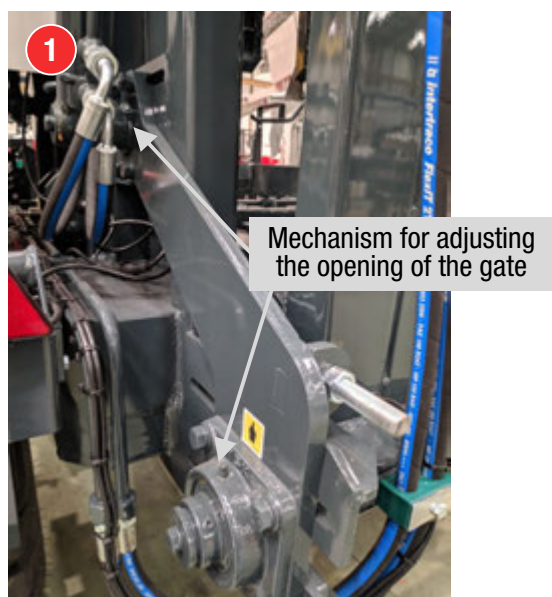
The width of the bales produced can vary (44 cm., 46 cm. y 48 cm.) according to the type of baler used; it is therefore necessary to adjust the space between the inside of the front part of the bale pressing chamber and the discharge gate in order to prepare the bale press for the specific working conditions.

When making this adjustment, measure the width of the bales to be packed, **multiply by 2** and then add **4 cm** for clearance; this gives the space to be allowed for when adjusting the bale pressing chamber.



*This adjustment is made by sliding the discharge gate across, using the gate adjusting mechanisms.*

1. Loosen the screws on both sides of the hatch hinge bearing and those of the axle that supports the cylinder.
2. Adjust using the tensioners at each end.



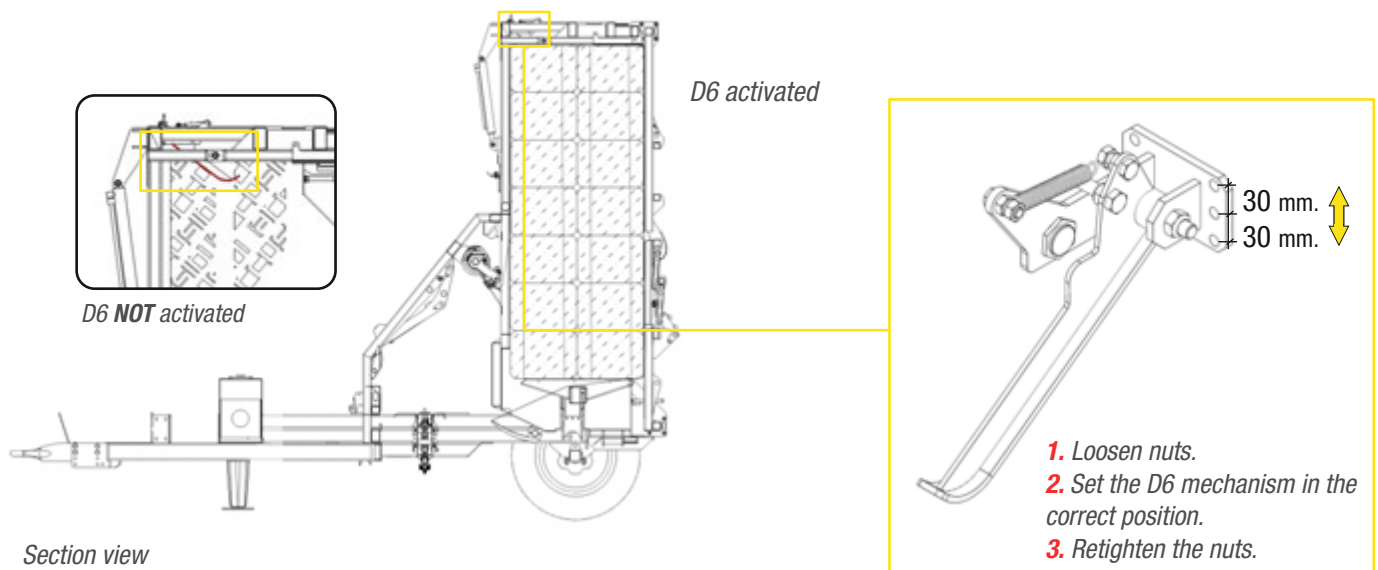
3. Adjust the upper stops of the hatch so it is parallel to the frame.
4. Adjust the detection flag of photocell D8.

Buffer of discharge gate



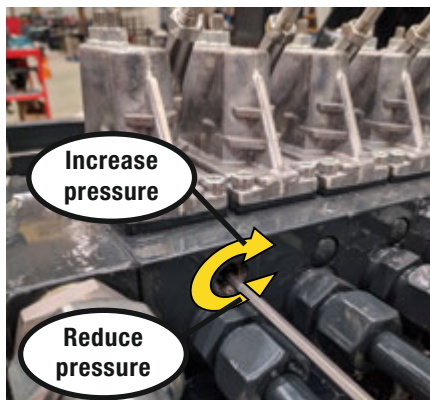
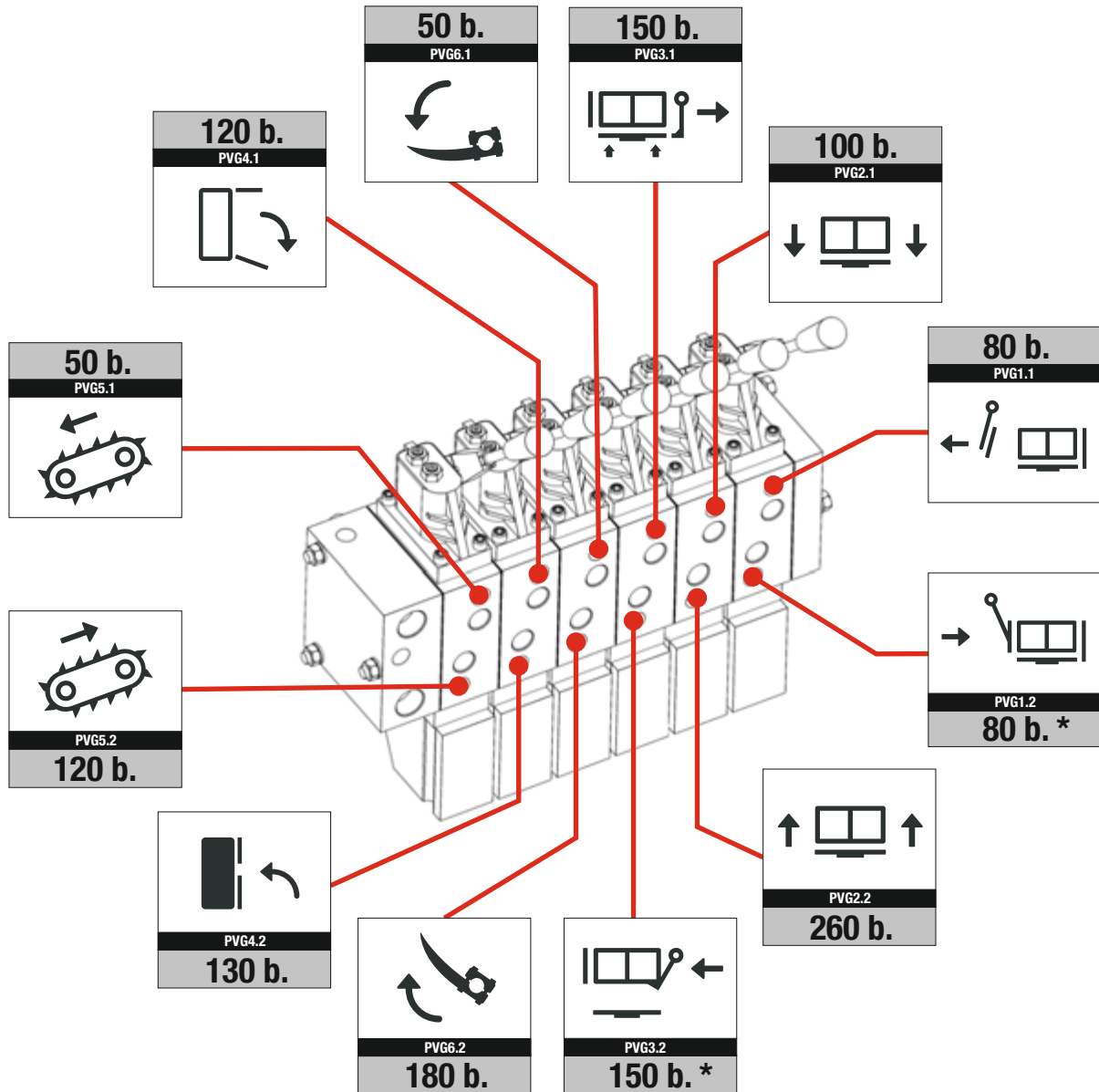
#### 4.12. ADJUSTABLE SHOOT D6

We must adjust sensor mechanism **D6** according to the size of the bales that we want to group to ensure that the last row of bales will activate the mechanism. This mechanism has **3 variable positions; + / - 30 mm.**



4.13. OTHER ADJUSTMENTS

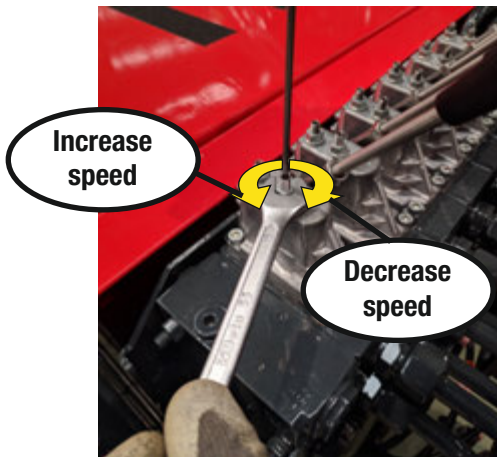
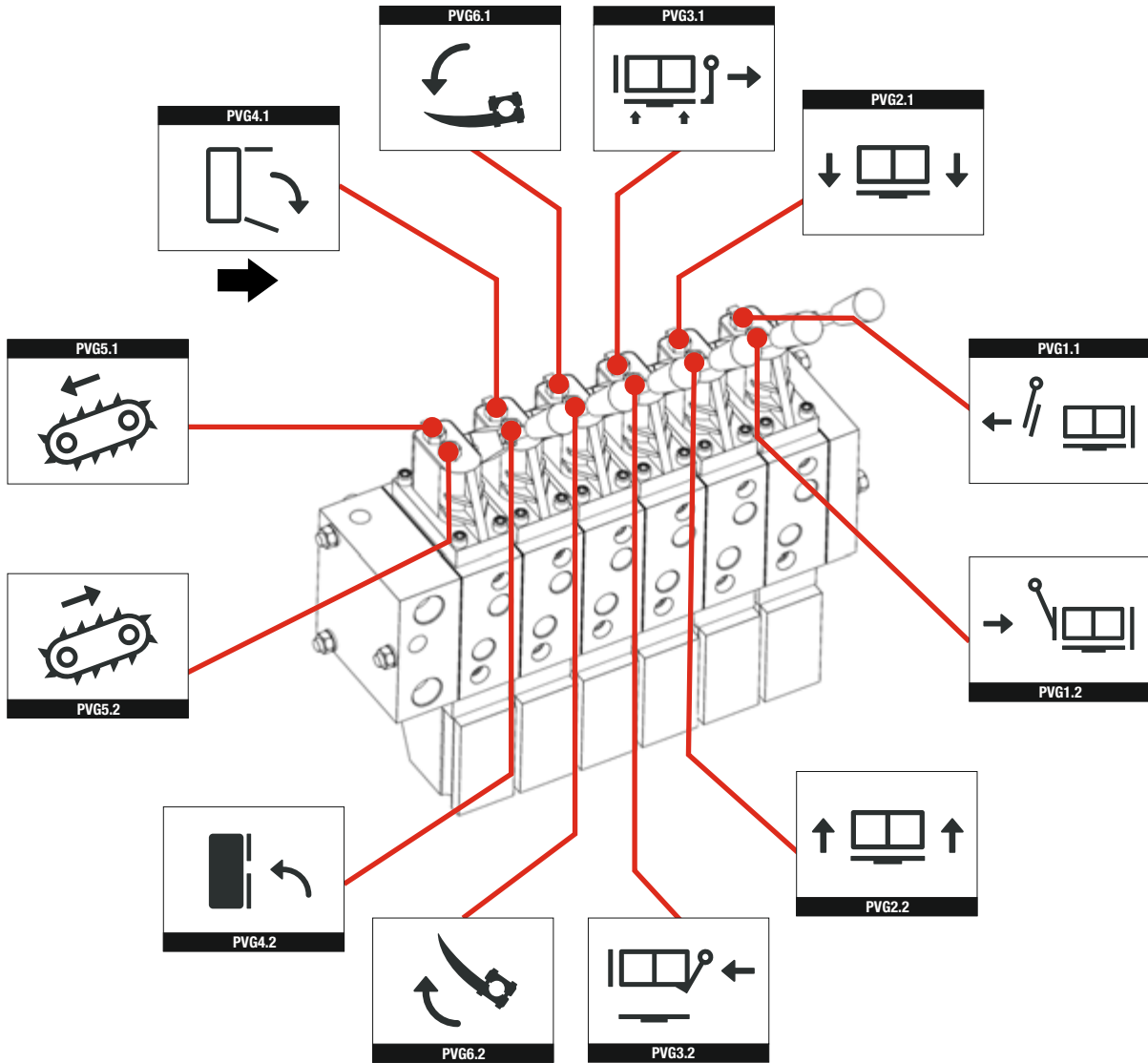
4.13.1. ADJUSTING MOVEMENT PRESSURE ON THE D14



4 mm allen key



4.13.2. ADJUSTING SPEED FOR OPERATIONS D14



10 mm spanner



3 mm allen key

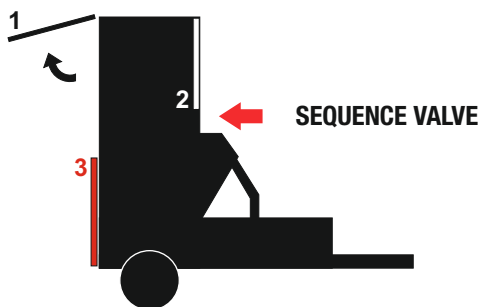




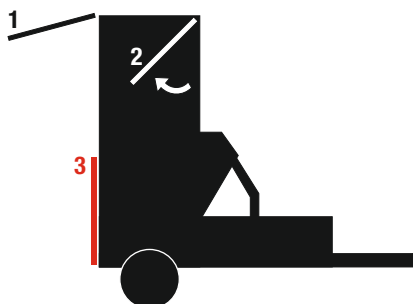
4.13.3. ADJUSTING THE SEQUENCE VALVE OF THE HATCH ON THE D14

GATE-OPENING SEQUENCE

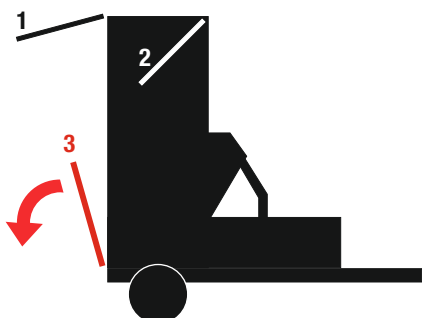
**A.** The upper retainer (1) arrives at the end of its travel



**B.** When the retainer (1) reaches its end position, the extractor (2) begins to open.



**C.** The discharge gate (3) should open when the retainer and the extractor reach the end of their travel



POSITION OF THE REGULATOR



GATE-OPENING SEQUENCE VALVE ADJUSTMENT PROCESS

1. Activate the "open gates and extractor" lever very slowly, maintaining a constant flow.
2. When the retainer and the extractor reach their end position (B) the discharge gate should open when the manometer shows **60 bar** (C).
3. If the gate opens when the pressure is **lower than 60 bar**, **tighten the sequence valve**. If the pressure is **higher than 60 bar**, **loosen the sequence valve**.
4. Repeat the process until the gate opens at **60 bar**.



19 mm SPANNER



6 mm ALLEN KEY

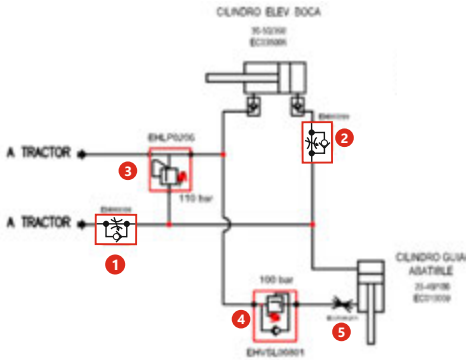


**IMPORTANT**

Depending on working conditions, the above settings may need to be adjusted for the machine to work correctly.



### 4.13.4. PICK-UP GUIDE / LIFTING ADJUSTMENT



To correctly adjust the pick-up UP/DOWN movement, a correct sequence of movements must be produced.

**When the pick-up MOVES UP:** When the pick-up reaches its highest position, the **internal guide must be closed** (moving towards the fixed external guide).

**When the pick-up MOVES DOWN:** When the pick-up needs to be moved down, the **internal guide must be opened before beginning to lower the pick-up** (towards the working position).

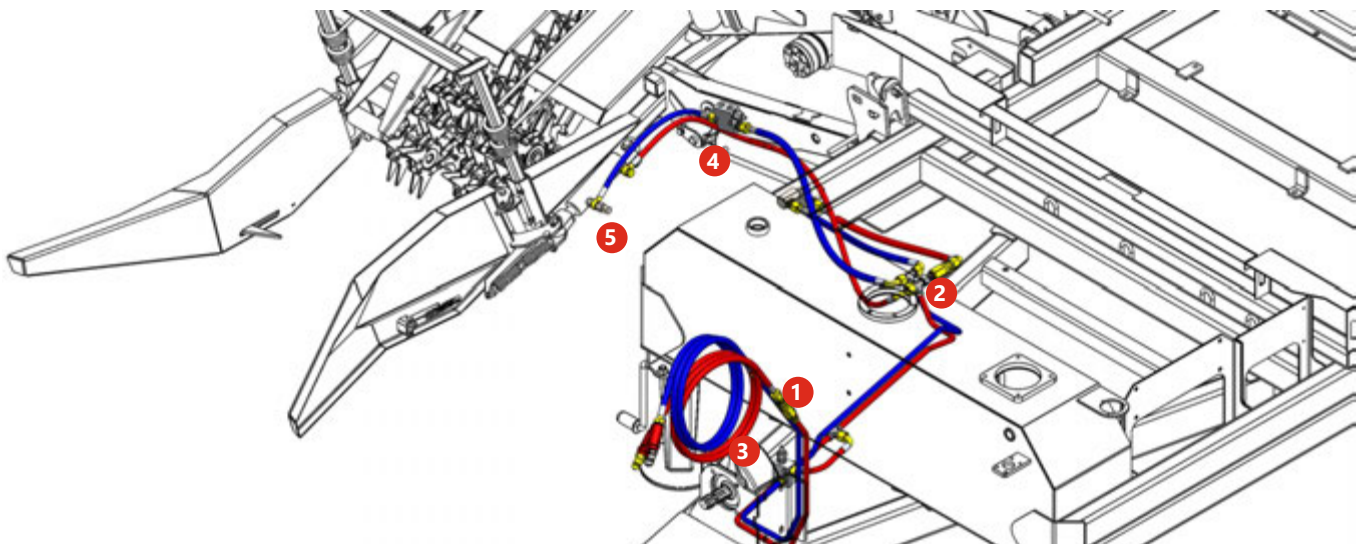
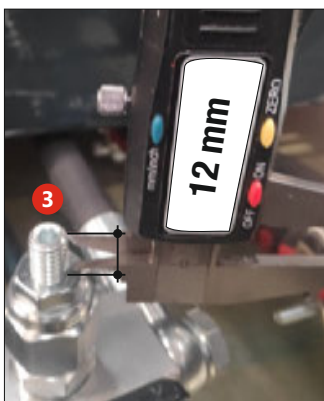
#### 4.13.4.1. ADJUSTMENT PROCESS

Set a normal working speed of between 350 and 450 rpm, then proceed with adjustment.

1. Close the regulators (1) - (2) and open two turns. Fully open pressure control valve (3) and fully close sequence valve. (4) Close the hollow screw (5) fully and open it three turns.
2. Raise the pick-up all the way. After doing this, it may not be possible to lower the pick-up due to the pressure control valve (3).
3. Set the pressure control valve (3) to 12 mm as shown in the picture. If the pick-up does not lower, tighten one more turn to guarantee correct functioning.
4. Loosen the sequence valve (4) two to three - turns. Activate pick-up raising and check that the internal guide closes when the pick-up is at its maximum position, approaching the external guide. If it is not, loosen the sequence valve (4) a little more until the sequence is performed correctly.
5. Raise and lower the pick-up until optimum speed is achieved using the regulators (1) and (2).

- (1) Pick-up UP flow regulator
- (2) Pick-up DOWN flow regulator
- (3) Pressure control valve
- (4) Sequence valve
- (5) Hollow screw with regulator

Recommended raising and lowering times:  
 Up ~ = 6 seconds  
 Down ~ = 6 seconds





**WARNING!**

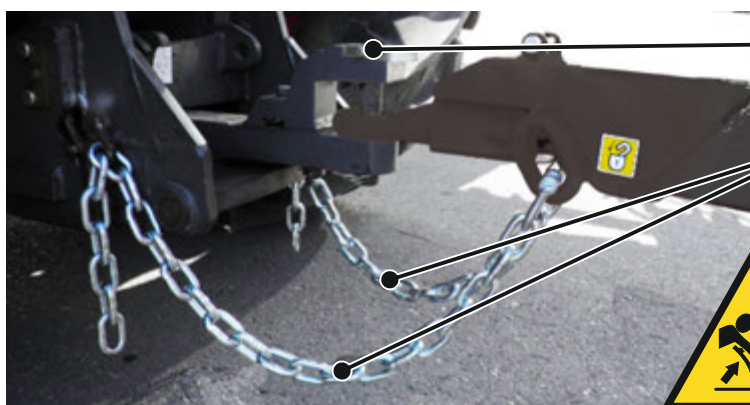
Whenever the packer is unhitched from the towing vehicle, make sure that the **protective device to prevent unauthorised use is correctly employed.**

**5.1. START UP AND OPERATION**

For the next step, it is necessary to hitch the Packer to the tractor in the following way:

First, remove the protective device intended to prevent unauthorised use and connect the Packer to the tractor; this must be done with caution in order to avoid getting caught between the tractor and the machine.

Then, position the pin and apply its safety bloc, and secure the safety chains.



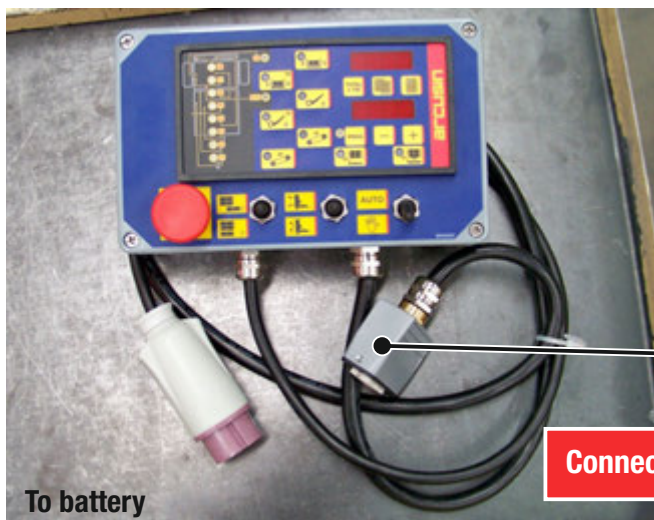
LINK-PIN

SAFETY CHAINS

Take care with coupling operations. There is a risk of the upper extremities being trapped in the machine.



Once the machine has been coupled, connect the control console's power outlet **directly to the tractor's battery**. The positive wire should be connected to the battery's positive terminal and the negative wire to its negative terminal. Also connect the movement connector on the control console to the base socket, which is located on the back of the machine, next to the pressure filter.



To battery



Connecting together

Then connect the lighting connector to the tractor, so the lighting circuit (turn signals, brake lights) of the machine is controlled by the tractor. Also connect the quick-fit connectors of the hydraulic hoses to the tractor so the pick-up can be moved up and down.

Once the electrical and hydraulic connections have been made, open the oil valve, which is located on the bottom of the oil tank.

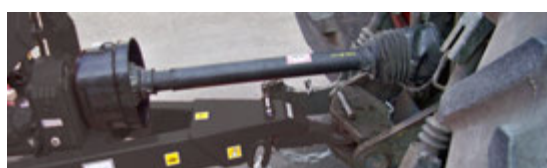
Before starting up the machine, it is necessary to load the Packer with spools of twine with which to tie the compressed bales. A total of eight spools must be loaded, and this must be done according to the instructions provided in section:

### Loading and changing the spools.

Furthermore, a mock (manual) tying sequence needs to be carried out to leave the knotters loaded and ready.

*As a general rule, lubrication and maintenance work should be carried out on a daily basis, as outlined in chapter **Cleaning and grasing**.*

**Finally, connect the tractor's PTO to the machine's pump by way of a drive shaft or PTO.**



### WARNING!

**It is very important that the twine retention system installed inside the spool cabinet applies as little pressure as possible to the twine.**

When the machine has been correctly coupled, you must measure the distance between the groove on the tractor's PTO and the groove on the axis of the machine's multiplier.

**It must be possible to reduce the working length of the PTO, as measured between the axes, by 100mm because when the PTO is retracted it will be up to 100mm shorter.**



### WARNING!

**Never** stand on, jump over, or even get too close to the drive shaft or the PTO when the machine is working. Always use the corresponding safety guards. Always connect the PTO at **540 RPM**.

*ARCUSIN S.A. cannot be held responsible for any failure to comply with these instructions.*



Before starting up the tractor and beginning to work with the Packer, it is a good idea to develop the habit of walking around the machine to ensure that everything is in order. **You should therefore do the following:**

1. Carry out daily lubrication and maintenance work as outlined.
2. Fully acquaint yourself with the machine by following the instructions provided in this manual (this is essential!). Then make an exhaustive check of all the adjustable parts previously described in “Regulations”. This will enable you to obtain optimum performance and maximum benefits from your **MultiPack D14 Bale Packer**.
3. Make sure that the machine is not blocked (by the chocks).
4. Check that the oil level in the tank is correct.
5. If the oil tank has been emptied for any reason, the casing of the pump should be filled with oil.
6. Make sure that the hitch is secure and that the safety chains have been correctly applied.
7. Make sure that the extractor is completely retracted. D10 off in the control box.
8. Check that the pickup chains, the feeding roller chains and the knotters' chains are all correctly tensed.
9. Once inside the tractor cabin, make sure that the control box is firmly in place and that there is no risk of it falling.

**WARNING!**

The multipack is only designed to collect, handle and group on straw bales or other types of **DRY** fodder.

The correct functioning and performance of the machine cannot be guaranteed if the bales are wet or damp as a result of excess water absorption.





The working cycle of the Bale Packer can be divided into three separate stages:

• **Feeding**

*This is the stage in which the machine successively picks up and loads a total of 14 small bales.*

• **Compressing and tying**

*Once the 14 bales have been fed into the bale pressing chamber, they are compressed to form one large bale group and then tied.*

• **Discharge**

*Finally, when the bale group has been tied, the machine discharges the resulting large bale and deposits it on the ground.*

**6.1. PREPARING THE MACHINE**



The working cycle starts when the machine is in the field. Once all the checks described in sections **3 and 4** have been completed, the machine is ready for use.

1. First of all, remove the pickup's safety cover (which must be fitted to the machine when circulating on public thoroughfares, roads, tracks etc.).
2. Lower the pickup into position; and level the machine and the pickup so that they are in the ideal working position.
3. Connect the control console's power outlet to the tractor (**12V.**); flick the selector switch to the “**AUTO**” position and check the display panel to make sure that everything is correctly positioned (lights off and no acoustic signal).
4. Check that there is nobody within the machine's risk area (see chapter 2).
5. Move forwards until the pick up is in line with the row of bales to be collected from the field.
6. Connect the tractor's **PTO at 540 RPM**, taking all the necessary safety precautions. When you connect the PTO in the “**AUTO**” position, the only thing working should be the motor that moves the pickup chains in the loading direction.

**\*OBSERVATION**

The machine is now ready to pick up bales from the ground. This is the beginning of the feeding stage of the Bale Packer's working cycle.

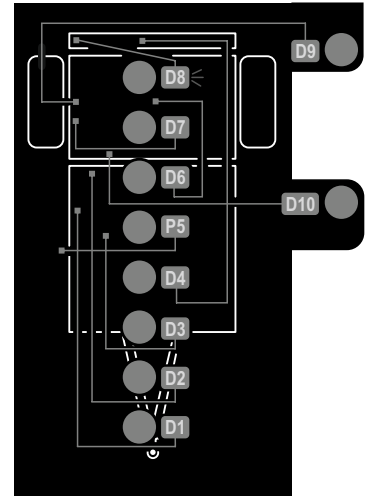
**6.2. FEEDING**

1. Start moving forwards with the mouth of the pickup pointing towards the row of bales to be loaded and ready to load the first bale. To produce a good quality bale group, it is important that all the bales loaded are of the best possible quality and are well-tied.

It is important to visually check the general quality of each bale when steering the pickup towards it. It is best to discard any potentially defective bales and not load them.

2. Adapt the speed of the machine to the specific field conditions: the distance between one bale and the next (*the greater the distance between bales, the higher the speed at which the machine can operate*).

3. When the front of the pickup comes into contact with the first bale, the chains engage and pick it up from the ground. It is then carried up the face of the pickup and left in position for the pusher, in the channel in the base of the machine chassis.

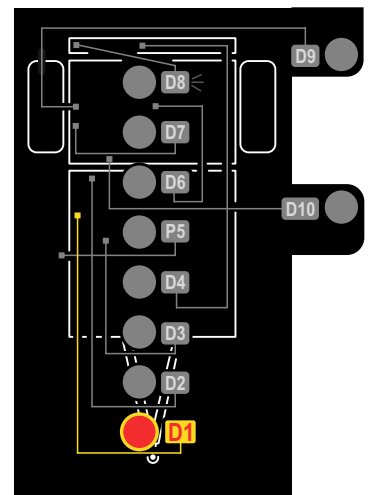


*\*All lights must be green before you can start working. Red lights indicate that machine mechanisms are currently in operation.*

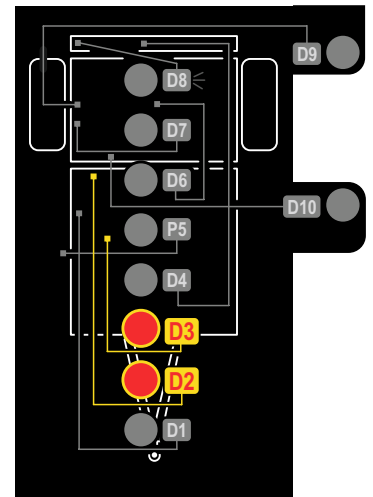
*\*There may be inputs that are also active during the loading process.*



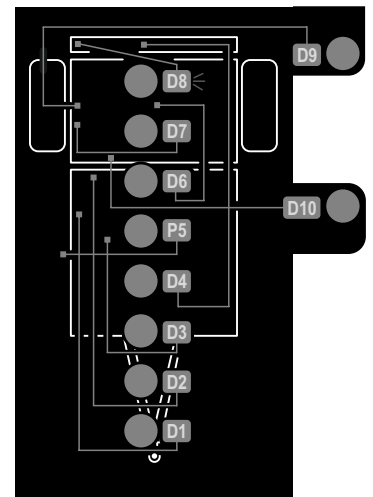
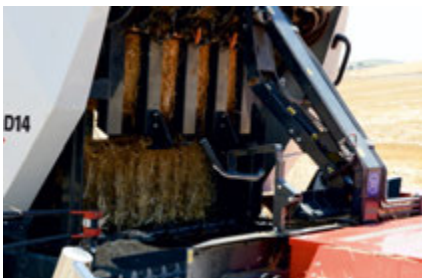
4. Once the bale is positioned on top of the pusher mechanism, and up against the limit point, sensor **D1** (magnetic detector) is activated. The pickup chains stop moving and an order is sent to start the cycle in which the pusher advances and positions the bale on the lift platform, inside the bale pressing chamber.



5. The pusher, pushes the bale towards the inner part of the bale pressing chamber, until it detects **D2**, returning the pusher to the loading position.

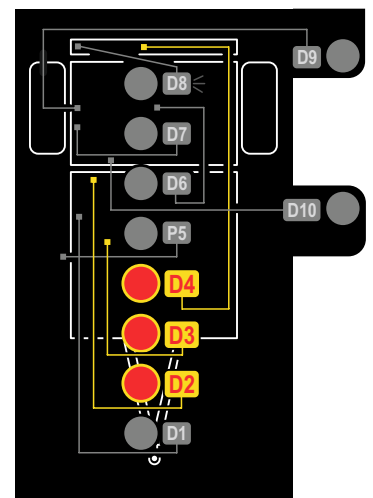
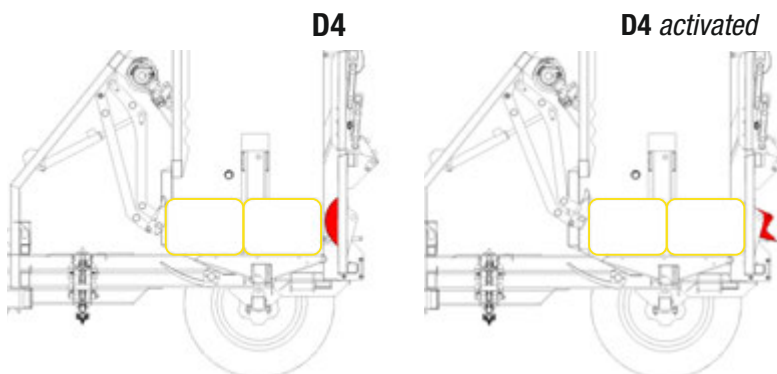


6. When the pusher comes back to its initial position, the indicator light **D3** is OFF (magnetic detector).



7. The machine moves forwards to pick up the second bale. The pickup collects it the ground and again positions it on the pusher.

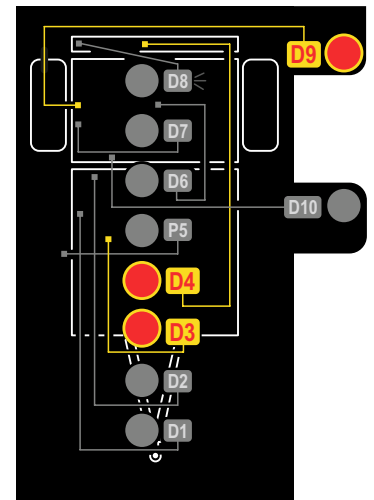
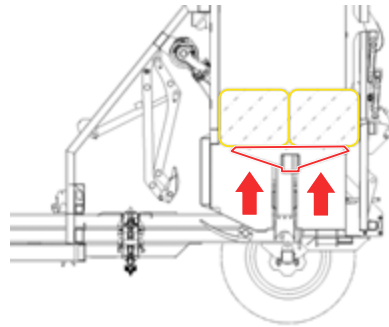
8. The pusher repeats its swivel and turn movement, but when the bale enters the bale pressing chamber it displaces the bale that is already inside, activating the **D4** (magnetic detector) end of sequence. This detects the presence of **two bales** on the lift-press and sends the command for the lift-press to rise.



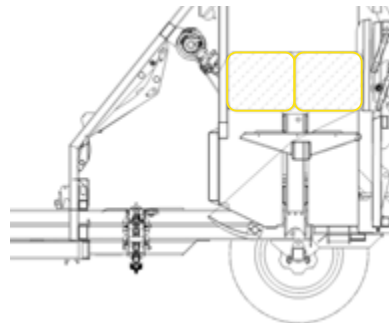
9. When the **D4** end of sequence is activated and gives the command for the lift-press to rise, the bale feeder arm is retained for several seconds to push against the bales and make sure that they enter the bale pressing chamber in the correct position. It then returns to its loading position while the lift-press rises.



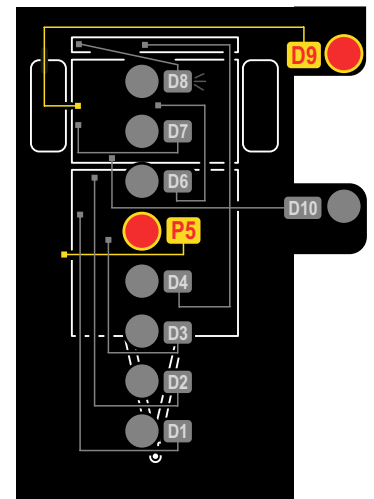
Lift-press



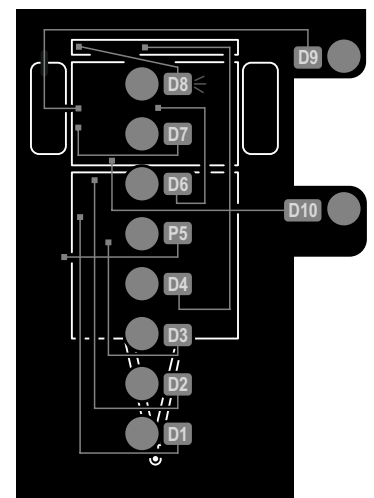
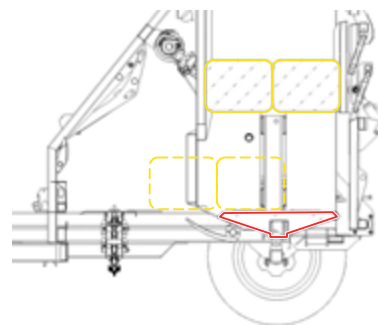
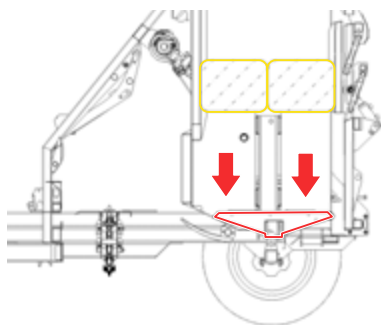
10. When the lift-press reaches its upper limit, **P5** (the pressure transducer) is activated and reverses the direction of the lift-press, making it descend to its original position. But before the lift-press starts its descent - when it is at its uppermost position - the discharge gate's retaining cylinder is activated. This presses against the bales and ensures that they do not descend with the lift-press.



retaining cylinder



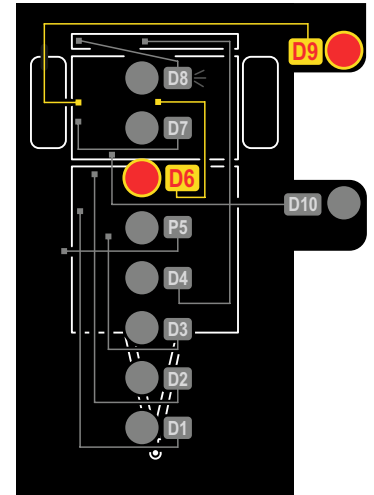
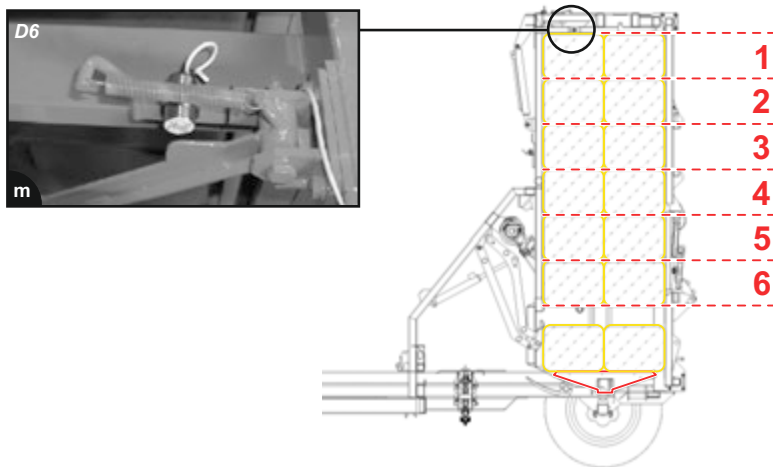
11. The empty lift-press descends to its original position (off **D9**), leaving the compressed bales in the upper part of the bale pressing chamber and the lower part ready to receive more bales.





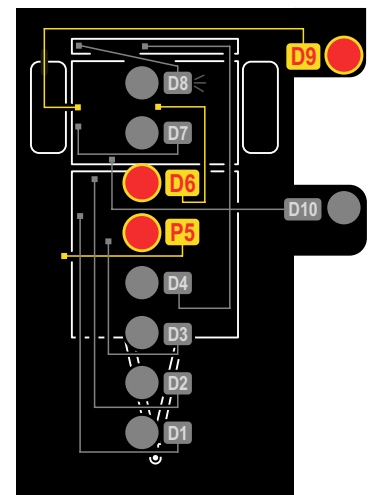
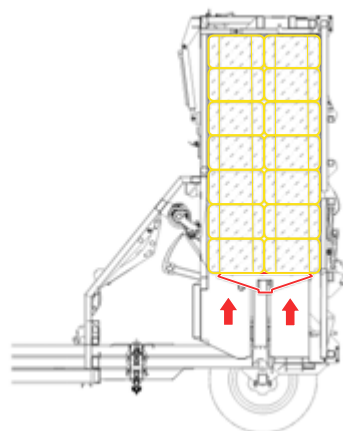
12. For the moment, 2 bales have been loaded and 12 more are needed to fill the Packer prior to compressing and tying to form a large bale group. The whole process must be repeated 6 more times before reaching the end of the feeding process.

13. Once bale number 12 has entered the bale pressing chamber the lift-press starts to ascend. On reaching its upper limit - when the tops of the bales come into contact with those already inside the Packer - the **D6** (magnetic detector) end of sequence is activated. This detects the height of the penultimate layer and sends a signal to the machine's command console to compress the following load (bales 13 & 14) according to the preselected pressure value indicated by **P5** (the pressure transducer).



### 6.3. COMPRESSING AND TYING

14. When bale number 14 is on the lift-press, the lift-press begins to ascend. The bales are then compressed according to the pre-selected value marked by the **P5** (the pressure transducer) pressure regulator.



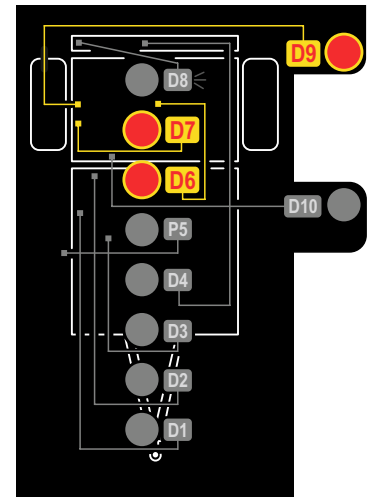
15. Once the **P5** pressostat has been activated the lift-press remains in its upper position so that the resulting large bale group can be tied.



**16.** The needle support leaves its resting position and describes a radial movement. The threaded needles align with their corresponding knotters.



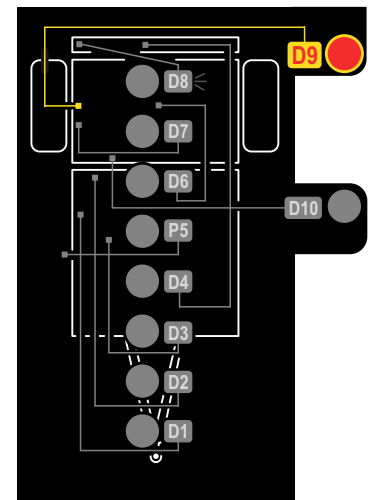
*Needle support*



**17.** When the needles enter their corresponding knotters, these do their work and tie the stack. The needle support then descends again and activates **D7** (magnetic detector), which controls the complete cycle of the tying mechanism. The needle support stops when it reaches its initial (resting) position.



*Position of detector D7*



**There is now one large bale group formed by the 14 bales that have been pressed and tied. The machine now automatically prepares to discharge the large bale group.**



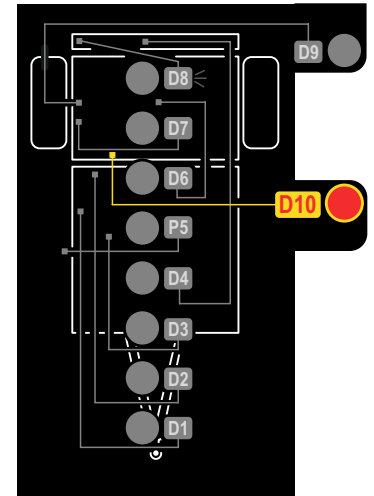
*Machine ready to start discharging the package*

**18.** Continue moving forwards at a prudent speed. When the large bale group has been tied and the needles have returned to their starting position the lift-press descends to its initial position. Then **D9** (magnetic detector) is disabled, which controls the position of the lift-press in the lower part of the machine.

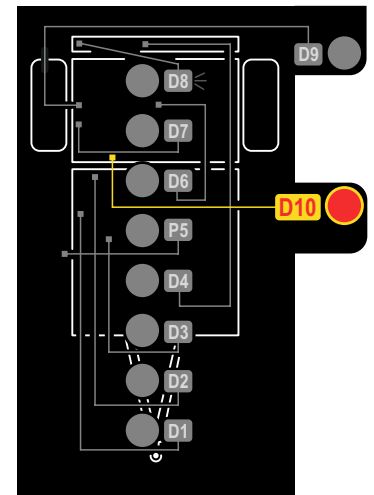
*All of the information, illustrations and specifications in this manual are up-to-date at the time of publication. We reserve the right to introduce additional technical modifications without previous notice.*

6.4. UNLOADING

19. When the lift-press is down, the upper retainer is activated and ascends. The extractor mechanism then starts to push against the large bale group and at the same time the discharge gate is opened. This combination of movements pushes the large bale against the gate as it opens.



20. The gate gradually opens as far as its limit. As the gate slopes with respect to the ground, the upper end of the large bale group comes into contact with the ground and this checks its advance with respect to the forward movement of the machine. The machine continues to move forwards and the large bale is left on the ground.

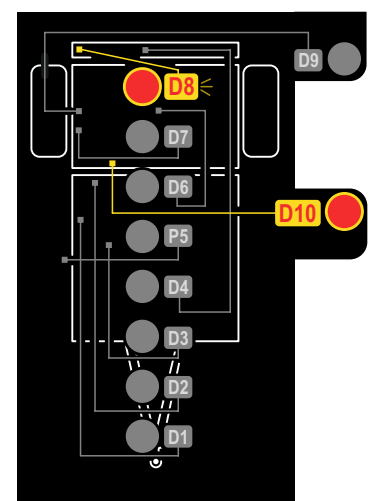
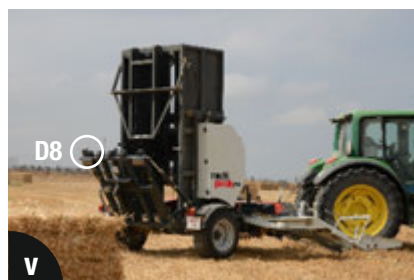


21. Once the large bale group has been discharged and the D8 (photocell) end of sequence does not detect the presence of the large bale group for a certain length of time (TA), first the upper retainer closes, then the extractor is retracted and finally the discharge gate is closed: in that order.



**NOTE**

The machine works in an uninterrupted cycle: while it is discharging one large bale group, it can load another bale until it is in position on top of the lift - press.



22. When the gate has closed again and the large bale group is on the ground, the working cycle has concluded and the machine is ready to begin another cycle.

## 6.5. ADVICE FOR HANDLING GROUPED BALES

As a manufacturer of agricultural machinery with many years experience in this sector, **ARCUSIN S.A** would like to offer some advice for handling grouped bales for distribution or storage.

First and foremost, it is very important for the handling process that the large bale group is stable, well-pressed and uniform. It is therefore very important that the small bales that form the large bale group are as well made as possible.

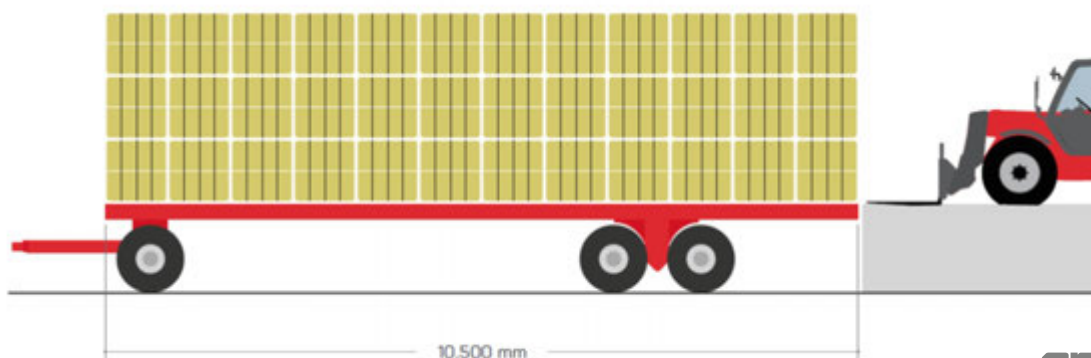


When baling, it is important for all the bales produced to have the same basic characteristics (length, pressure etc.).

When discharging the large bale group the Bale Packer leaves it in the perfect position for subsequent collection (with the twine strings touching the ground).

When handling the resulting large bales, it is always advisable to pick them up using “spikes” or similar mechanisms and to “attack” the bottom, or lower part, of the large bale group.

The following photos show different ways of handling large bale groups for subsequent storage, stacking and distribution.





7.1. SAFETY WARNING STICKERS







**ATTENTION!**







It is very important to read this section carefully, as in this way you can prolong the life of your machine and prevent exposing both materials and people to unnecessary safety risks.

In the interests of both your own safety and that of others, we remind you that however many precautions you may take, you can never take enough.







The **ISO 11684** (April 1998) normative only provides general recommendations for the dimensions of safety stickers. As a result, the ones that we have used may vary in size and at times may be slightly different from those indicated. The size and positioning of our stickers largely depend on the characteristics of the machine (available space, etc.) in question. Even so, the relative proportions of our safety stickers are always maintained.







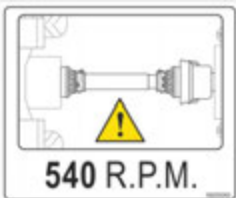
**The different safety stickers that can be found on the Bale Packer are shown below: they indicate the main safety parameters of the machine.**



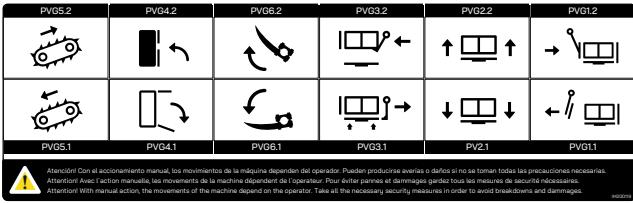
PICTOGRAM	DESCRIPTION	QUANTITY
	<p><b>CAUTION!</b> Danger of pressurised hydraulic oil release.</p> <p>LOCATION: On the side of the reservoir, near the manometer.</p>	<p>1</p>
	<p><b>ATTENTION!</b> Maintain the safety distance with the machine to avoid accidents, projected elements, falls, trapping, etc.</p>	<p>1</p>
	<p><b>CAUTION!</b> Working voltage 12V.</p> <p>LOCATION: On the front of the chassis, near the base of the connector, and on the cover of the connections box.</p>	<p>1</p>
	<p><b>CAUTION!</b> Moving part.</p> <p>LOCATION: On all of the machine's hydraulic cylinders and on all of its moving parts.</p>	<p>18</p>

PICTOGRAM	DESCRIPTION	QUANTITY
	<p><b>CAUTION!</b>  <b>Check all of the greasing with the regularity indicated in the greasing tables.</b></p> <p>LOCATION:            On all parts of the machine that need to be greased.</p>	26
	<p><b>CAUTION!</b>  <b>Greasing point or area with multiple greasers.</b></p> <p>LOCATION:            At knotters.</p>	4
	<p><b>CAUTION!</b>  <b>Indicates the direction in which the pump rotates.</b></p> <p>LOCATION:            On the front part of the hydraulic unit housing, above the pump.</p>	1
	<p><b>CAUTION!</b>  <b>Position and fasten the safety chain that joins the drawbar to the hydraulic unit housing.</b></p> <p>LOCATION:            At the extreme of the drawbar, on top of the safety rings of the drawbar and in the security tether of the pickup.</p>	5
	<p><b>CAUTION!</b>  <b>Lifting point.</b></p> <p>LOCATION:            Back side of the draw bar (both sides), close to the multiplier. Chassis, in the area of the</p>	6
	<p><b>CAUTION!</b>  <b>Position hydraulic jack for tyre change.</b></p> <p>LOCATION:            Under the chassis, close to the tyre.</p>	2



PICTOGRAM	DESCRIPTION	QUANTITY
	<p><b>CAUTION!</b> <b>Danger of loss of balance when climbing on the Bale Grouper.</b></p> <p>LOCATION: On the front part of the tube that connects the vertical chassis to the base of the machine chassis and rear part of the upper chassis.</p>	<p><b>3</b></p>
	<p><b>CAUTION!</b> <b>Danger of lower limbs being trapped.</b></p> <p>LOCATION: On the front of the machine near the support leg.</p>	<p><b>1</b></p>
	<p><b>CAUTION!</b> <b>Danger of upper limbs being trapped.</b></p> <p>LOCATION: On the back of the pickup, near the cog wheels and moving chains.</p>	<p><b>5</b></p>
	<p><b>CAUTION!</b> <b>Danger to be specified (moving parts, heat, etc.)</b></p> <p>LOCATION: On the back of the machine, on the tubes of the retainer of the discharge gate and on the front of the pickup.</p>	<p><b>4</b></p>
	<p><b>CAUTION! Danger of becoming trapped when the drive shaft is in motion.</b></p> <p>LOCATION: On the sides of the drawbar structure.</p>	<p><b>2</b></p>
	<p><b>CAUTION!</b> <b>Do not put your hands or fingers in this zone, as they are in danger of being severed.</b></p> <p>LOCATION: On the front of the pickup.</p>	<p><b>4</b></p>

PICTOGRAM	DESCRIPTION	QUANTITY
	<p><b>CAUTION!</b>            Take care when carrying out operations involving the hitching and unhitching of the machine to tractors: there is a danger of trapping hands or fingers.</p> <p>LOCATION:            On the sides of the drawbar.</p>	1
	<p><b>CAUTION!</b>            Indicates the working pressure of the tyres.</p> <p>LOCATION:            On both sides of the chassis, near the tyres.</p>	2
	<p><b>CAUTION!</b>            Indicates the characteristics of the oil used for the hydraulic system.</p> <p>LOCATION:            Near the oil meter on the reservoir.</p>	1
	<p><b>CAUTION!</b>            Indicates the maximum working pressure of the hydraulic circuit.</p> <p>LOCATION:            Next to the distributor.</p>	1
	<p><b>CAUTION!</b>            Indicates the characteristics of the oil used in the multiplier.</p> <p>LOCATION:            On the side of the support for the multiplier.</p>	1
	<p><b>CAUTION!</b>            Knot between coils.</p> <p>LOCATION:            In the inner part of the spool cabinet's lid</p>	1
	<p><b>CAUTION!</b>            Indicates the need to connect the PTO at 540 r.p.m.</p> <p>LOCATION:            On both sides of the drawbar.</p>	2

PICTOGRAM	DESCRIPTION	QUANTITY
	<p><b>ATTENTION!</b> Compulsory to disconnect the hydraulic and electrical lines when repair or maintenance operations are being done. Electrical hazard. 12V Operating voltage. Consult the instruction manual.</p> <p>LOCATION: On the outside of the central wiring console.</p>	<p>1</p>
	<p><b>ATTENTION!</b> Danger Moving Parts. Keep safety distance of 6 meters.</p> <p>LOCATION: In the discharge door</p>	<p>1</p>
	<p><b>ATTENTION!</b> Indicates the movement that is caused by manual activation of the lever on the distributor.</p> <p>LOCATION: On the protector, next to the levers on the distributor.</p>	<p>1</p>

**7.2. SAFETY IN TRANSIT**


The aim of this section is to provide help when driving the machine. It explains the rules that must be obeyed to guarantee working safely. These rules do not, however, free the driver from the obligation to observe the regulations set out in the corresponding national legislation relating to road traffic and work safety.

Concentration, good judgement and respect for the appropriate safety precautions for different types of work and the current road traffic legislation are all necessary requisites for preventing accidents and working safely with the machine.

All drivers must respect established speed limits and also take into account a series of other factors: their own physical and mental aptitudes; the type and conditions of the road in question; the vehicle and its load; the weather conditions; the general surroundings; and the other traffic on the road; and the combination of any or all of these factors at any given time. Drivers must adjust the speed of their vehicles in accordance with the prevailing circumstances and make sure that their vehicles can always be stopped within their driver's field of vision and before colliding with any potential obstacles.

Drivers using public highways must drive in such a way that they do not unduly obstruct the general flow of traffic, cause danger, harm or unnecessary inconvenience to other people, or damage property.

Drivers must proceed with due care and attention and avoid causing any damage to, injuring, or endangering, either themselves or other road users.

Drivers of tractors and other agricultural machinery must use flashing warning lights, both during the day and at night, when driving on public highways at speeds of, or below, 25 km/h.

**7.2.1. TRANSPORT ON PUBLIC HIGHWAYS**

The driver of a machine is also a user of public highways, and as such must be acquainted with the traffic rules and regulations of the country in which the machine is used.

It is important to take into account the fact that the machine is slow in comparison to other vehicles and may therefore constitute an obstacle for them. Bear this in mind and be aware of other road users behind you: allow them to overtake whenever possible.

It is essential to respect and observe all of the following regulations concerning driving on public highways:

- Check that the machine is correctly hitched and secured with he safety chain that connects the drawbar to the tractor.



- **Reduce speed when turning** (*figure 1*), crossing hummocks and on rough, slippery or muddy surfaces. **Drive smoothly**, without abruptly stopping and starting.

Drive with **extreme care and attention** whenever visibility is limited due to rain, fog or other adverse weather conditions.

- When in transit, the support leg should always be retracted.
- When travelling on public highways, the pickup must be raised and appropriately secured.

- Before starting the machine up, inspect it to ensure that all of its guards are correctly positioned.

- The PTO and the power supply that feeds the control box must be disconnected when the machine is not being used or is being transported on roads, tracks and public highways, etc.

- The machine's maximum towing speed is **25 Km/h**.  
Adjust your speed in accordance with the particular field conditions.

- It is expressly forbidden to transport people or animals on the machine, or **any other objects that are not firmly secured to the Packer** (*figure 2*).

- Avoid making any brusque manoeuvres or driving on or near any areas that could make the Packer become unstable. **The machine must not be used on slopes with an angle of inclination of more than 18 %** (*Figure 3*).

- It is forbidden to use the Packer to transport any other materials. **The machine must be empty (unloaded) when in transit on public highways.**

- Whenever travelling on public highways, whether by day or night, the tractor's rotating **flashing light** must be on and **its indicators** must be connected.

- **Always fasten the seatbelt**, even though the tractor is equipped with a roll bar (*Figure4*).

Figure 1

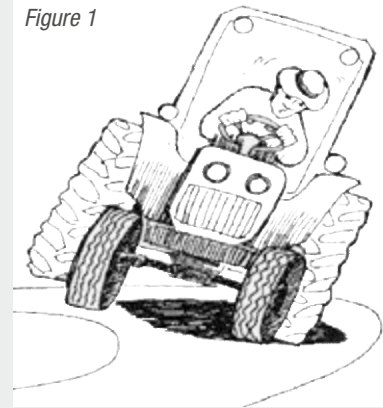


Figure 2

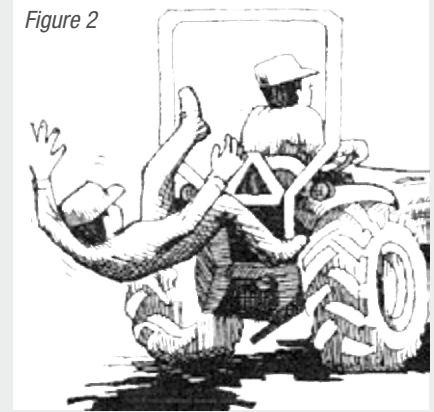


Figure 3

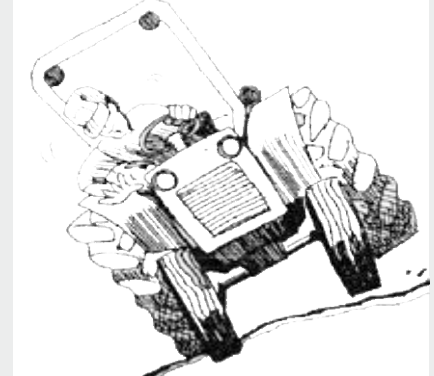


Figure 4





**7.3. SAFETY WHEN OPERATING THE MACHINE**

Carefully read these instructions and look at the illustrations before using the machine. Remember that in the interests of your own safety and that of others, you can never take too many precautions. The following section on safety should serve as a complement to what you already know about safety measures. It should not be regarded as a substitute for training or for using the equipment in the appropriate way.

The operator should receive training on receipt of the Packer. Each machine contains a large number of working parts and specific training is required for correct and safe machine operation.

Having received training in the handling of the machine, it is then necessary to carry out a safety inspection before starting to work with it. The operator must carefully inspect all parts of the machine to ensure that they are in good working condition.

**Areas that should receive specific attention include:**

- 1.** All safety guards (PTO, fairings, etc.), if any guard is missing or damaged, it must be replaced or repaired.
- 2.** Check all hydraulic circuits to ensure that they are safe and in good condition.
- 3.** Make sure that all working speed settings are correct for their normal working functions. During training the operator will have learnt how all of the machine's movements are activated: this will help him/her to notice any unusual noises or movements.
- 4.** Check the machine's electrical circuit and make sure that the necessary voltage (12V.) is being supplied and that everything is correctly connected.
- 5.** Keep all the machine's moving parts clean and free from harvest debris.
- 6.** Do not work with the Packer unless it is in safe working order.



Figure 5



Figure 6

Having carried out the initial safety inspection, the tractor's engine can then be started. Care must be taken to assure that anybody near the machine remains at a safe distance when it is started up.

The operator must always concentrate on his/her work. Most agricultural machinery requires careful attention for safe and efficient handling. The operator must avoid being distracted from his/her work.

Do not work with the machine if you feel sick or ill. Illnesses and fever can affect the operator's judgement and contribute to creating a dangerous working environment.

**Keep away from unprotected moving parts.** It is important to concentrate on your work and your movements to take adequate precautions with your clothing when near the machine. Do not allow anyone to approach unprotected moving parts, unless the machine is switched off.

If the working noise level is too high for you to make yourself heard, use a combination of the tractor's acoustic signals and hand signals to convey any messages. It is very important that you are able to communicate with your colleagues and the people around you.

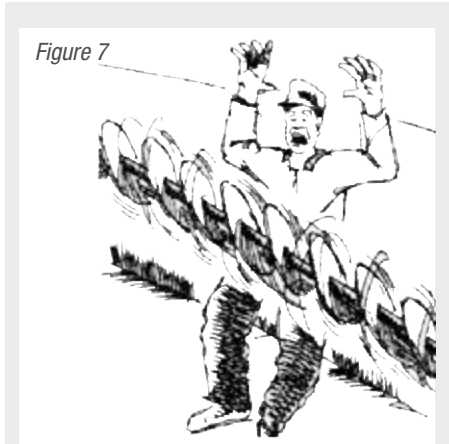


Figure 7

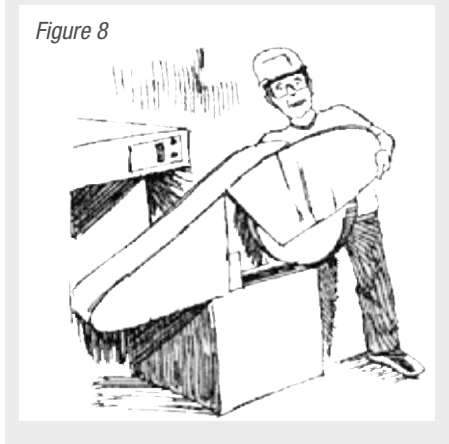



Figure 8



**CAUTION!**  
Do not approach unprotected moving parts.  
Always make sure that the guards are correctly fitted.

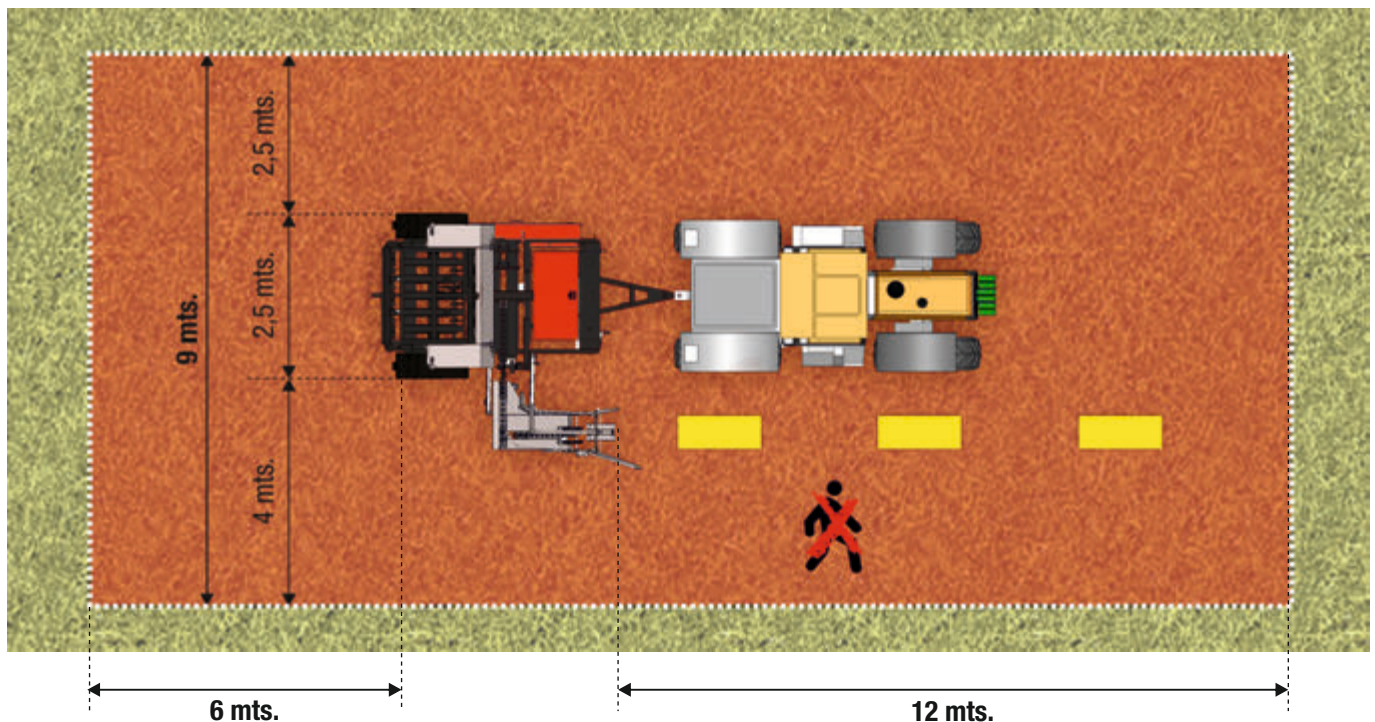
When working, you must take all of the precautions outlined below. In this way your work will be safe and will not endanger other people or damage the machine.

1. The electrical components inside the control console should not be tampered with and the regulation pressures of the hydraulic unit should not be modified.
2. In order to prevent possible damage, whenever the machine is uncoupled from the tractor you should make sure that all the elements that unite the two (electrical, hydraulic, PTO, etc.) are disconnected.
3. Whenever hitching the Packer to the tractor, it is necessary to apply the safety chains.
4. Never stand on, or jump over, the PTO or approach it when it is in motion. This axle must always be covered by the corresponding safety guards.
5. Always connect the PTO at 540 rpm.



6. Never get down from the tractor with the **PTO** in motion: always disengage it before stepping down.
7. It is absolutely forbidden to use the Bale Packer for tasks other than those indicated in this instructions manual.
8. Whenever the machine is working, check that there is nobody within the risk area: if there is anyone within this area, stop the machine until the risk has been eliminated.

## SAFETY DISTANCES



9. If, during the course of its work, the machine stops due to obstruction by a bale, switch it to manual mode (MANUAL). If the problem cannot be solved from the tractor's cabin, disconnect the electrical part of the control console and proceed to unblock the machine using the hydraulic unit's manual distributors.



Control console



Hydraulic Block



**7.4. SAFE MAINTENANCE AND ADJUSTMENTS**

Familiarise yourself with the maintenance procedures before carrying out any maintenance work.

Do not carry out any greasing or tuning with the engine on. Always keep your hands, feet and clothes away from moving parts. Set all controls to neutral and disconnect all electrical functions. There should be no pressure in the hydraulic system. Stop the engine and allow the machine to cool down.

Support all parts of the machine that are raised before carrying out any maintenance work.

All the components should be kept in good working order and should be correctly mounted. Change any worn or broken parts. Keep all of the machine's components free from accumulated grease, oil and dirt.

Disconnect the (-ve) cable before working on the electrical system and before carrying out any welding work on the machine.

**Disconnect the *positive and negative* cables from the battery before carrying out any welding work on the machine.**

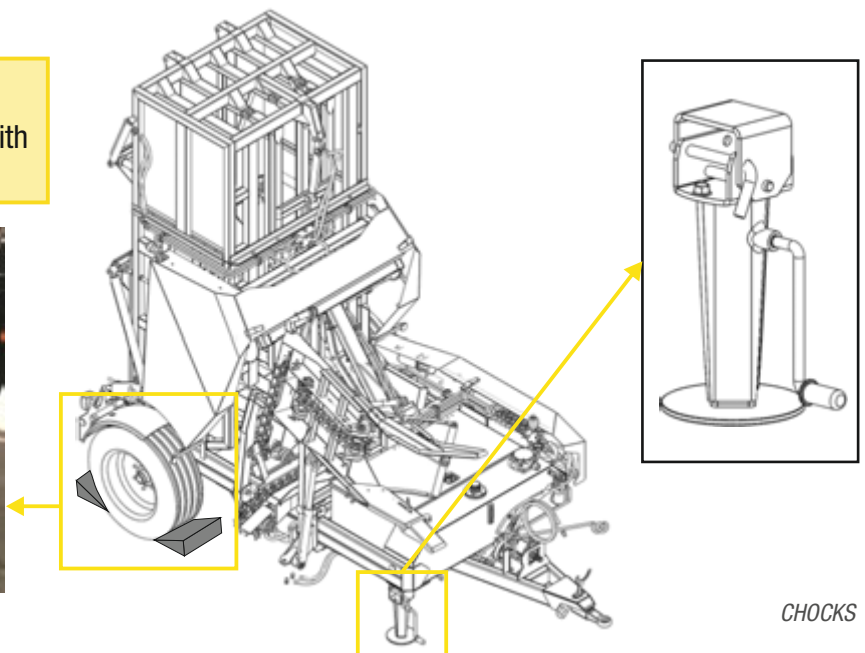
In the interests of safety, and in order to prevent unnecessary risks, the machine should be positioned on a flat surface and prepared in the following way before undertaking any maintenance work:

- Position the support leg so that the whole weight of the packer rests on the wheels and the support leg; then block the machine by placing the chocks, which are incorporated into the side protectors, in position, on the wheel opposite the support leg.



**CAUTION!**

Never park the machine on slopes with gradients of over **18%**.



- Before starting any kind of work, check that the moving parts (lift, pickup, etc.) have been completely lowered and are resting on their corresponding mechanical stops, and that there is no possible danger from unexpected movements.

- Whenever you prepare to carry out any kind of maintenance work on the machine, first stop the tractor's PTO and disconnect the electrical power supply.

- As a general rule, and in the interests of preventing risks, you should avoid positioning yourself under any moving parts such as the lift-press, pickup, and discharge gate and under the machine itself.

- If, for reasons of accessibility or comfort, it is necessary to position yourself under any of the previously mentioned parts when carrying out maintenance tasks, this should be done in the following way:

- Tie and mechanically block the moving parts in question using safety bars, cords, etc.
- Secure the work zone with “props” to prevent any moving parts from falling unexpectedly.

- Any work on electrical components or involving pressure adjustments should only be carried out by qualified personnel from ARCUSIN or carried out with the authorisation of the head of the after sales support department (S.A.T.)



- Whenever you have been carrying out any maintenance or repair work, make sure that the machine is left in optimum working order.

- Remember that when starting up the machine after maintenance or repair work, it is necessary to remove all of the previously positioned safety instruments.

- As a general rule, and in the interests of risk prevention, no safety precautions are ever excessive. You should be conscious of the risks to which you are exposed and take any safety measures that that may be required.



### WARNING!

ARCUSIN S.A. CANNOT BE HELD RESPONSIBLE FOR ANY FAILURE TO COMPLY WITH THESE INSTRUCTIONS OR ANY POTENTIAL DAMAGE OR INJURY THAT MAY RESULT FROM SUCH FAILURE.

## MACHINE SAFETY

- If for reasons of accessibility or comfort when carrying out maintenance or adjustment work, we must access superior parts of the machine, the operation must be carried out as follows:

- The basic rule is not to use a manual ladder to work. If necessary and whenever it is not possible to use a work platform, the following measures must be adopted
- In the case of having to use a ladder it is very important: Fix the ends of the ladder well, consider the inclination of the ladder, use it only one person, etc.
- If feet are 2 meters above the ground, use a safety harness anchored to a solid and resistant point.



**8.1. MAINTENANCE PLAN**

A maintenance plan is the set of preventive tasks to be carried out on a machine in order to meet certain availability, Reliability or cost objectives and with the final objective of maximising the service life of the machine.

This plan contains all the tasks necessary for preventing the main faults that can occur with this machine.

**PREVENTIVE MAINTENANCE:**

Preventive maintenance aims to anticipate breakdowns by ensuring the correct operation of the machine.

**PREDICTIVE MAINTENANCE:**

Predictive maintenance predicts future points of failure of a machine component so that said component can be replaced just before it fails. This minimises equipment downtime and maximises component life time.

	8.1.1. PREVENTIVE MAINTENANCE Every 80,000 bales	8.1.2. PREDICTIVE MAINTENANCE Every +80,000 bales
UPPER RETAINER	X	Replace bushings Replace rubber stops
RETAINER	X	Replace bushings Replace rubber protector
DISCHARGE GATE	X	Replace bearings Replace rubber stops
EXTRACTOR	X	Replace bushings
KNOTTERS	Replace plastic on the tensioner Clean, adjust and test	Replace chain Replace plastic on the tensioner Clean, adjust and test
PUSHER	Replace rubber stop	Replace bushings Replace rubber stop
PRESS	X	Replace plates with bearing
CONVEYOR	Tension chain	Tension chain Replace plastic guides
OIL TANK	X	Clean / change suction filter Change pressure filter Change return filter Change aerator plug Clean tank Change oil Clean magnet
DRAWBAR	Check tongue	Check tongue Identify / weld cracks
LOWER FRAME	X	Identify / weld cracks
PICK UP	Replace rubber stop Tension chains Check springs	Replace rubber stop Replace bushings on arms Tension chains Replace plastic guides Check springs

	8.1.1. PREVENTIVE MAINTENANCE Every 20,000 bales	8.1.2. PREDICTIVE MAINTENANCE Every 40,000 bales
THREAD TENSOR	X	Replace anti-wear guide Replace pressure plate
NEEDLES	X	Replace bridge bushings
HYDRAULIC INSTALLATION	Check pressures Repair oil leaks	Check pressures Repair oil leaks
ELECTRICAL INSTALLATION	Check I/O box Check control box Check detectors are functioning Check 10-pole connector	Check I/O box Check control box Check detectors are functioning Check 10-pole connector
DETECTOR D1	Replace springs Replace rubber stop	Replace bushings Replace springs Replace rubber stop
DETECTOR D6	Replace spring	Replace spring
WHEELS	Check / re-tighten slack in bushings Check tyres and rims	Check / re-tighten slack in bushings Check tyres and rims
GUARDS	Check lighting Check / change reflectors Check protective stops	Check lighting Check / change reflectors Check protective stops
MULTIPLIER	Check / top up gear oil level	Change gear oil Check / top up gear oil level
PUMP	X	Check flow rate Repair leaks
PTO	Check crossheads and protectors	Check crossheads and protectors
FUNCTIONING	Test automatic operation Test manual operation	Test automatic operation Test manual operation
GENERAL	Preparation Collection and management	Preparation Collection and management

You should make it a regular habit to keep both your work area and your machine clean and free from accumulated debris. This will help to prevent slippages and improve the working of your machine.

It is recommendable to fully grease your machine at the end of each season and to thereby leave it in perfect working order and ready for the next.

#### 8.1.1. END OF SEASON STORAGE

1. Thoroughly clean your machine both inside and out: dirt attracts moisture, which in turn causes corrosion.
2. Check the general condition of the machine and all its parts.
3. Make a list of any spare parts that may be required and order them in good time, so that the distributor has sufficient time to supply and fit them: this can usually be done quicker outside the working season. If you do this, you will avoid delays at the beginning of the new season.
4. Repair and/or replace all pieces that require such attention.
5. Repaint any pieces or areas that require such attention.
6. Thoroughly grease all of the parts of the machine indicated in the next chapter.
7. Close the oil shut-off tap inside the hydraulic reservoir.
8. Disconnect the control console and store it in a safe place, away from any moisture.
9. Finally, keep the machine in a dry place and avoid large periods of exposure to direct sunlight.

#### 8.1.2. PRE-SEASON SERVICE

1. Grease all of the parts of the machine specified in this manual, in order to eliminate any moisture that may have accumulated on the bearings etc...
2. Make a general check of all the nuts and screws that may have loosened during the season and retighten them wherever necessary.
3. Check and correct tyre pressures.
4. Open the oil shut-off tap located on the lower part of the reservoir and check that the level is correct.
5. Unwrap and connect the control console.
6. If you have recently changed any moving pieces, check that they are working correctly.
7. Read the instructions manual.
8. Load the twine spools and thread the twine along its whole course to the knotter. Carry out a full knotting cycle in order to prepare the knotter.
9. Check that all of the fairing protectors are correctly positioned.
10. Make sure that the machine is correctly coupled.

**8.2. CLEANING AND GREASING**

It is necessary to carry out a thorough cleaning of all parts of the machine on which harvest debris could settle and accumulate, as these may cause the machine to malfunction. It is important to acquire the habit of carrying out regular visual inspections of the whole machine and to check that everything is in working order before starting to use the Packer.

Check all of the greasing points with the regularity indicated in the greasing schedule tables. Use lytic based greases. It is very important to take special care when carrying out greasing operations: greasing has an important role in ensuring that the machine works well. Make sure that the machine is left clean and well greased before any prolonged period of inactivity.



Grease after every 10 hours of work:

1. Bushings on the pusher cylinder.



Grease after every 20 hours of work:

2. Casings on turn mechanism of needle carrier support / Tie rod bearings.
3. Below discharge gate cylinder casings.
4. Top discharge gate cylinder casings.
5. Adjustable bearings of the discharge gate turn mechanism.
6. KNOTTERS (all grease nipples).
7. Axle traction bearing of the conveyor chain.
8. Axle traction bearings of the pick up chains



Grease after every 60 hours of work:

9. Casings of the pickup turn mechanism.
10. Pick up elevation cylinder.
11. PTO links.

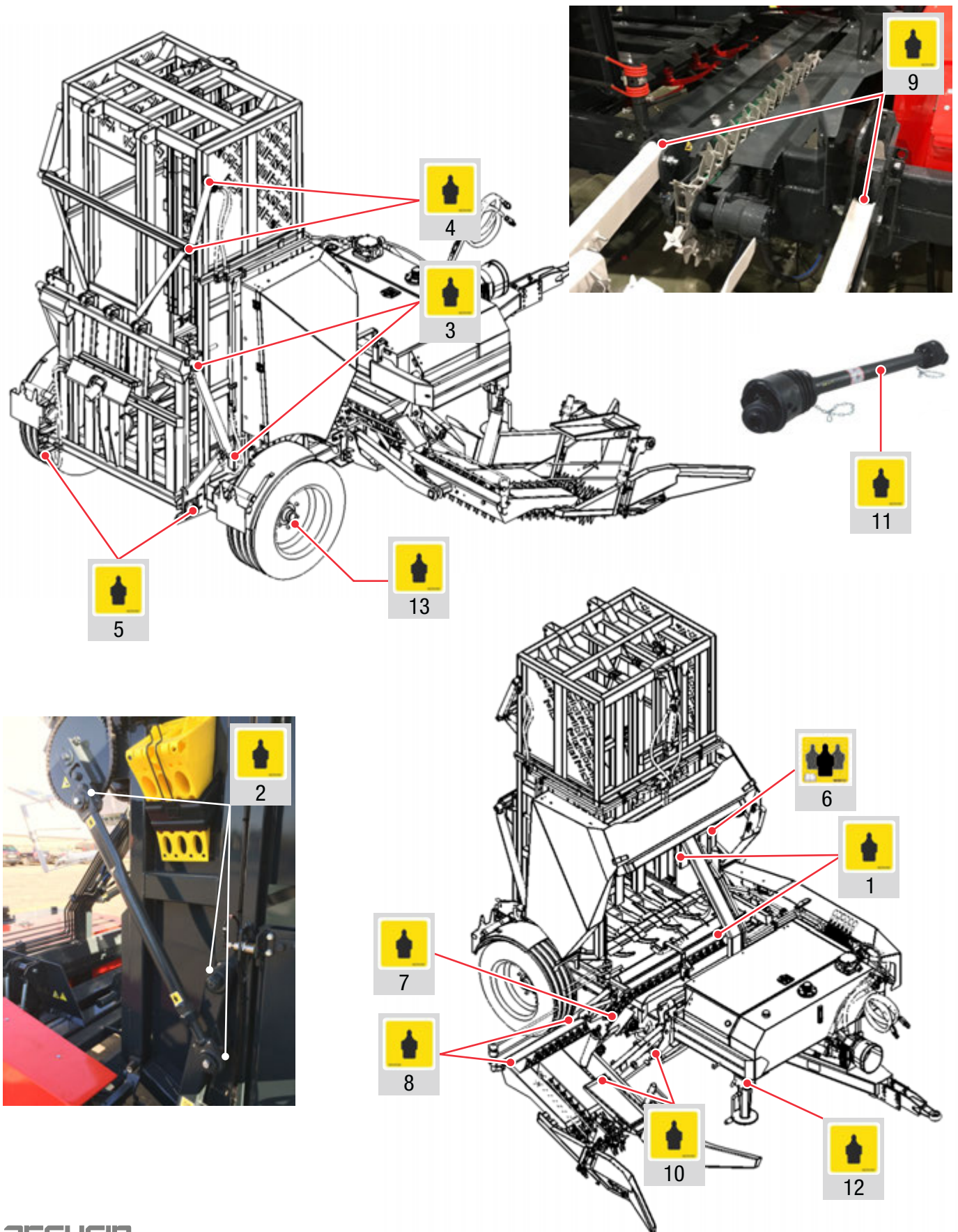


Grease after every 500 hours of work:

12. Check and change grease in the support leg.
13. Check and change grease in the wheel housings



8.2.1. GREASING DIAGRAM





Carry out all of the greasing and maintenance operations detailed in this chapter.

Clean the grease nipples before filling them with grease. Immediately change any lost or defective grease nipples. If a grease nipple does not accept the grease, take it off and check its condition and that of its contiguous elements.

We recommend that you use greases that comply with at least one of the following specifications:

- SAE universal grease EP with a 3-5% content of molybdenum bisulphide
- SAE universal grease EP

**At extremely low temperatures, use greases with MIL-G-10924C military specifications.**

**\*There is an option for centralised greasing of the knotters.**

In this case, add grease to the greasing points on the distributors located on the sides of the chassis.



8.3. LOADING AND CHANGING THE SPOOLS

RECOMMENDED SIZE OF TWINE: 150

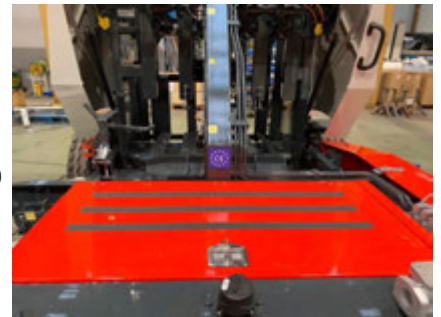


**CAUTION!**

Disconnect the PTO: the electrical power supply, and leave all moving parts in their rest position (resting upon mechanical stops).  
Position the support foot and appropriately block the machine using its chocks.

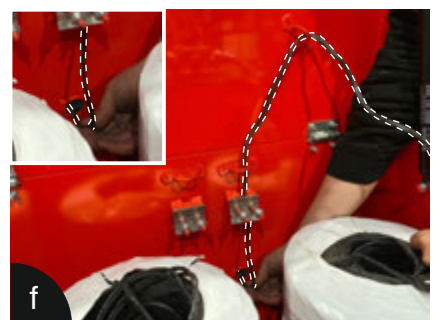
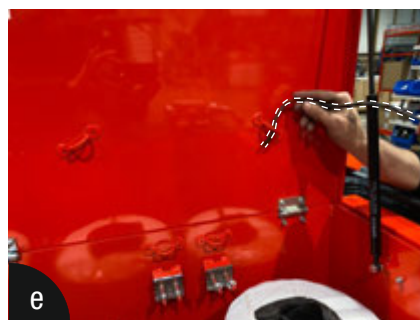
You must observe the following procedures whenever loading or changing the spools:

1. Open the upper cover to have access to the spool cabinet.
2. The spool cabinet can hold up to 8 spools. It is necessary to feed 4 needles, so each line is connected to 2 spools. The spool nearest the needle is the one that feeds it and the one nearest the oil reservoir is for storage. The supply to each needle is linear and begins from one end. The first two compartments feed the needle from this same end, and this is correlative.



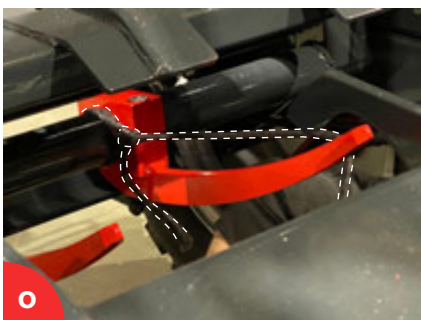
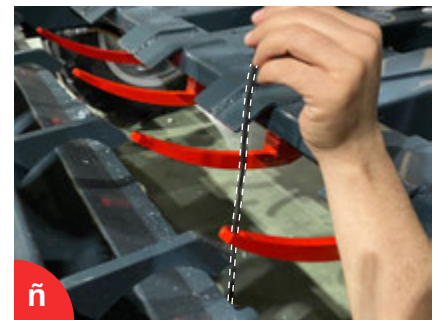
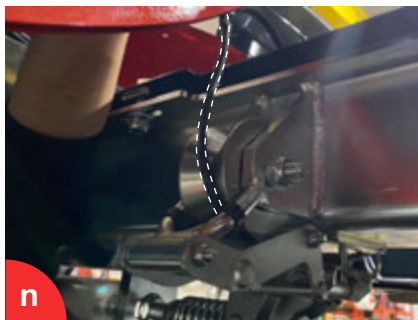
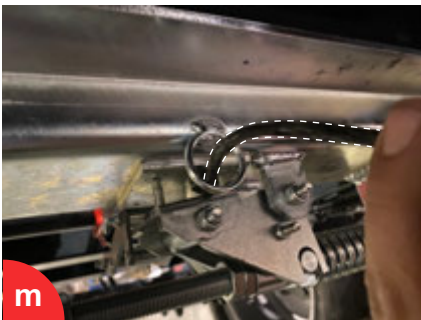
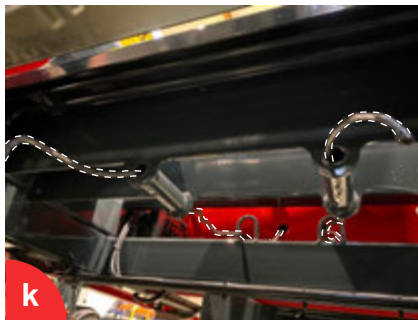
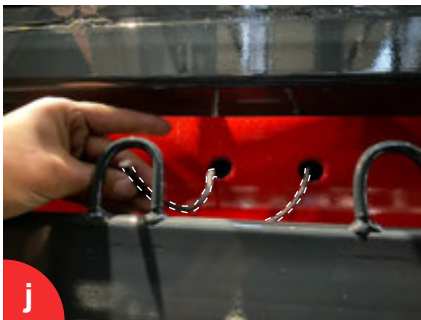
**CAUTION!**

Load the spools into the spool cabinet following each manufacturer's instructions.



3. Once loaded and connected in pairs it is necessary to guide the twine along its path and to the knotter.

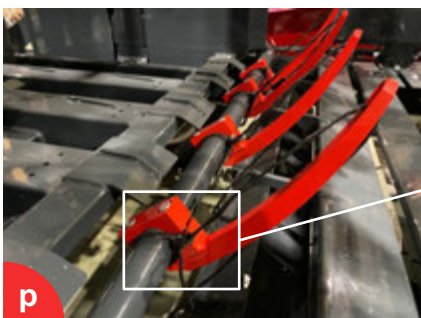
4. Start by threading the twine through the ring that is inside the spool cabinet cover. Then pass it through the ring on the box plate that is nearest to the needles and located just under them. Next, pass it through the turnbuckle of the spool cabinet. And lead the twine out through the ring located on the lower part of the spool cabinet.
5. Feed the thread through the rings located outside the box (see photos k-l). The two lines of thread located next to the pickup must be fed through the main body of the conveyor (see photo m).
6. Feed the thread through the retention mechanism as described in Chapter 7.3.1 and lead it to the needle (see photos n - o).



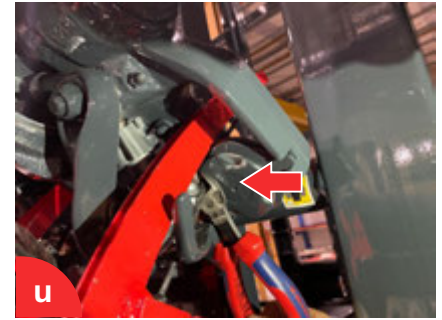
7. Pass the thread through the needle.

To set up the knoter, the thread must be tied to the bar on which the needles are mounted (see photos o - p - q).

8. With the PTO just ticking over, gently move the hand lever and raise the needles (distributor PVG 6.1) in order to set up the thread on the knoter (see photos r-s-t). Constantly control the speed at which the needles rise.







9. When the needles are in the correct position inside the knotter, check that the disks that hold the thread are correctly synchronized with the knotting mechanism.

10. Stop the PTO and cut the thread at the short stem, as shown above. (see photo u).  
Restart the PTO to returns the needles to their initial position by gently activated distributor lever PVG 6.2 (lower needles). (see photo v).

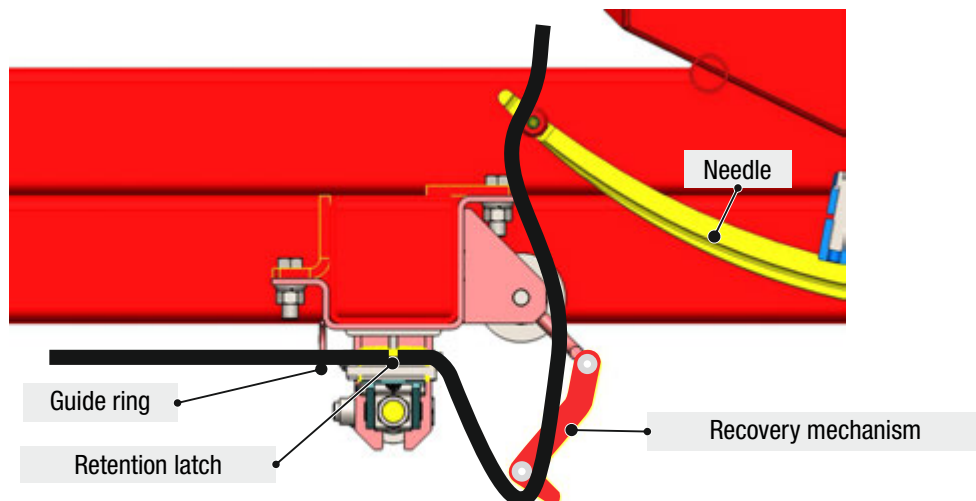
THE KNOTTERS ARE NOW PREPARED AND THE PACKER IS READY TO START WORK

When the lift press is down, the only tension applied to the thread is from friction throughout its trajectory.

It is necessary to check the 4 feed lines. Let a bale enter the system and check that it is held horizontally and remains in constant contact with the lift (without the strings causing the bale to rise).

### 8.3.1. COURSE OF THE TWINE THROUGH THE TURNBUCKLE MECHANISM

Start by threading the twine through the ring at the entry point to the twine retention system, then pass it through the retention latch, and then through the recovery mechanism, as shown in the following scheme.

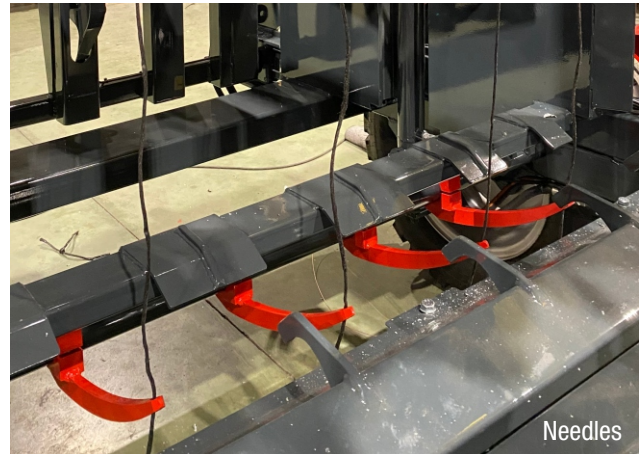




- On leaving the turnbuckle mechanism, lead the twine to the needle and then, once threaded, to the knotter.

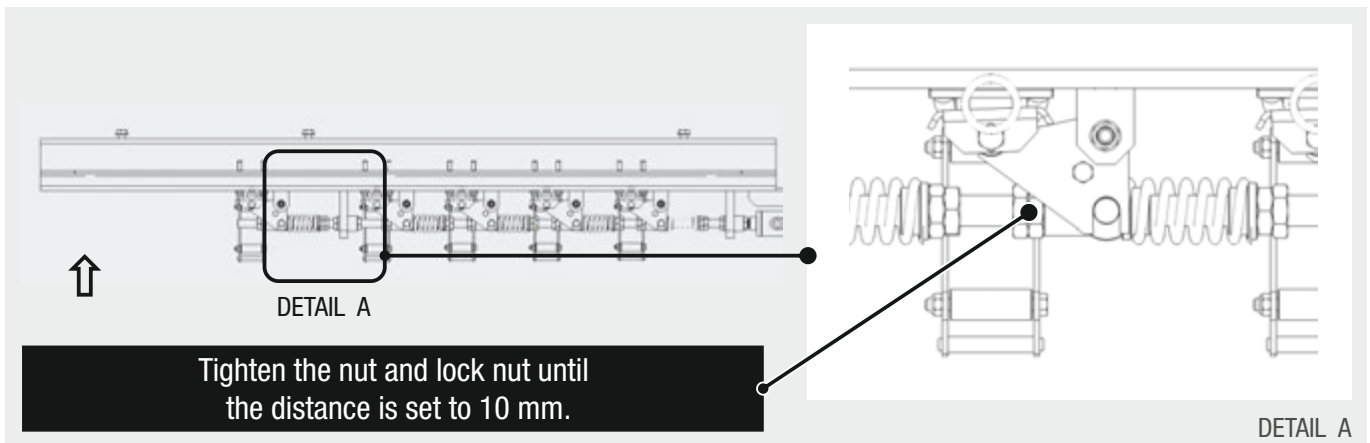
Having reached this point, before starting work, it is necessary to make a knot in order to leave the knotter prepared.

To prepare the knotter, it is necessary to tie the end of the twine (leaving the needle) to the round tube of the needle support, and to perform a manual knotting manoeuvre, from the distributor. We now have the machine ready to group bales.

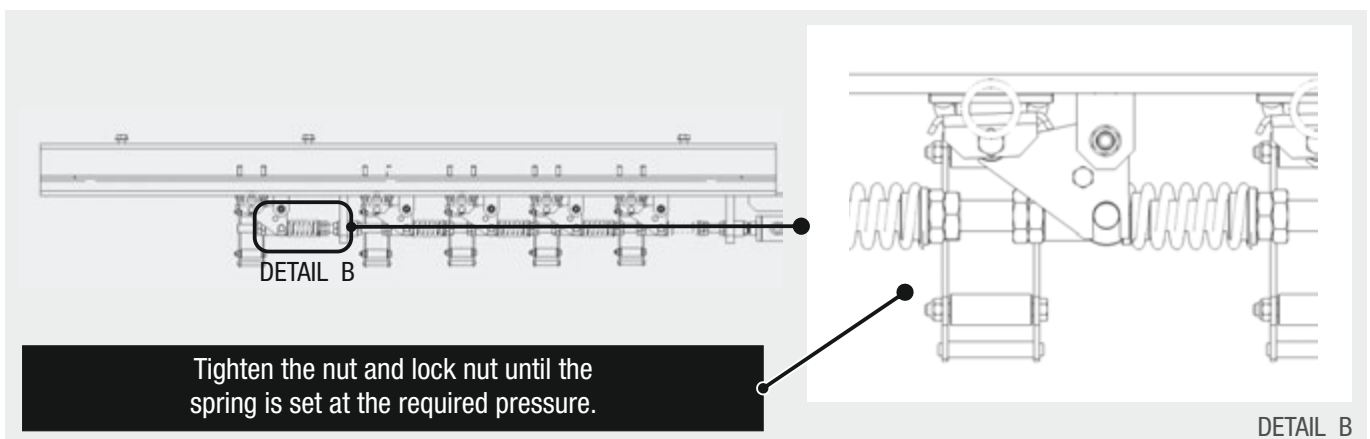


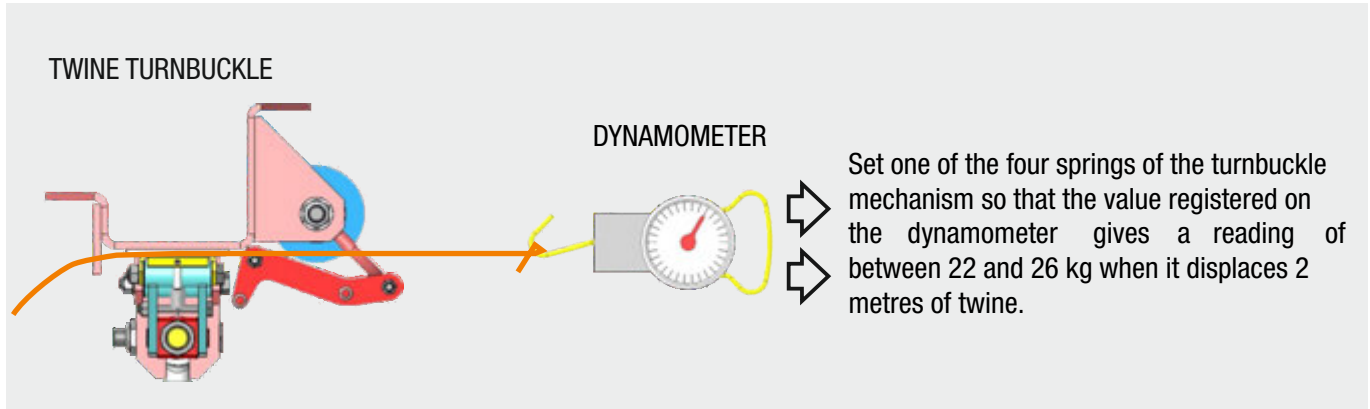
### 8.3.2. Tense the strings of twine according to the following instructions:

1. Set the distances for “passing the twine” using the closed cylinder (applying pressure with the forward sleeve of the cylinder). Tighten the nut before the “limiting socket” until a distance of 10 mm. has been set for each of the twine turnbuckles.



2. Next, set the tensions of the 4 panel turnbuckles, using the stretching cylinder (applying pressure using the rear sleeve of the cylinder). Tighten the nuts and lock nuts that are before the springs and carry out verification checks using the dynamometer, according to the following table.





When loading the spools, it is recommendable to use 150 m/Kg. packing twine, because the knotter mounted on the Packer is designed for high resistance twine.

One 150 m/Kg. spool of twine should tie between 100 and 125 packs: the number will vary according to the pressure at which the lift-press is set.

### 8.3.3. TYPE OF KNOTTE

The twine knotters used in this machine are manufactured to work with 40 mm diameter drive shafts. The distance between the centres of the different knotters is 250 mm.

### 8.3.4. TYPES OF TWINE

The knotters can use the different types of packing twine listed in the following table:

Type of Twine	Size of twine (m/kg)	
	small bale	large bale
Sisal	* 150-250	100-200
Synthetic	300-400	130-300

\*Recommended

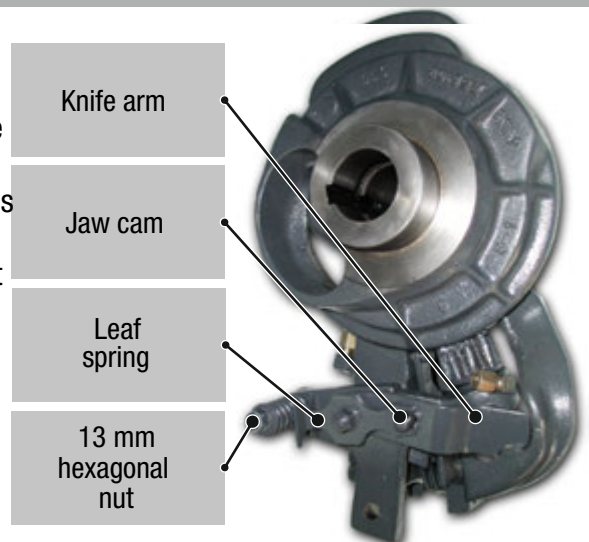
## 8.4. MAINTENANCE FOR THE KNOTTERS

### 8.4.1. INSTRUCTIONS FOR MAKING ADJUSTMENTS AND SETTINGS

#### 8.4.1.1. THE BILL HOOK

The bill hook is activated by the gear system: if the mouth of the bill hook clamps the twine too tightly, the knot will jam in its mouth and the twine will break. If the mouth of the bill hook does not clamp the twine with sufficient force, either no knot will be formed, or there will only be a series of loose loops of twine that will come undone when subjected to tension.

It is possible to adjust the clamping force by using the leaf spring, and regulating the 13 mm hexagonal nut (fig.1). The photo at the bottom of the page shows a correctly knotted twine string.



### 8.4.1.2. TWINE CLAMPING

The twine disk assembly (fig.2) should be set in such a way that when it is in its dead (resting) position, the points of the two cleaner disks should engage in the notches of the twine disk assembly with a tolerance of between 0 and 2 mm.

Doing this assures that the twine is correctly positioned in the notches of the twine disk assembly as it is fed by the machine's needles. It is necessary to complete at least 2 tying cycles to make sure that the notches have been correctly located.

To adjust the twine disk assembly, it is necessary to loosen the worm which is clamped to the cone of the worm shaft.

To do this, unscrew the 17 mm hexagonal nut (fig.2) until its face is about 1 mm from the end of the worm shaft. Tap the nut gently to release the worm shaft from the cone that it is fastened to. It is then possible to find the correct notch position by turning the worm.

To modify the force with which the twine is clamped, turn the 13mm hexagonal nut (fig.2) in order to apply pressure to the twine holder via the leaf or coil springs.

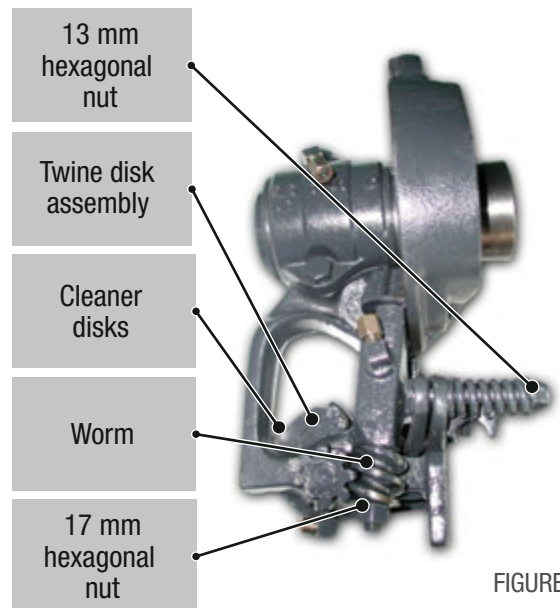


FIGURE 2



TWINE KNOTTED PROPERLY

The twine string that is already in the knotter should just be held tight enough to prevent it from slipping out during the tying cycle. If it is held too tightly, the twine will fray at its ends. The clamping force required will need to be proportionally adjusted as the weight and/or the density of the bales tied increases. The most appropriate setting will be determined by a number of different factors:

The type of material to be baled; its moisture content; and the type of twine used, etc. It is therefore best to adopt a trial and error approach to deciding the settings and to modify them according to the specific operating conditions.

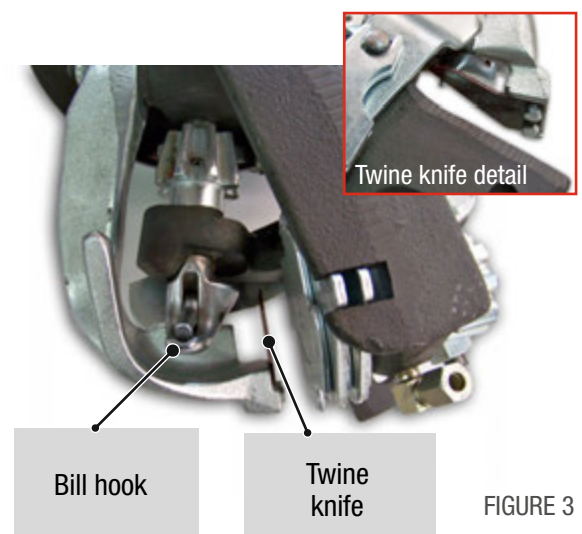


FIGURE 3

### 8.4.1.3. THE KNIFE ARM

The knife arm (Fig.4 y 5) needs to be set in such a way that the bill hook can rotate freely without coming into contact with it. The knife cam must glide smoothly over the surface of the head of the bill hook, but at the same time make contact with it.

In the case of conventional balers, the distance between the stripping cam and the tip of the bill hook should be between 8 and 12 mm in the outer dead position of the knife arm. When working with big bales, this distance should be between 15 and 18 mm. The knife arm is at its outer dead position when the knife arm roller reaches the highest point of the cam on the cam shaft gear.

To set the knife arm, it is necessary to release the knotter frame that is in the bale chamber and to pivot the frame upwards around the drive shaft of the knotter.

To bend the knife arm, it is necessary to make a setting tool. This should be approximately 400 mm long and have a forked end to enable the knife arm to be gripped. Heavier knife arms will have to be removed and set in a suitably equipped workshop: this requires the use of special tools. The twine guiding area of the knife arm must always be kept smooth in order to prevent twine breakages.

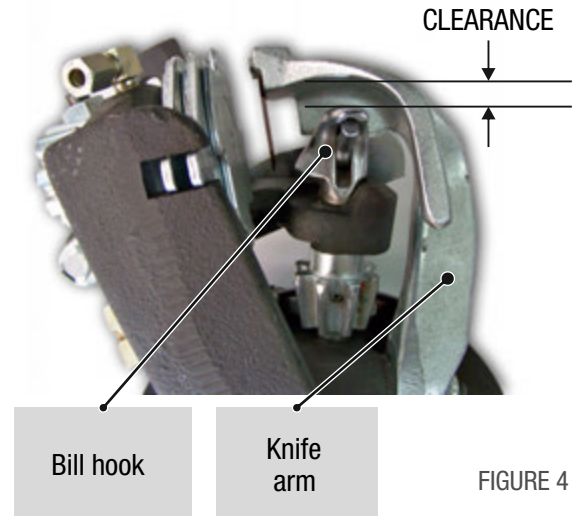


FIGURE 4

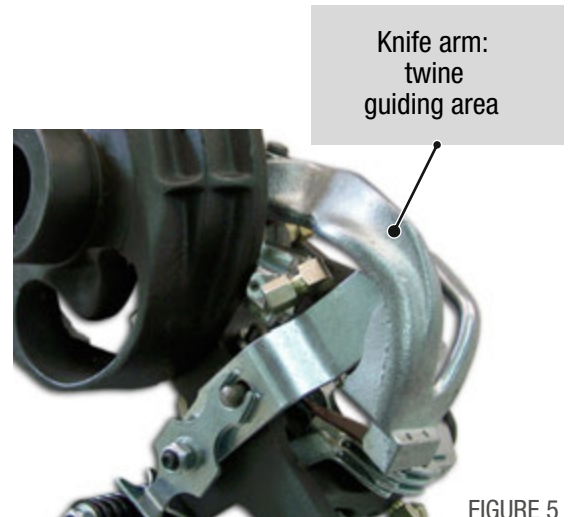


FIGURE 5

As soon as signs of wear (grooves) start to appear, the knife arm must be replaced. When the ends of the twine become frayed or irregular, it is necessary to sharpen the cutting blade of the twine knife.

### 8.4.1.4. GREASING

In the first days of using the machine, it is necessary to apply grease to all of the Packer's grease nipples before using it. This should be done on a daily basis and it is best to use a smooth, multi-purpose grease. It is also necessary to lightly grease the tothing on the cam gears and all associated sliding and running surfaces.

In winter it is necessary to carry out a thorough cleaning and greasing programme that should include all of the metal surfaces of the mechanism that are exposed to the elements.



**8.5. TENSING THE CHAINS**

It is a good idea to develop the habit of carrying out regular visual inspections of the state of the Packer's chain tension in order to prevent any possible breakdowns or associated problems. Such inspections should be undertaken before starting any work.

**· PICK-UP**

-The pick-up chains are tensioned by two automatic tensioners.

**· KNOTTERS**

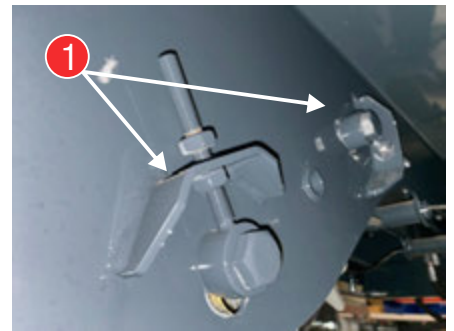
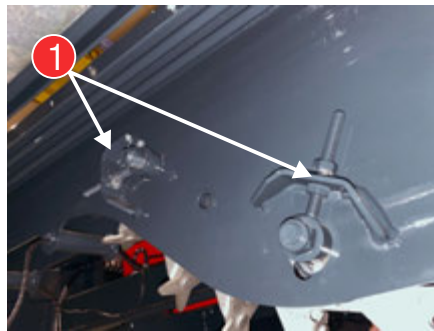
- The tension of the knotting mechanism chain is set by an adjustable turnbuckle.

**· TRANSBORDER CHAIN**

- The transporter chains are tensed with the adjusting screws on the wheel nearest to the turner.



Automatic knotters tensor



Transborder chain tensors

1. Set using the tensors.
2. Set using the screws.

**8.6. CHECKING THE SENSORS**

After working with the Packer, it is common for traces of straw or other grass-like debris to remain caught in/on different parts of the machine. This may cause the blocking of some sensors, and the consequent malfunctioning of the machine.

You should periodically check the condition of all of the sensors and carry out electrical checks to make sure that they are working properly.

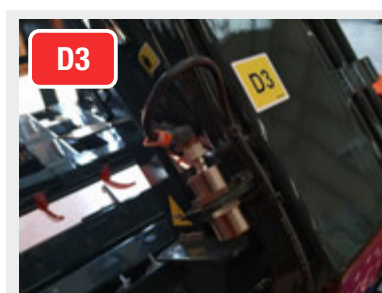
To electrically check all of the sensors, always disconnect the power supply and manually activate the sensors. When a sensor is activated, its corresponding point on the control console should light up.



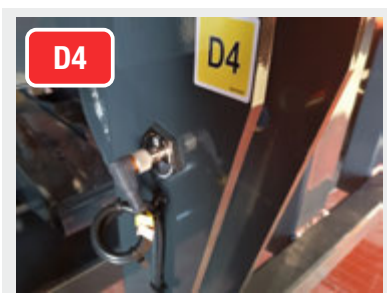
Magnetic sensor



Magnetic sensor



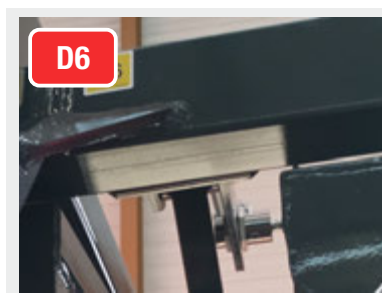
Magnetic sensor



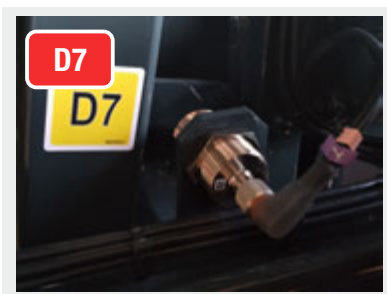
Magnetic sensor



Pressure transducer



Magnetic sensor



Magnetic sensor



Photocell



Magnetic sensor



Magnetic sensor



Photocell



Photocell

**8.7. OIL CHANGES AND OIL LEVELS**
**8.7.1. CHANGING THE OIL IN THE HYDRAULIC SYSTEM**

Change the oil in the hydraulic unit according to the following indications:

- **Reservoir capacity:** **150 Litres**
- **Type of oil:** **ISO VG-46 (SAE 20)**  
(with additives, anti-oxidants, anti-corrosives and anti-foam)
- **Oil change schedule:**

1st Change	<b>300 hours</b>
2nd Change	<b>900 hours</b>
Subsequent changes every	<b>900 hours</b>



Draining cap


**IMPORTANT ADVICE:**

As a result of the changing of the oil or the emptying of the oil reservoir, the oil pump should be purged following each refill.

**8.7.2. CHANGING THE MULTIPLIER LUBRICATING OIL**

Change the oil in the multiplier according to the following indications:

- **Reservoir capacity:** **1 Litre**
- **Type of oil:** **SAE 80/90**
- **Oil change schedule:**

1st Change	<b>300 hours</b>
Subsequent changes every	<b>900 hours</b>



Multiplier


**IMPORTANT NOTE:**

When filling the multiplier, it is important to fill it until it is completely full, but without making it overflow.

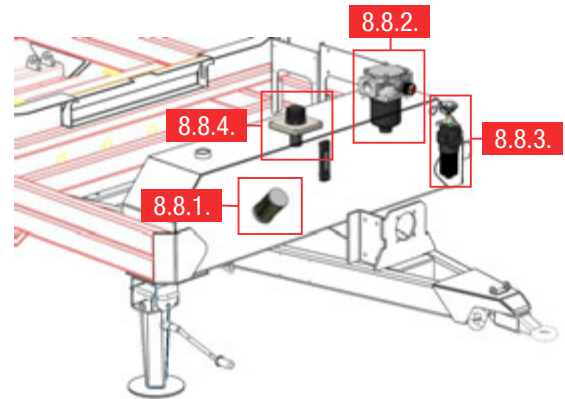
**8.8. FILTER CHANGES**

Change the filters according to the following indications:

**8.8.1. SUCTION FILTER**

1<sup>st</sup> cleaning                    **300 hours**  
Then every                    **900 hours**

This filter is located inside the oil reservoir.



**8.8.2. RETURN FILTER**

1<sup>st</sup> change                    **300 hours**  
Then every                    **900 hours**

This filter is equipped with a system that indicates when there is dirt in the filter. When it is red, change the cartridge



RETURN FILTER

**8.8.3. PRESSURE FILTER**

1<sup>st</sup> change                    **300 hours**  
Then every                    **900 hours**

This filter is equipped with a system that indicates when there is dirt in the filter. When it is red, change the cartridge.



PRESSURE FILTER

**8.8.4. BREATHER FILTER**

1<sup>st</sup> change                    **300 hours**  
Then every                    **900 hours**

The breather filter is located on the upper part of the oil reservoir.



BREATHER FILTER



### 8.8.5. FLEXIBLE HOSES

It is not possible to precisely calculate the lifespan of the flexible hoses, as this depends on a number of different factors. The majority of these are beyond the manufacturer's control. These include their duration and frequency of use, temperature, blows received, other shocks and environmental conditions.

All of this makes it necessary to conduct periodic revisions of flexible hoses, particularly focusing on possible leaks.

## 8.9. TYRE CHECKS

### 8.9.1. FITTING TYRES SAFELY

- Fitting tyres should be left to experienced technicians who possess all the tools needed to carry out such operations.
- Make sure that the tyres are inflated to the correct pressure. The inflation pressure should never exceed the maximum value recommended by the manufacturer.

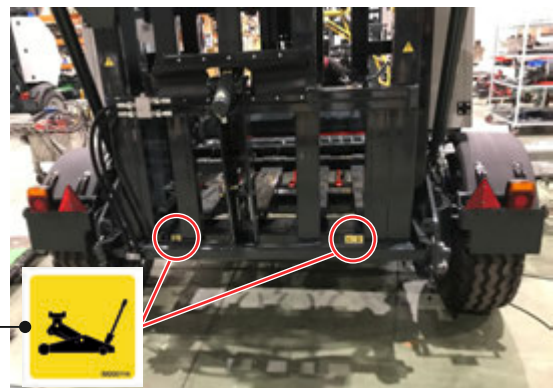
	STANDARD	OPTIONAL 1	OPTIONAL 2
TYRE	13.0/65-18	400/60-15,5	500/50-17
BAR	4.9	4	2.75

- When inflating tyres, use a positioning clamp and an extension hose that allow you to stand to one side of the tyre and not directly in front of it or above it. Use a safety cage if there is one available.
- Inspect wheels and tyres on a daily basis. Do not work with tyres that are insufficiently inflated, are cracked, have lumps in them, have deteriorated rims or that lack either nuts or screws.
- Position the hydraulic jack in the area indicated by the corresponding sticker.



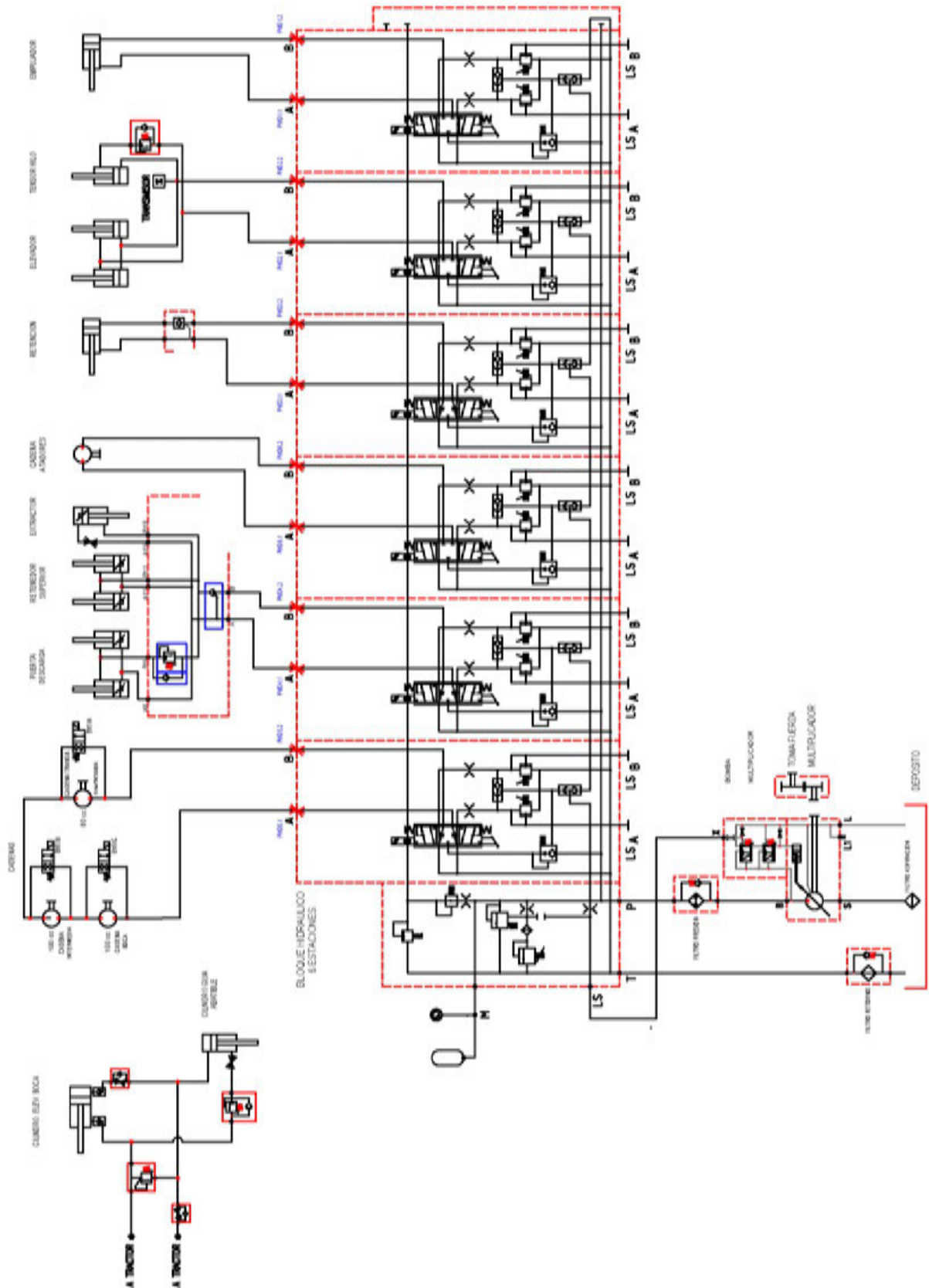
#### ATTENTION! DANGER

Accidents involving the violent separation of tyres from their corresponding wheel rims may cause very serious injuries or even deaths.

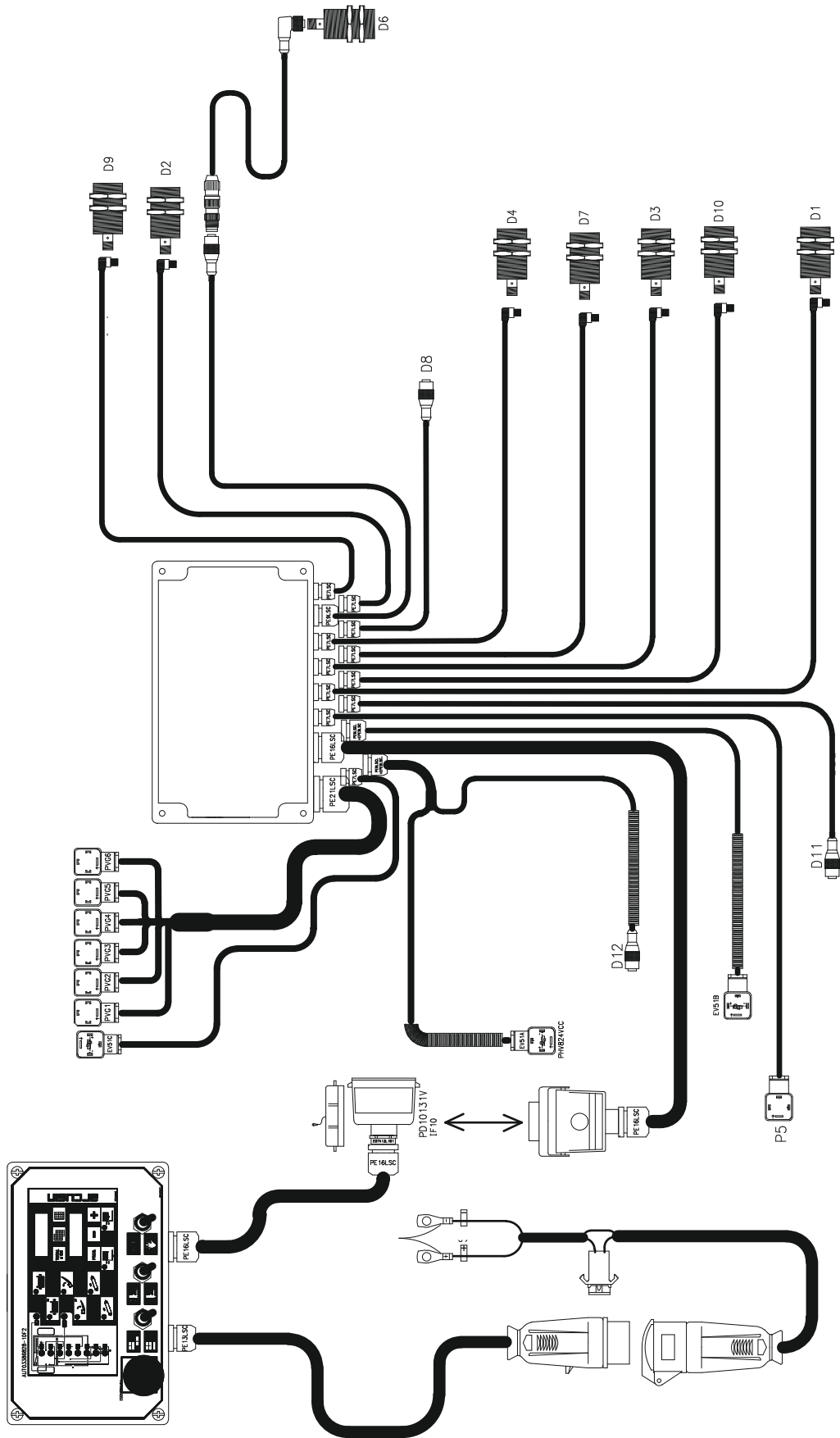


Sticker indicating hydraulic jack position

9.1. HYDRAULIC SYSTEM



9.2. ELECTRICAL SYSTEM



**10.1. FAQ**

**WHAT IS THE BEST OPERATION RPM FOR THE POWER TAKE-OFF?**

The power take-off, according to the relationship established by the multiplier, should run from the tractor at 540 rpm.

**WHEN DO I HAVE CHANGE THE OIL OF THE MULTIPLIER?**

The oil of the multiplier is changed every 900 h, with capacity less than 1 litre and type 80 W-90 EP API GL-5 (sae 90). If more information is required, you can consult the section OIL CHANGES AND LEVELS of this instruction manual.

**WHEN DO I HAVE TO CHANGE THE OIL AND THE FILTERS?**

The oil and the filters must be first changed after 300 h and then every 900 h. The oil used is ISO VG-46 (sae 20) with a capacity of 150 litres in the deposit. If more information is required, you can consult the section OIL CHANGES AND LEVELS /and/ FILTER CHANGE of this instruction manual.



**WHERE IS THE MACHINE DIE FOUND?**

The frame identification number of the machine is die stamped on the right side with respect to the direction of the travel of the tow bar.

**WHAT IS THE MINIMUM POWER REQUIRED FOR THE TRACTOR?**

The minimum recommended power is 90 HP, with a power take off at 540 rpm.

**WHAT IS THE INFLATION PRESSURE OF THE TYRES?**

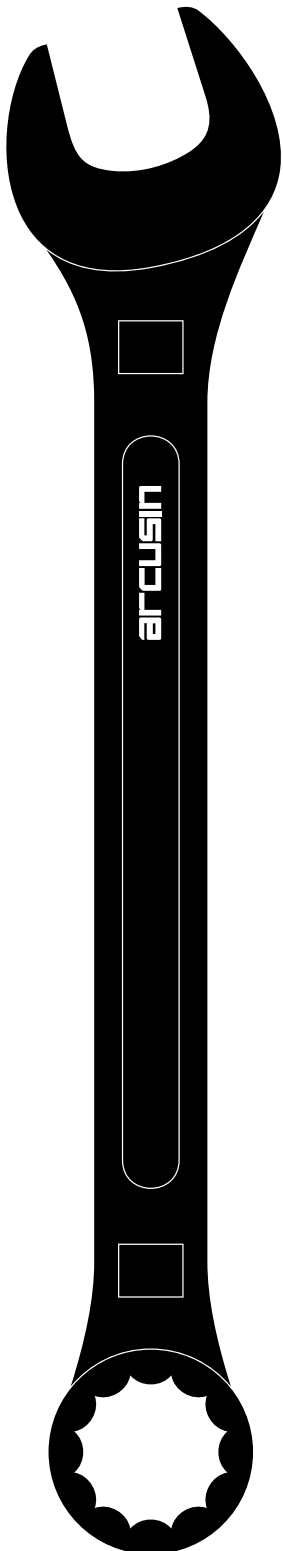
The inflation pressure is 4.9 bar for 13.0/65-18 160 IMG tyres.

If the tyre size is 400/60-15.5, the inflated pressure is 4 bar.

If the tyre size is 500/50-17 IMP, the inflated pressure is 2.75 bar.

If more information is required, consult the section VERIFICATION OF TYRES of this instruction manual.





### ATTENTION, VERY IMPORTANT!

We have made a special effort and dedicated a lot of time and resources to the preparation of this chapter that deals with the most common anomalies and explains how to deal with them.

We ask you to read this chapter with care and attention and to do everything possible to apply the solutions in the way that we have outlined below.

This chapter is divided by function and according to the different parts of the machine. This division is repeated in the spare parts manual, which will help you to identify the different pieces of the machine.

To help you to identify the different detection systems (photocells and magnetic detectors) and hydraulic adjustment (pressostat), we have added information about their locations.

Due to the type of work that the machine carries out in the field, the accumulation of straw and other similar debris on certain parts of the machine may cause deviations from its normal functioning. It is evident, however, that there may also be other reasons for any problems encountered: whatever the case, experience and the use of logic tend to be two of the best arms for solving any problems that may arise.

We should finally add that the best way to deal with problems is to prevent them from occurring. To achieve this, the best policy is to carry out constant maintenance and cleaning work on the machine.

**If you do have problems that you cannot solve, you always have our technical service at your disposal.** [+34 973 712 855 · +34 696 982 910]



### CAUTION!

On occasions we have observed malfunctions and modifications to the normal working cycle of the machine that have been caused by interference from short wave radio transmitters. It is therefore recommendable to switch off the machine when you communicate with people via radio.

**10.2. PICK-UP**

<b>ANOMALY:</b>	<b>THE CHAINS DO NOT WORK WHEN MANUALLY ACTIVATED</b>
<b>CAUSE 1:</b>	<b>A foreign body (such as a stick or stone) obstructs movement.</b>
<b>SOLUTION:</b>	<i>Disconnect the PTO and remove the object in order to free the chains.</i>
<b>CAUSE 2:</b>	<b>The chains are slack and get caught in the wheels of the chain.</b>
<b>SOLUTION:</b>	<i>Tense or change the chains.</i>

<b>ANOMALY:</b>	<b>DO NOT WORK IN THE AUTOMATIC CYCLE, BUT YES IN MANUAL MODE</b>
<b>CAUSE 1:</b>	<b>The pusher is incorrectly positioned and does not detect D3.</b>
<b>SOLUTION:</b>	<i>Clean the work area around the pivot point and, if necessary, adjust D3.</i>

<b>ANOMALY:</b>	<b>THE CHAIN HAS BROKEN OR THE STARS ARE BENT</b>
<b>CAUSE 1:</b>	<b>Excessive tension caused by a build up of chaff on the driving pin.</b>
<b>SOLUTION:</b>	<i>Remove any chaff and remains of string from the shaft, and tense or change the chains.</i>
<b>CAUSE 2:</b>	<b>The chain touches the ground and scrapes against stones.</b>
<b>SOLUTION:</b>	<i>Slightly raise the pickup until the chain no longer touches the ground.</i>

<b>ANOMALY:</b>	<b>THE BALES PASS UNDER, OR GET CAUGHT UNDER, THE PICKUP</b>
<b>CAUSE 1:</b>	<b>The pick up is too high, or the limit is badly set.</b>
<b>SOLUTION:</b>	<i>Level the machine and the pickup following the instructions for making adjustments.</i>

<b>ANOMALY:</b>	<b>WHEN THE PICKUP MEETS THE BALE, THE CHAINS HAVE DIFFICULTY IN LIFTING IT</b>
<b>CAUSE 1:</b>	<b>The chains rotate too quickly.</b>
<b>SOLUTION:</b>	<i>Synchronise the speed of the chains with that of the tractor.</i>
<b>CAUSE 2:</b>	<b>Low density and poorly formed bale.</b>
<b>SOLUTION:</b>	<i>Produce more compact bales.</i>
<b>CAUSE 2:</b>	<b>The teeth of the chain are worn, or have been mounted the wrong way round.</b>
<b>SOLUTION:</b>	<i>Change the chains or invert the mounting of the transport teeth.</i>

<b>ANOMALY:</b>	<b>THE PICK-UP DON'T LOWER TO ITS WORK POSITION WHEN IT'S RAISED</b>
<b>CAUSE 1:</b>	<b>Excessive friction at pivot and turning points. retour de l'huile.</b>
<b>SOLUTION:</b>	<i>Clean, tune and grease the pivot and turning points.</i>
<b>CAUSE 2:</b>	<b>Oil resistance as it passes through the output regulator.</b>
<b>SOLUTION:</b>	<i>Clean and adjust the passage of oil through the output regulator.</i>

<b>ANOMALY:</b>	<b>BREAKING OF THE BALE STRINGS ON BEING MOVED ABOVE THE MOUTH</b>
<b>CAUSE 1:</b>	<b>The chainwheels turn with difficulty or are blocked.</b>
<b>SOLUTION:</b>	<i>Check one by one that the chainwheels turn smoothly.</i>
<b>CAUSE 2:</b>	<b>The teeth of the chainwheels are worn or bent.</b>
<b>SOLUTION:</b>	<i>Straighten or substitute worn chainwheels.</i>
<b>CAUSE 3:</b>	<b>Cutting effect on the edges of the chainwheels.</b>
<b>SOLUTION:</b>	<i>Polish or round off the edges of the chainwheels.</i>

**10.3. PUSHER**

<b>ANOMALY:</b>	<b>THE BALES DO NOT MAKE CONTACT WITH THE LEVER THAT ACTIVATES D1</b>
<b>CAUSE 1:</b>	<b>Chains which are too slow.</b>
<b>SOLUTION:</b>	<i>Increase the speed of the chains.</i>
<b>CAUSE 2:</b>	<b>Very short bales.</b>
<b>SOLUTION:</b>	<i>Adjust the D1 mechanism. The length of the bale cannot be less than 80 cm.</i>

<b>ANOMALY:</b>	<b>THE BALE IS CORRECTLY POSITIONED, BUT THE PUSHER DOES NOT MOVE</b>
<b>CAUSE 1:</b>	<b>One of the end of lines is not in its correct position and cancels the signal to the bale pusher.</b>
<b>SOLUTION:</b>	<i>Clean the areas around D1, D7 and D9; Check that the signal reaches the three end of lines.</i>

<b>ANOMALY:</b>	<b>THE PUSHER DOESN'T COMPLETE ITS FULL TRIP AND RETURNS HALFWAY</b>
<b>CAUSE 1:</b>	<b>There is some kind of unforeseen obstruction prevents it from completing its course.</b>
<b>SOLUTION:</b>	<i>Check and verify the area of action of the pushing mechanism.</i>
<b>CAUSE 2:</b>	<b>Electrical signal at the end of line D2.</b>
<b>SOLUTION:</b>	<i>Check the state of sensor D2 and its wiring. Adjust the sensor at the reversal point of the bale pusher.</i>

<b>ANOMALY:</b>	<b>WHEN TRANSFERRING THE BALE FROM THE PUSHER TO THE LIFT, IT HAS PROBLEMS ENTERING THE LIFT</b>
<b>CAUSE 1:</b>	<b>The lift is not in its lowest position.</b>
<b>SOLUTION:</b>	<i>Clean the guides and areas of work. Check the lift cylinder and D9 activator.</i>

<b>ANOMALY:</b>	<b>THE BALE IS NOT CORRECTLY FED INTO THE BALE CHAMBER</b>
<b>CAUSE 1:</b>	<b>The bale is short.</b>
<b>SOLUTION:</b>	<i>Adjusting correctly the sensor mechanism D1 and set up the guide inside the lift and adjust it.</i>



<b>ANOMALY:</b>	<b>THE BALE LEAVING THE PUSHER GETS CAUGHT WHEN ENTERING IN THE CHAMBER</b>
<b>CAUSE 1:</b>	<b>Excessively long bale (which does not enter the bale chamber).</b>
<b>SOLUTION:</b>	<i>Reduce the length: maximum 120 mm</i>
<b>CAUSE 2:</b>	<b>The internal guide located inside the lift is not correctly positioned.</b>
<b>SOLUTION:</b>	<i>Adjusting the sensor mechanism D1 so that the free space is equal to the length of the bale plus 5 cm.</i>

**10.4. LIFT - PRESS**

<b>ANOMALY:</b>	<b>THE LIFT RISES WITH ONLY ONE BALE</b>
<b>CAUSE 1:</b>	<b>The pusher moves too quickly.</b>
<b>SOLUTION:</b>	<i>Reduce the speed of the bale feeder arm. Check the timing of T14.</i>
<b>CAUSE 2:</b>	<b>Activator D4 is very sensitive due to the stretching or breaking of the spring.</b>
<b>SOLUTION:</b>	<i>Change the D4 activating spring.</i>
<b>CAUSE 3:</b>	<b>The safety break does not work or is insufficient.</b>
<b>SOLUTION:</b>	<i>Set up the braking system for the first bale to make it more effective.</i>

<b>ANOMALY:</b>	<b>THE LIFT CONTAINS TWO BALES, BUT DOES NOT RISE</b>
<b>CAUSE 1:</b>	<b>The safety detector (D10) is NOT correctly positioned.</b>
<b>SOLUTION:</b>	<i>Adjust sensor D10 or close the gate so that it is in the correct position.</i>
<b>CAUSE 2:</b>	<b>Detector D4 has not been mechanically activated (possible blockage).</b>
<b>SOLUTION:</b>	<i>Dismantle the activator and tune and grease</i>
<b>CAUSE 3:</b>	<b>The mechanism for tensing the string applies too much pressure and bales rise on entering the pickup.</b>
<b>SOLUTION:</b>	<i>Reduce the string tension until it slides freely along its course.</i>
<b>CAUSE 4:</b>	<b>The D4 activating lever easily gets caught in the bale.</b>
<b>SOLUTION:</b>	<i>Produce more compact bales (minimum density approx. 140 kg / m3).</i>

<b>ANOMALY:</b>	<b>THE LIFT REACHES THE END OF ITS COURSE, BUT DOES NOT GO DOWN AGAIN</b>
<b>CAUSE 1:</b>	<b>The pressure signal in P5 (pressure transducer) that inverts the elevator direction is not found.</b>
<b>SOLUTION:</b>	<i>Adjust the press's pressure using the command console (min. 100b - max. 235 b).</i>

<b>ANOMALY:</b>	<b>THE LIFT RISES WITH TWO BALES, BUT DOES NOT RETAIN THE LOAD</b>
<b>CAUSE 1:</b>	<b>The inner chamber is very wide.</b>
<b>SOLUTION:</b>	<i>Adjust it to the size of 2 bales.</i>
<b>CAUSE 2:</b>	<b>The back door is slightly open.</b>
<b>SOLUTION:</b>	<i>Close it until the limit.</i>
<b>CAUSE 3:</b>	<b>On the last trip a bale has entered on its side (turned through 90°).</b>
<b>SOLUTION:</b>	<i>Lay the two bales flat.</i>
<b>CAUSE 4:</b>	<b>The retainer does not provide sufficient pressure and does not retain.</b>
<b>SOLUTION:</b>	<i>Check and regulate the pressure. Check the stop valve.</i>

<b>ANOMALY:</b>	<b>THE LIFT RETURNS BEFORE COMPLETING ITS FULL COURSE</b>
<b>CAUSE 1:</b>	<b>The pressure programmed in the lift's pressostat is too low.</b>
<b>SOLUTION:</b>	<i>Increase the press's pressure using the command console (min. 100 b).</i>
<b>CAUSE 2:</b>	<b>The bales fit very tightly in the inner bale pressing chamber (the bales enter with great difficulty).</b>
<b>SOLUTION:</b>	<i>Adjust the chamber so that the 2 bales enter it with greater facility.</i>

<b>ANOMALY:</b>	<b>THE LIFT HAS TWO BALES, IT DOES NOT RISE AND TRIES TO LOAD A THIRD BALE</b>
<b>CAUSE 1:</b>	<b>Badly adjusted door (too open) D4 is not detected.</b>
<b>SOLUTION:</b>	<i>Adjust and regulate the door to the bale size to be grouped.</i>
<b>CAUSE 2:</b>	<b>Sequence failure on D2 being activated and then D4.</b>
<b>SOLUTION:</b>	<i>Regulate and adjust the signal D2 correctly so that when the second bale enters above the lift, it first activated the D4 signal and then the D2 signal.</i>

**10.5. KNOTTERS**

<b>ANOMALY:</b>	<b>THE NEEDLES DO NOT RETURN TO THEIR CORRECT POSITION AFTER TYING</b>
<b>CAUSE 1:</b>	<b>The return speed is very quick and/or the pressure is very low.</b>
<b>SOLUTION:</b>	<i>Reduce the speed of the return. Adjust the pressure to the established value.</i>

<b>ANOMALY:</b>	<b>THE NEEDLES CONTINUALLY WORK AND DO NOT STOP</b>
<b>CAUSE 1:</b>	<b>The mechanical mechanism to D7 is blocked.</b>
<b>SOLUTION:</b>	<i>Clean, tune and grease the mechanism.</i>

<b>ANOMALY:</b>	<b>THERE IS ONLY A KNOT AT ONE END OF THE STRING, THE OTHER END HAS ONLY BEEN THREADED (A KNOT ON A LONG STRING)</b>
<b>CAUSE 1:</b>	<b>The string carried up to the knotting hook by the needle is not positioned over the beak of the knotter.</b>
<b>SOLUTION:</b>	<i>Check the string tension and adjust it if necessary. Align the needles with the knotter.</i>

<b>ANOMALY:</b>	<b>THE KNOT GETS CAUGHT ON THE KNOTTING HOOK, AND EITHER THE STRING BREAKS OR THE PACKET IS NOT CORRECTLY FORMED</b>
<b>CAUSE 1:</b>	<b>The pressure spring that closes the beak is over-tensed.</b>
<b>SOLUTION:</b>	<i>Loosen the pressure spring. The tension should be between 5 and 10 Kg.</i>
<b>CAUSE 2:</b>	<b>The handle of the knife does not remove the knot as it moves through the knotting mechanism.</b>
<b>SOLUTION:</b>	<i>Adjust the knife handle so that it skims the surface of the knotter.</i>
<b>CAUSE 3:</b>	<b>The string has left entry grooves in the tongue of the knotter.</b>
<b>SOLUTION:</b>	<i>Replace the knotting hook.</i>

<b>ANOMALY:</b>	<b>THE KNOT IS TOO LOOSE (SLACK)</b>
<b>CAUSE 1:</b>	<b>The pressure spring that closes the beak is not tense enough.</b>
<b>SOLUTION:</b>	<i>Tighten the nut of the pressure spring, 1/2 to 1 turn.</i>



<b>ANOMALY:</b>	<b>THE STRING HAS BEEN CUT OR HAS BROKEN, BUT THERE IS NO KNOT</b>
<b>CAUSE 1:</b>	<b>The grip strength of the disks that hold the string is excessive.</b>
<b>SOLUTION:</b>	<i>Remove tension from the pressure spring by slightly loosening the hexagonal screw.</i>

<b>ANOMALY:</b>	<b>THE STRING IS UNRAVELLED OR IS BROKEN NEXT TO THE KNOT</b>
<b>CAUSE 1:</b>	<b>The edge for eliminating the knife handle grips the back of the knotting hook too tightly.</b>
<b>SOLUTION:</b>	<i>Adjust the knife handle, bearing in mind that the knotting hook should be able to rotate freely.</i>
<b>CAUSE 2:</b>	<b>The surface of the knife handle is rough in the area through which the string passes.</b>
<b>SOLUTION:</b>	<i>Smooth the surface of the area over which the string passes.</i>
<b>CAUSE 3:</b>	<b>The upper knotting beak is bent and traps the string.</b>
<b>SOLUTION:</b>	<i>Straighten or change the piece.</i>

<b>ANOMALY:</b>	<b>THE ENDS OF THE STRING ARE OF DIFFERENT LENGTHS AND ARE UNRAVELLED</b>
<b>CAUSE 1:</b>	<b>The knife is blunt.</b>
<b>SOLUTION:</b>	<i>Replace or sharpen the string blade (it should not be sharpened more than twice).</i>
<b>CAUSE 2:</b>	<b>The bale is not dense enough.</b>
<b>SOLUTION:</b>	<i>Make more compact bales with a minimum density of approx. 140 kg/m<sup>3</sup>.</i>

<b>ANOMALY:</b>	<b>ONE END OF THE STRING IS INSIDE THE KNOT AND HAS FORMED A LOOP</b>
<b>CAUSE 1:</b>	<b>The traverse of the knife handle is insufficient.</b>
<b>SOLUTION:</b>	<i>Adjust the knife handle so that in its dead position, the cleaning edge of the knife handle remains at between 10 and 15 mm from the point of the knoter hook.</i>

**10.6. THREAD TENSION**

<b>ANOMALY:</b>	<b>THE THREAD MAKES IT DIFFICULT FOR THE 2 BALES TO ENTER THE CHAMBER</b>
<b>CAUSE 1:</b>	<b>The string comes off the bobbin forming loops or knots which subsequently get caught in other parts of the machine.</b>
<b>SOLUTION:</b>	<i>Disentangle the string or change the spool. Correctly position the spool.</i>
<b>CAUSE 2:</b>	<b>The string does not follow the correct circuit.</b>
<b>SOLUTION:</b>	<i>Check with the system diagram and correct the path.</i>
<b>CAUSE 3:</b>	<b>The string does not pass correctly through the turnbuckle mechanism located in the lower part of the machine.</b>
<b>SOLUTION:</b>	<i>Check the path of the string and always allow a passing space of at least 10 mm.</i>

<b>ANOMALY:</b>	<b>THE STRING BREAKS DURING THE LOADING CYCLE</b>
<b>CAUSE 1:</b>	<b>The string has become caught in part of the circuit and does not return.</b>
<b>SOLUTION:</b>	<i>Free the string and start knotting again.</i>
<b>CAUSE 2:</b>	<b>The string is very tense and gets jammed.</b>
<b>SOLUTION:</b>	<i>Loosen the springs of the tensing mechanism (the string should leave the mechanism with a tension of between 14 and 18 Kg.)</i>
<b>CAUSE 3:</b>	<b>The string used is not recommended for grouping bales.</b>
<b>SOLUTION:</b>	<i>Use the recommended string of 150kg/m</i>

<b>ANOMALY:</b>	<b>THE RESULTING PACKETS ARE LOOSE</b>
<b>CAUSE 1:</b>	<b>The string not taut enough and during the tying cycle the needles catch string from the spools.</b>
<b>SOLUTION:</b>	<i>Tighten the springs of the tensing mechanism.</i>

<b>ANOMALY:</b>	<b>THE STRING BREAKS DURING THE TYING CYCLE</b>
<b>CAUSE 1:</b>	<b>Too much tension or the main spool packing knot can not pass through the needle.</b>
<b>SOLUTION:</b>	<i>Regulate the tension of the string to between 14 and 18 Kg. Make the main packing knot smaller.</i>
<b>CAUSE 2:</b>	<b>The string escapes from the needle feed channel on its way up towards the knoter.</b>
<b>SOLUTION:</b>	<i>Smooth the edges that come into contact with the string.</i>

**10.7. UNLOADING**

<b>ANOMALY:</b>	<b>THE PACKET DOES NOT COME OUT OF THE CHAMBER</b>
<b>CAUSE 1:</b>	<b>A string has become caught in the stripper plate.</b>
<b>SOLUTION:</b>	<i>Align the strings with the string feed channel by making adjustments to the machine.</i>
<b>CAUSE 2:</b>	<b>The extract or cylinder does not work (hydraulic fault).</b>
<b>SOLUTION:</b>	<i>Repair or change the cylinder.</i>
<b>ANOMALY:</b>	<b>THE GATE DOESN'T CLOSE ONCE THE PACKET HAS BEEN DROPPED ONTO THE GROUND</b>
<b>CAUSE 1:</b>	<b>Something (chaff, string etc..) is obstructing the view of the photocell.</b>
<b>SOLUTION:</b>	<i>Clean the area or remove the obstacle so that the optical signal is properly received.</i>

**10.8. FINAL PACKETS**

<b>ANOMALY:</b>	<b>THE PACKETS ARE LIMP OR POORLY MADE</b>
<b>CAUSE 1:</b>	<b>Low density bales.</b>
<b>SOLUTION:</b>	<i>Increase the pressure in the baler.</i>
<b>CAUSE 2:</b>	<b>Insufficient pressure for compacting the packet.</b>
<b>SOLUTION:</b>	<i>Increase the pressure of the press.</i>
<b>ANOMALY:</b>	<b>THE PACKETS ARE LIMP DUE TO A LACK OF STRING TENSION</b>
<b>CAUSE 1:</b>	<b>Little string tension when the press rises and in the tying cycle; the needles take string from the spools.</b>
<b>SOLUTION:</b>	<i>Adjust the string tension (minimum level 10 Kg. - 100 N).</i>
<b>CAUSE 2:</b>	<b>The strings get caught by part of the chamber.</b>
<b>SOLUTION:</b>	<i>Adjust the feeding of the bales so that the strings are aligned with the string feeding channels.</i>
<b>ANOMALY:</b>	<b>THE GROUPED PACKETS HAVE A SLIGHTLY UPWARD CURVING PROFILE</b>
<b>CAUSE 1:</b>	<b>The discharge gate lowers too far and the packet is only supported at its ends.</b>
<b>SOLUTION:</b>	<i>Level the height of the gate by mounting spacing bushes on the cylinders.</i>
<b>ANOMALY:</b>	<b>THE BALES IN THE PACKET ARE BROKEN ON COMING OUT OF THE MACHINE</b>
<b>CAUSE 1:</b>	<b>A bale bursts due to excessive pressure from the lift-press.</b>
<b>SOLUTION:</b>	<i>Reduce the pressure via the command console.</i>
<b>CAUSE 2:</b>	<b>A string breaks in the course of the machine's work cycle.</b>
<b>SOLUTION:</b>	<i>Observe in order to discover what causes the string to break and then correct the fault.</i>
<b>CAUSE 3:</b>	<b>The bale enters the machine with a previously broken string.</b>
<b>SOLUTION:</b>	<i>Solve the problem in the baler.</i>



<b>ANOMALY:</b>	<b>THE FACES OF THE PACKET ARE SCRATCHED, POORLY ALIGNED OR BADLY SQUARED OFF</b>
<b>CAUSE 1:</b>	<b>There is great variation in the length of the bales.</b>
SOLUTION:	<i>Adjust the baler in order to improve the standardisation of the bales.</i>
<b>CAUSE 2:</b>	<b>The bales are not well aligned when they enter the chamber.</b>
SOLUTION:	<i>Adjust the guide inside the lift.</i>
<b>CAUSE 3:</b>	<b>The bales only just enter the chamber and scrape against the front part of the bale pressing chamber.</b>
SOLUTION:	<i>Allow more space in the chamber by adjusting the back gate.</i>
<b>CAUSE 4:</b>	<b>The bales remain very loose inside the chamber and they move around.</b>
SOLUTION:	<i>Adjust the inner part of the chamber according to the instructions provided in the section on making adjustments.</i>

<b>ANOMALY:</b>	<b>THE PACKET HAS NOT BEEN COMPLETED (14 BALES)</b>
<b>CAUSE 1:</b>	<b>The bale is larger than foreseen.</b>
SOLUTION:	<i>Adjust upper activator D6.</i>
<b>CAUSE 2:</b>	<b>On one of the bale lifting trips a bale has entered the lift on its side.</b>
SOLUTION:	<i>Check the string tension.</i>

**10.9. ELECTRICAL SYSTEM**

<b>ANOMALY:</b>	<b>THE PHOTOCELL DOES NOT DETECT THE SIGNAL CORRECTLY</b>
<b>CAUSE 1:</b>	<b>The collection distance is not correct.</b>
SOLUTION:	<i>Adjust to the maximum distance.</i>
<b>CAUSE 2:</b>	<b>Something is blocking the view of the photocell.</b>
SOLUTION:	<i>Clean it so that the optic signal is picked up without problems.</i>
<b>CAUSE 3:</b>	<b>The wire has been severed.</b>
SOLUTION:	<i>Change the cable.</i>
<b>ANOMALY:</b>	<b>PROBLEMS WITH THE MACHINE WHEN IT IS WORKING IN AUTOMATIC CYCLE</b>
<b>CAUSE 1:</b>	<b>Interference from the radio waves emitted by the tractor.</b>
SOLUTION:	<i>The two things should not happen at the same time.</i>
<b>CAUSE 2:</b>	<b>One of the electronic circuit components does not work correctly.</b>
SOLUTION:	<i>Replace the faulty component (chip, detector, photocell, etc.)</i>
<b>ANOMALY:</b>	<b>THE INDUCTIVE DETECTOR DOES NOT DETECT THE SIGNAL CORRECTLY</b>
<b>CAUSE 1:</b>	<b>The detector is broken.</b>
SOLUTION:	<i>Change the detector unit, cable and connector.</i>
<b>CAUSE 2:</b>	<b>The wire is severed.</b>
SOLUTION:	<i>Change the detector unit, cable and connector.</i>
<b>CAUSE 3:</b>	<b>The connector is not well contacted.</b>
SOLUTION:	<i>Change the detector unit, cable and connector.</i>
<b>CAUSE 4:</b>	<b>The detection distance is not correct.</b>
SOLUTION:	<i>Set to a distance of 5 to 6 mm.</i>

<b>ANOMALY:</b>	<b>THE CURRENT DOES NOT REACH THE CONNECTION TERMINAL</b>
<b>CAUSE 1:</b>	<b>The connector is unplugged.</b>
SOLUTION:	<i>Connect the control box cable.</i>
<b>CAUSE 2:</b>	<b>The main cable is severed.</b>
SOLUTION:	<i>Repair or change the cable.</i>
<b>ANOMALY:</b>	<b>THERE IS AN ELECTRICAL FAULT IN A MOVEMENT OF THE DISTRIBUTOR UNIT</b>
<b>CAUSE 1:</b>	<b>There is a loose wire in the spool connector.</b>
SOLUTION:	<i>Connect the loose cable.</i>
<b>CAUSE 2:</b>	<b>The spool is occupied.</b>
SOLUTION:	<i>Change the spool.</i>
<b>CAUSE 3:</b>	<b>One of the wires from the box to the connector is loose or has been cut.</b>
SOLUTION:	<i>Connect or change the cable.</i>
<b>CAUSE 4:</b>	<b>Movement is in the opposite direction to that of manual drive.</b>
SOLUTION:	<i>Change round the connector wires.</i>
<b>ANOMALY:</b>	<b>THE CONTROL BOX DOES NOT WORK (SUPPLY VOLTAGE 12 V.)</b>
<b>CAUSE 1:</b>	<b>The battery cable is disconnected or broken.</b>
SOLUTION:	<i>Connect or change the cable.</i>
<b>CAUSE 2:</b>	<b>The battery is low on energy or flat.</b>
SOLUTION:	<i>Change the battery.</i>
<b>CAUSE 3:</b>	<b>The fuse has blown.</b>
SOLUTION:	<i>Change the fuse.</i>

**10.10. HYDRAULIC SYSTEM**

<b>ANOMALY:</b>	<b>SOME MOVEMENTS OF THE HYDRAULIC BLOCK DO NOT RETURN TO NEUTRAL</b>
<b>CAUSE 1:</b>	<b>The slide is blocked by a foreign body.</b>
<b>SOLUTION:</b>	<i>Dismantle, clean and reassemble.</i>
<b>ANOMALY:</b>	<b>THE HYDRAULIC BLOCK HAS APPARENTLY LOST ALL OF ITS ASSIGNED PRESSURES</b>
<b>CAUSE 1:</b>	<b>The hydraulic union's general valve has remained open due to dirt inside it.</b>
<b>SOLUTION:</b>	<i>Dismantle, clean and adjust.</i>
<b>ANOMALY:</b>	<b>THE SEQUENCE VALVE DOES NOT RESPOND TO THE PRESSURE ADJUSTMENT</b>
<b>CAUSE 1:</b>	<b>Dirt in the valve, or a broken adjusting spring.</b>
<b>SOLUTION:</b>	<i>Dismantle, clean and/or change the spring and readjust.</i>
<b>ANOMALY:</b>	<b>THE CYLINDERS LOSE OIL AT THE FRONT (REMOVABLE HEAD)</b>
<b>CAUSE 1:</b>	<b>Scratched rod or gasket in poor condition.</b>
<b>SOLUTION:</b>	<i>Change the rod and/or the head gaskets.</i>
<b>ANOMALY:</b>	<b>THE CYLINDERS MOVE WHEN THEY ARE AT REST AND DO NOT SUPPORT THE CORRECT PRESSURE</b>
<b>CAUSE 1:</b>	<b>There is undesired communication within the oil circuit due to internal deterioration.</b>
<b>SOLUTION:</b>	<i>Change the gaskets inside the sleeve.</i>
<b>ANOMALY:</b>	<b>THE CYLINDERS DO NOT HAVE THE PRESSURE AND OUTPUT THAT THEY HAVE BEEN ASSIGNED</b>
<b>CAUSE 1:</b>	<b>Internal leakages in the circuit or greater than normal losses of load.</b>
<b>SOLUTION:</b>	<i>Check the circuit and adjust to restore the pre-set values.</i>
<b>ANOMALY:</b>	<b>OIL IS LEAKING FROM THE HYDRAULIC BLOCK</b>
<b>CAUSE 1:</b>	<b>The interior and exterior joints are in poor condition.</b>
<b>SOLUTION:</b>	<i>Change the joints.</i>

<b>ANOMALY:</b>	<b>THE PUMP DOES NOT WORK</b>
<b>CAUSE 1:</b>	<b>The PTO is not activated.</b>
SOLUTION:	<i>Connect the tractor's PTO at 540 RPM.</i>
<b>CAUSE 2:</b>	<b>The oil pass key is closed.</b>
SOLUTION:	<i>Open the tap as far as possible.</i>
<b>CAUSE 3:</b>	<b>There is not enough oil in the deposit.</b>
SOLUTION:	<i>Fill the tank to the level.</i>
<b>CAUSE 4:</b>	<b>The pump valve with the highest pressure is blocked.</b>
SOLUTION:	<i>Dismantle, clean and adjust.</i>
<b>CAUSE 5:</b>	<b>The pilotage nozzle is obstructed.</b>
SOLUTION:	<i>Dismantle, clean and assemble.</i>
<b>CAUSE 6:</b>	<b>The pump does work correctly and/or makes a noise.</b>
SOLUTION:	<i>Check whether the tank's ventilation filter is blocked.</i>
<b>CAUSE 7:</b>	<b>The multiplier is faulty.</b>
SOLUTION:	<i>Change or repair.</i>
<b>CAUSE 8:</b>	<b>The pump is faulty.</b>
SOLUTION:	<i>Repair or change for another.</i>

<b>ANOMALY:</b>	<b>LOSS OF LOAD IN THE PRESSURE AND/OR RETURN CIRCUIT</b>
<b>CAUSE 1:</b>	<b>The cartridges of the filters are full of dirt.</b>
SOLUTION:	<i>Clean and change.</i>



<b>ANOMALY:</b>	<b>THE PILOTED RETENTION VALVE DOES NOT RETAIN</b>
<b>CAUSE 1:</b>	<b>The hoses are probably on back to front.</b>
<b>SOLUTION:</b>	<i>Fit the hoses correctly.</i>
<b>CAUSE 2:</b>	<b>Internal leakages in the valve.</b>
<b>SOLUTION:</b>	<i>Clean and change.</i>

<b>ANOMALY:</b>	<b>THE CIRCUIT HEATS UP MORE THAN NORMAL AND LOSES ITS HYDRAULIC PROPERTIES</b>
<b>CAUSE 1:</b>	<b>The hydraulic oil is dirty or has lost some of its physical properties.</b>
<b>SOLUTION:</b>	<i>Change the oil.</i>

**11.1. REMOVAL AND SCRAPPING**

When the owner/operator of the machine considers that it has reached the end of its service life, they should bear in mind that it **must be taken to a properly authorised disposal centre.**

The following information must be provided regarding the machine's components:

MATERIAL	LOCATION	EWC CODE	DESCRIPTION	PROCESS
<b>GEAR OIL</b>	Gearbox interior	<b>130206</b>	Transmission oils	<b>V22</b> Mineral oil regeneration by a specialised company
<b>HYDRAULIC FLUID</b>	Hydraulic tank	<b>130111</b>	Synthetic hydraulic oils	<b>V22</b> Mineral oil regeneration by a specialised company
<b>TYRES</b>	Running gear	<b>160103</b>	Rubber	<b>V52</b> Tyre recovery
<b>HYDRAULIC CONTROLS AND PIPES</b>	Conduits and components	<b>150202</b>	Material containing oil residue	<b>V41</b> Recycling and recovery of metals
<b>CHASSIS</b>	Machine structure	<b>160117</b>	Ferrous metals	<b>V41</b> Recycling and recovery of metals
<b>PLASTICS</b>	Tool box, technical plastics	<b>160119</b>	Plastics	<b>V12</b> Recycling of plastics
<b>ELECTRICAL COMPONENTS AND CONDUITS</b>	Electrical / electronic installation	<b>160216</b>	Copper and others	<b>V45</b> Recovery of cables
<b>OIL FILTERS</b>	Filter interiors	<b>160107</b>	Filter cartridges	<b>V99</b> Others

NOTE: Table taken from the EWR European Waste Catalogue



**HELP PROTECT THE ENVIRONMENT BY SEPARATING MATERIALS FOR DISPOSAL ACCORDING TO THEIR SPECIFIC NATURE.**



**WARNING! IMPORTANT:**

**Take care** when emptying hydraulic cylinders, tanks, pipes, etc. before recycling components. Use leak-proof containers that are intended for the purpose.

**DO NOT** dispose of waste on the ground or in drains, streams, reservoirs, lakes, etc.

**ALWAYS** comply with local and state regulations and respect regulations regarding the handling and disposal of substances and components.

*The company cannot be held liable for non-compliance with these rules.*



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**13.1. HOW TO ORDER SPARE PARTS?****ATTENTION, IMPORTANT INFORMATION!**

In order to maximise the efficiency of our service, we need you to read these instructions carefully and follow them closely. This manual explains the procedures that you must follow whenever you need to order new spare parts from this catalogue.

The new procedures will have little effect unless you follow the guidelines (that we will now explain) when you need to order spare parts.

**ALWAYS REFER TO THIS MANUAL WHEN YOU NEED TO ORDER NEW SPARE PARTS!** It is important to keep this manual with your machine or very near to it.

There are three possible ways to order spare parts from ARCUSIN:



By TELEPHONE  
**+34 973 71 28 55**



By FAX  
**+34 973 60 42 57**



By E-MAIL, via the Arcusin web-site  
**[www.arcusin.com](http://www.arcusin.com)**

We shall now explain the correct procedure to follow when ordering spare parts. This can be done in one of three possible ways.

13.1.1. BY TELEPHONE



**+ 34 973 71 28 55**

First, you will need to have the manual/catalogue with you. You will need to refer to it when making your order.  
**Identify the spare part(s) you require.**

**DRAW** →

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Phone **Arcusin** on **+34 973 712 855** and ask for the spare parts department. We will then ask you to provide the information that appears on the “spare parts order sheet”:

**IDENTIFICATION PLATE**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CHASSIS NUMBER**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**A Arcusin S.A.**

Rol. Ind. Pla d'Urgell, Av. Meritx B  
25245 VILA-SARNA, Lleida (Spain)  
+34 973 712 855 +34 898 982 910

VERSION: VERSION

AÑO YEAR: YEAR OF MANUFACTURE

www.arcusin.com

	T-1	T-2	T-3
B-1	--	--	--
B-2	--	--	--
B-3	--	--	--
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**To complete the process, please provide the following information:**

- Your Telephone/Fax/E-mail contact number/address:
- The name of the person to contact:
- The complete postal address to which the parts must be sent:
- The transport company involved:

13.1.2. BY FAX



**ATTENTION!**

- Remember that when requesting a spare part by telephone, you should always have your spare parts manual/catalogue close at hand.
- Provide all of the information that appears on the “Identification sheet” in order to fully identify your machine.
- Provide all of the details needed to identify the spare part in question.
- Make sure that you provide full details of the address to which the parts must be sent.



**+ 34 973 60 42 57**

Photocopy the back page of this catalogue (SPARE PARTS ORDER SHEET), complete the form, and send it by FAX to **+34 973 604257**.

Date of order.

Complete all of the required fields using the information on the “Identification sheet” In this way you will fully identify your machine

**Provide complete information including;** who to contact, the contact telephone num, the full postal address to which the parts must be sent, and the transport company involved.

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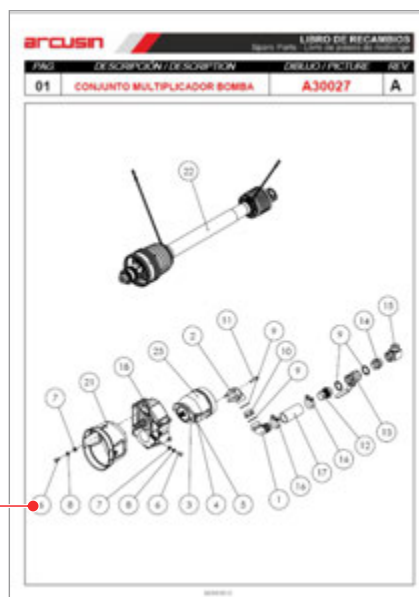
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5. BOMBA	1	5		
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<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	4	RCJMB24		OIL SEAL WASHER 1½"	
2	8	TR5830	-	FLAT WASHER M 12 125 ZN	
3	8	TR5940	-	GROWER WASHER M 12 127 ZN	
4	8	TR1300	-	BOLT M 12x025 933 8.8 ZN	
5	2	TR5840	-	FLAT WASHER M 14 125 ZN	
6	2	TR5950	-	GROWER WASHER M 14 127 ZN	
7	2	TR1428	-	BOLT M 14x035 933 8.8 ZN	
8	4	TR101008045	-	ALLEN BOLT 1/2"-13UNFx45 912 SAE	
9	4	TR12123030	-	ALLEN BOLT WITHWORTH 3/8"-16H x 30	
10	4	TR20190001	-	BOLT ALLEN 1/2" - 13UNFx25 931 SAE	
11	1	AMML1415D1	*	M7 MULTIPLIER 6005.401.040 (1:4)	-
12	1	EHBMB17	*	PUMP VAR. C. 60cc. CONEX. SIDE REX.	
13	1	RC56016		FLANGE SAE PARTIDA 1" 3000 PSI	-
14	1	RC3022424		BRACKET SAE 1" - H1" 3000 PSI A	
15	1	EH20210027	-	BALL VALVE 1 1/2" 2 WAYS H-H PN40	
16	1	EH20160008	-	JOINT OR-054x3.53	-
17	1	A3P000688	-	FLANGE ADAPTER ASE 2" - 1 1/2 3000 PSI	-
18	1	RC50324L	-	BRASS HYDRAULIC FITTING 1"1/2"M-1"1/2"H	-
19	1	RC51524		ELBOW 90 ° M1 ½ "-TL1 ½" SPECIAL SQUARE	
20	2	RC9043224		SUCTION COUPLING 90°TM2"-M1½"	-
21	1	TF012		MINING SUCTION HOSE 15BAR ø50	-
22	2	AM00310		PINCHCOCK SUPER 59-63	
23	1	RC50024		COUPLING M1½" - M1½"	
24	1	EM00109	-	SEAL 050-090-10/8	
25	1	AMTA219040		PTO CAP 250/180	
26	1	AMTF6081H6	-	HOMOKINETIC PTO TYPE 6	-
27	1	EMTR04008010	-	SEAL 040-080-10	
28	1	EH20190014	-	INTERIOR AXLE SEAL BOMB 60cc	

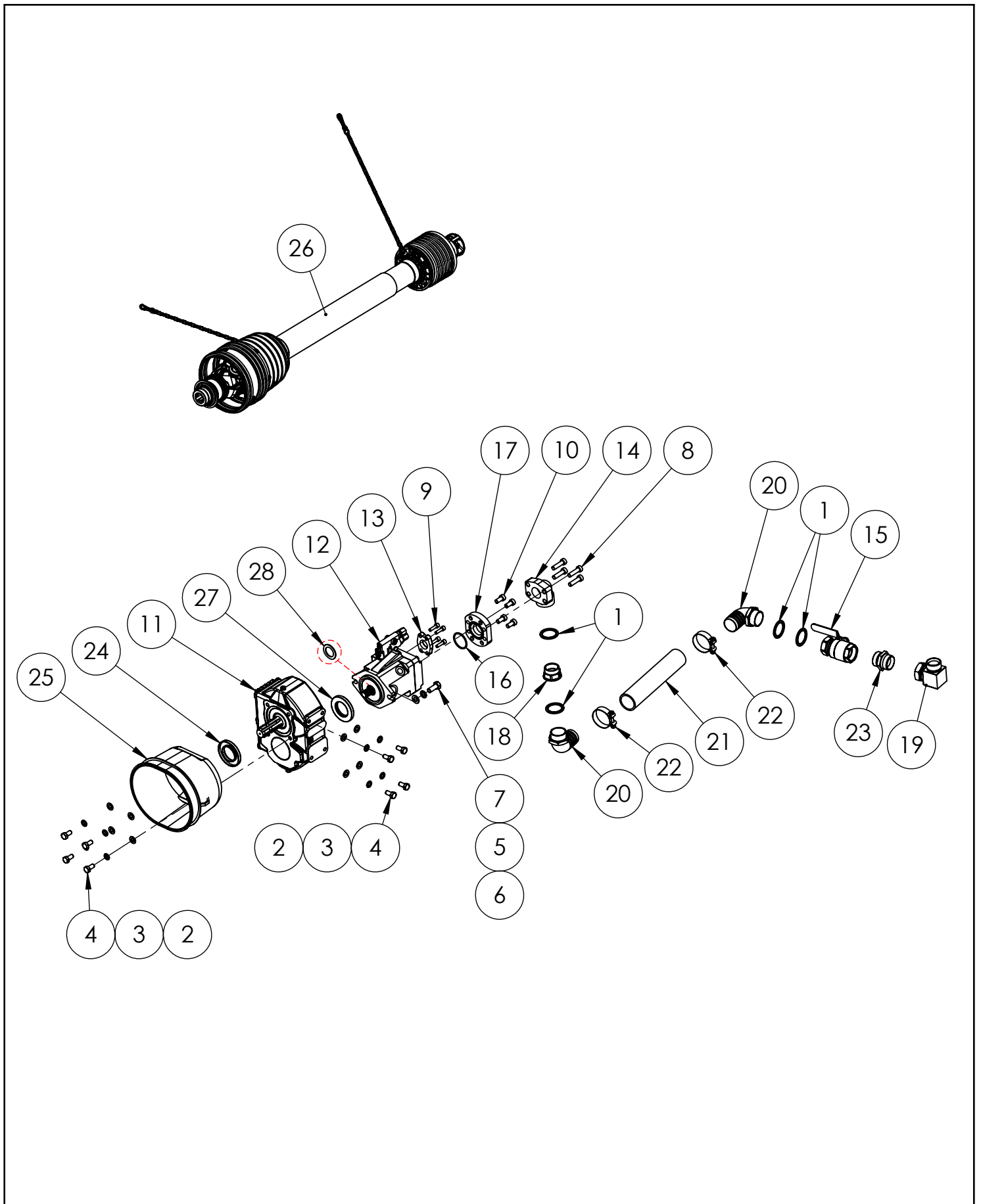


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
2	MULTIPLIER PUMP ASSEMBLY	HR00253	B



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00270</b>	<b>B</b>	<b>HITCH AND DEPOSIT</b>	<b>3</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	12	TR5850	-	WASHER DIN-125 ZN M16	
2	8	TR5960	-	WASHER M 16 127 ZN	
3	8	TR5070		NUT M 16 934 8.8 ZN	
4	4	TR1525	-	VOLT DIN 931 M16x50 8.8 ZN	
5	4	TR20210019		VOLT DIN 931 M16x50 8.8 ZN	
6	10	TR5820	-	FLAT WASHER M 10 125 ZN	
7	10	TR5930	-	GROWER WASHER M 10 127 ZN	
8	4	TR1200	-	BOLT M 10x030 933 8.8 ZN	
9	4	TR5800	-	WASHER M 06 125 ZN	
10	4	TR5910	-	GROWER WASHER M 06 127 ZN	
11	4	TR1021	-	BOLT M 06x025 933 8.8 ZN	
12	6	TR1190	-	BOLT M 10x025 933 8.8 ZN	
13	1	RCJMB24		OIL SEAL WASHER 1½"	
14	2	RCJMB12		OIL SEAL WASHER 3/4"	
15	1	EHFLTRES01		COMPLET RETURN FILTER 1½" ø180	
16	1	EH00168		SUCTION FILTER 1 ½ "Ø85x185 (130Lts.)	-
17	1	EHFTLTAP01		CAP WITH PRESSURIZED FILTER AND BALL	-
18	1	EHFLTP1201		PRESSURE FILTER 3/4" 20µ BP7bar 110 Lt. FIBER	-
19	1	EH00182	-	OIL LEVEL INDICATOR 127 mm. WITH TERMOMETER	
20	1	FXP000205	-	PRESSED CARTON BOARD	-
21	2	RC51012I		CAP M3 / 4 " WITH HEXAGONAL HOSE	
22	1	RC51022		CAP M1½" H	
23	1	AMPA001	-	SUPPORT LEG MECHANICAL (6000 KGS.)	
24	1	A3S000288	-	EXTENDED RING COUPLE	
25	1	EH00196		MANOMETER WIKA ø63 0/400 G1/4"dorsal class 1,6	
26	1	XPS000027	*	PLUG FLANGE TANK	
27	1	EHFLTP12R3		PRESSURE FILTER CLOGGING INDICATOR	
28	1	EHFLTP12R2	-	PRESSURE FILTER CARTRIDGE 3/4 "110 Lt. 10µ BP7bar	-
29	1	A3S000342	-	BALL COUPLING	
30	1	EHFLTREM01		MANOMETER RETURN FILTER MULTIPACK 2005	
31	1	EHFLTREC01	-	RETURN FILTER CARTRIDGE. SEMISUM. 1½" ø180 anchor	-
32	1	A3S000759	*	PIN AND EYE COUPLING	
33	4	A3P000810		LASER WASHER	-
34	1	A4P000363		P.T.O. SUPPORT	-
35	1.25	AM00003	-	CHAIN 10 MM DIN764 L1250mm	LONG. 1250 mm
36	1	CNCAN30140	-	PADLOCK	-

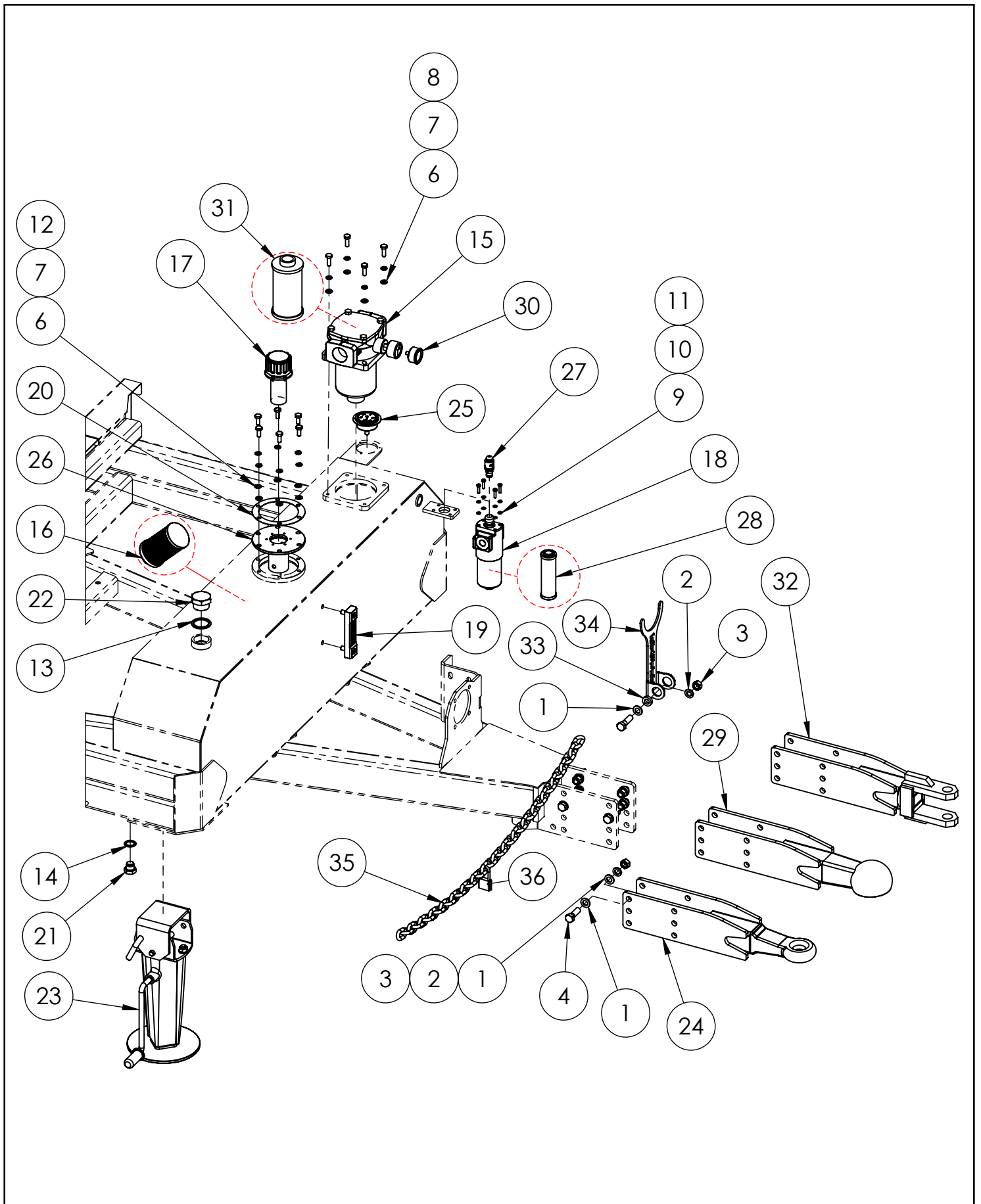


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
4	HITCH AND DEPOSIT	HR00270	B



DIBUJO / PICTURE	REV.	DESCRIPCIÓN / DESCRIPTION	PAG.
HR00311	B	PICK UP ASSEMBLY I	5

POSICIÓN POSITION POSITION	CANTIDAD QUANTITY QUANTITÉ	CODIGO ARTICULO PART CODE	*	DENOMINACION NAMING DÉNOMINATION	NOTAS NOTES NOTES
1	1	A3P000877		ENTRANCE AXLE PICK-UP	-
2	1	A4P000062	-	WHEEL	
3	2	A4S000026		CARRIAGE TENSOR	
4	8	EM00078		BEARING 6005 2RS	
5	4	EM00195	-	ELASTIC RING I-047 DIN 472	
6	5	TR06295		PIN 08x7x22	
7	2	A3P000879	-	TUBE	-
8	5	PL0104042		WHEEL	
9	6	EM00172		ELASTIC RING E-025 DIN 471	
10	2	EM00175		ELASTIC RING E-030 DIN 471	
11	2	A4S000025	-	ROCKER	
12	4	FXP000395		PINION CHAIN Z=7	-
13	4	EM00072		BEARING 6004 2RS	-
14	4	EM00190		ELASTIC RING I-047 DIN 472	
15	4	EM00171		ELASTIC RING E-020 DIN 471	
16	4	AMCDK015	-	STICK CHAIN 16 STEP	
17	2	PL0104187		SPRING 24x3x80	
18	7	TR5920	-	GROWER WASHER M 08 127 ZN	
19	6	TR1073	-	BOLT DIN-933 M08x20 8.8 ZN	
20	8	TR5810	-	BOLT M 08x020 933 8.8 ZN	
21	1	A3M000117	*	CHAIN ASSEMBLY 36 STEP	
22	1	A3S000017		MOTOR COUPLING AXLE	
23	1	EHMTRO100R	-	MOTOR H. ORBITAL WR-100 REINFORCED	
24	0.16	A4P000393		BAR TREATED M 08 ZN	-
25	1	TR5030		NUT M 08 934 8.8 ZN	
26	1	A32107000	*	BOLTED PLATE	
27	1	A3P000871	-	GUIDE RAIL	
28	1	A3P000872		TUB	-
29	1	A3P000873		CHAIN TENSOR	-
30	1	A3P000874		CHAIN TENSOR WHEEL	-
31	1	A3P000897	-	SPRING 22x2.5x16	
32	1	A3P000897s	-	SPRING 22x2.5x16	-
33	1	TR1283	-	BOLT DIN-931 8.8 ZN M10x120	
34	1	TR5520	-	NUT M 10 985 8.8 ZN	
35	2	TR5510		WASHER M 08 125 ZN	
36	1	TR1150	-	BOLT DIN-931 8.8 ZN M08x70	
37	1	EM00011		OVAL FLANGED BEARING SUPPORT ø25	
38	2	TR5940	-	GROWER WASHER M 12 127 ZN	
39	2	TR1312	-	BOLT M 12x040 933 8.8 ZN	
40	2	TR5930	-	GROWER WASHER M 10 127 ZN	
41	2	TR1200	-	BOLT M 10x030 933 8.8 ZN	
42	3	TR2991		BOLT M 06x015 7991 8.8 ZN	
43	1	A3P000021		4 POINT STAR	
44	1	A3P000020	-	BUSH	-
45	1	TR2063	-	BOLT M 08x020 912 8.8 ZN	
46	1	EHMTROK320	-	SEALS KIT ORBITAL MOTOR 320	-
47	1	EHBQ028	-	BLOCK D14	-



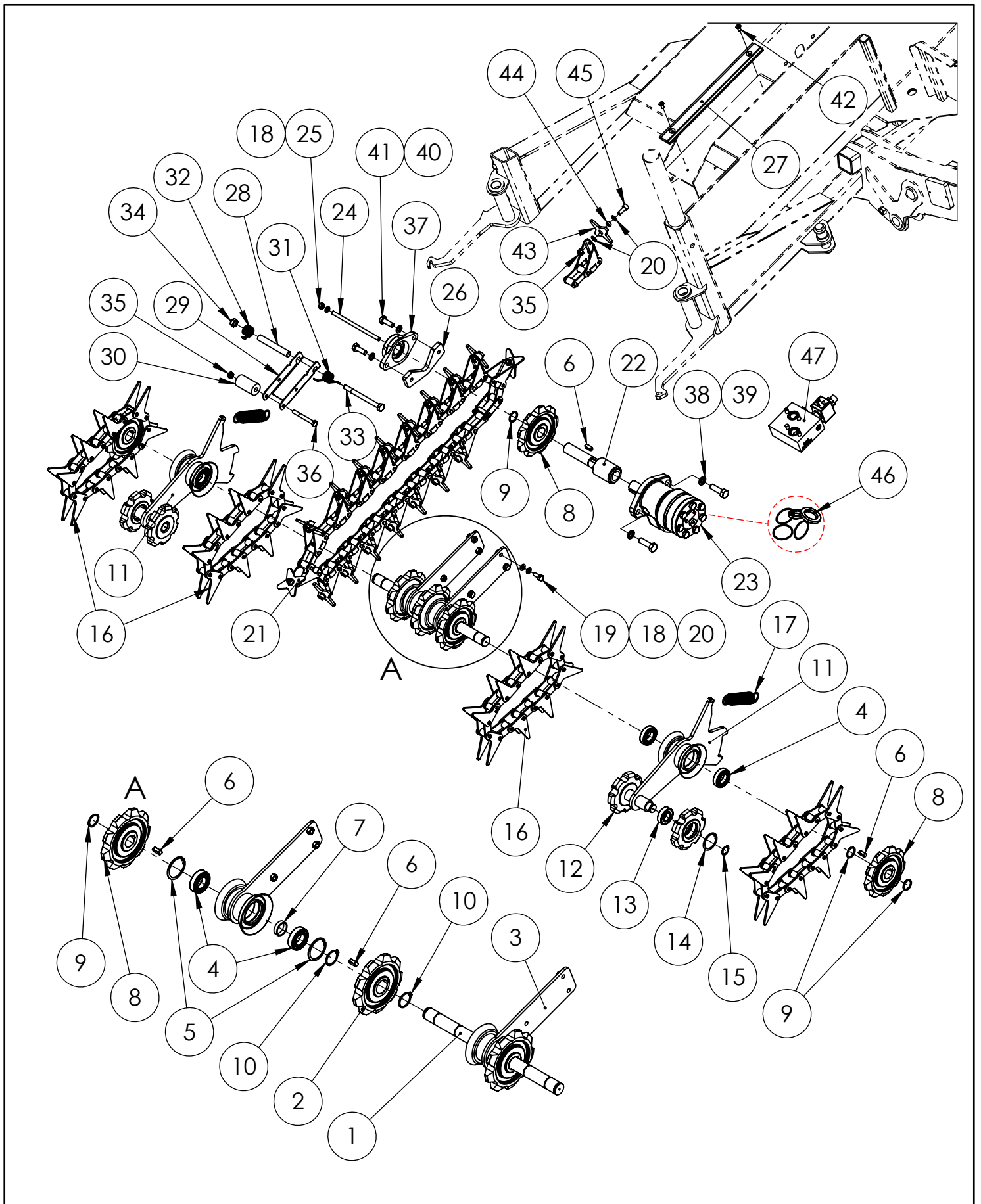
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
6	PICK UP ASSEMBLY I	HR00311	B



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00277</b>	<b>A</b>	<b>PICK UP ASSEMBLY II</b>	<b>7</b>

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	A3M000031	*	CHAIN SECTION 41.4 40	
2	1	PL0104042		WHEEL	
3	1	A3S000017	*	MOTOR COUPLING AXLE	
4	1	TR06295		PIN 08x7x22	
5	1	EM00172		ELASTIC RING E-025 DIN 471	
6	1	EHMTRO100R	-	MOTOR H. ORBITAL WR-100 REINFORCED	
7	0.16	TR06411	-	BAR TREATED M 08 ZN	-
8	1	TR5920	-	GROWER WASHER M 08 127 ZN	
9	1	TR5030		NUT M 08 934 8.8 ZN	
10	1	A3P000216	-	GUIDE RAIL	
11	1	A3P000215	-	GUIDE RAIL	-
12	1	PL0104041		WHEEL	-
13	1	A3P000031	*	AXLE SHAFT TENSING	
14	1	EM00075		BEARING 6206 2RS	
15	2	EM00212	-	ELASTIC RING I-062 DIN 472	
16	2	EM00175		ELASTIC RING E-030 DIN 471	
17	1	A3P000872		TUB	-
18	1	A3P000873		CHAIN TENSOR	-
19	1	A3P000874		CHAIN TENSOR WHEEL	-
20	1	A3P000897	-	SPRING 22x2.5x16	
21	1	A3P000897s	-	SPRING 22x2.5x16	-
22	1	TR1283	-	BOLT DIN-931 8.8 ZN M10x120	
23	3	TR5520	-	NUT M 10 985 8.8 ZN	
24	2	TR5510		WASHER M 08 125 ZN	
25	1	TR1150	-	BOLT DIN-931 8.8 ZN M08x70	
26	1	EM00011		OVAL FLANGED BEARING SUPPORT ø25	
27	1	TR1575	-	VOLT DIN 931 M16x125 8.8 ZN	
28	2	TR5940	-	GROWER WASHER M 12 127 ZN	
29	2	TR1312	-	BOLT M 12x040 933 8.8 ZN	
30	2	TR1200	-	BOLT M 10x030 933 8.8 ZN	
31	1	TR5850	-	WASHER DIN-125 ZN M16	
32	1	TR5541		NUT M 16 985 8.8 ZN	
33	2	TR2991		BOLT M 06x015 7991 8.8 ZN	
34	2	TR2043	-	VOLT DIN 912 M06x30 8.8 ZN	
35	1	A3P000021		4 POINT STAR	
36	1	A3P000020	-	BUSH	-
37	2	TR5810	-	BOLT M 08x020 933 8.8 ZN	
38	1	TR2063	-	BOLT M 08x020 912 8.8 ZN	
39	1	AM00016	-	STRAIGHT COUPLER 41.4,BOLT 8.25mmDELTA TONE M.0-0	OPCIONAL
40	1	EHMTROK320	-	SEALS KIT ORBITAL MOTOR 320	-

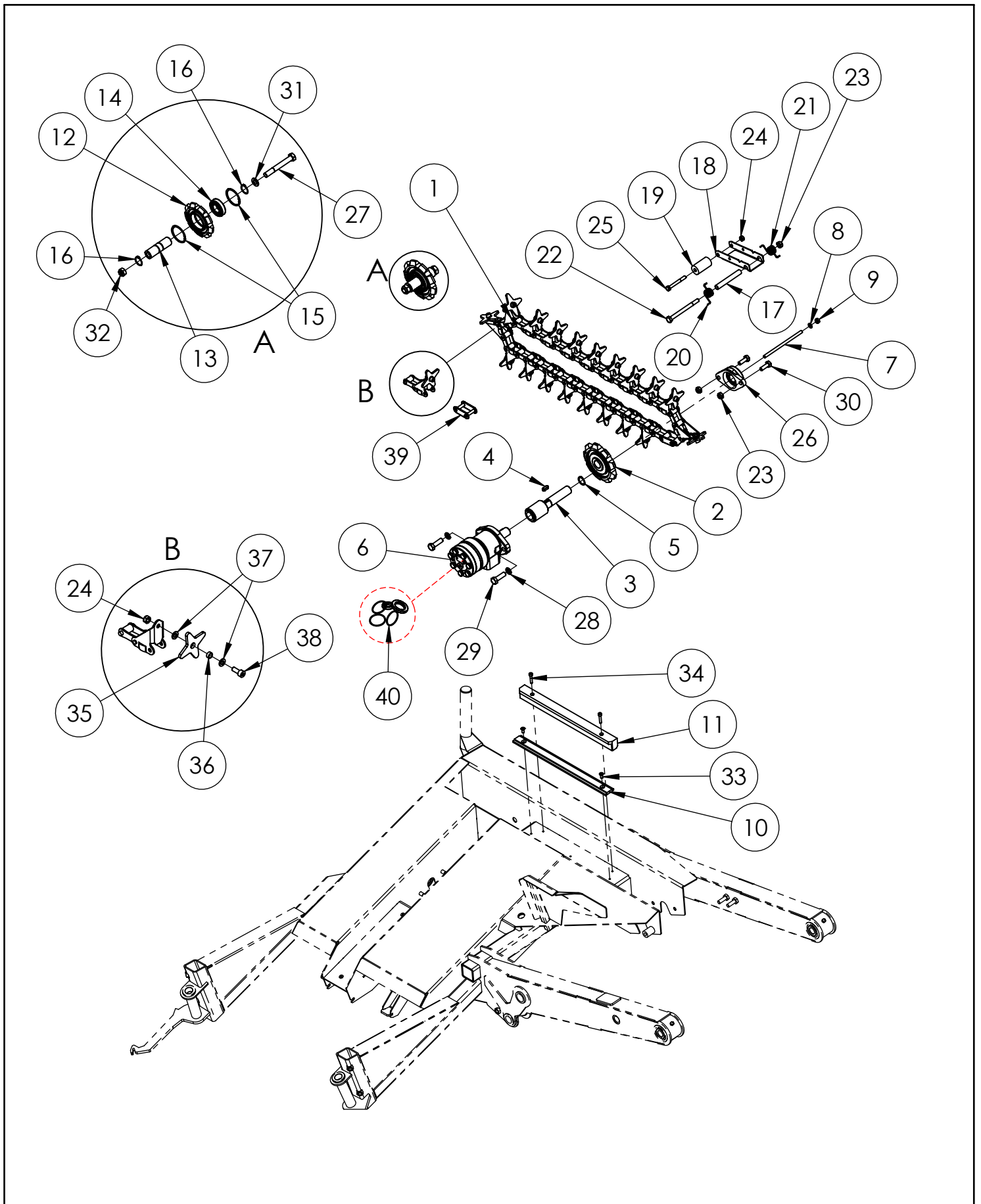


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
8	PICK UP ASSEMBLY II	HR00277	A



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00304</b>	<b>B</b>	<b>PICK UP ATTACHMENTS</b>	<b>9</b>

POSICIÓN POSITION	CANTIDAD QUANTITY QUANTITÉ	CODIGO ARTICULO PART CODE	*	DENOMINACION NAMING DÉNOMINATION	NOTAS NOTES NOTES
1	1	PL0104183	*	SPRING 28.5x3x140	-
2	2	PL0104187		TRACTION SPRING 24x3x80	
3	2	AM00099		SILENTBLOCK ø30x30 M06x17	
4	4	AM20210012	-	CLAMP CLOSURE 11/4" M6	-
5	2	EM20200021		BEARING RA20-XL_1	
6	2	TR5830	-	FLAT WASHER M 12 125 ZN	
7	2	TR5530	-	NYLON INSERT LOCK NUT M 12 985 8.8 ZN	
8	5	TR1190	-	BOLT M 10x025 933 8.8 ZN	
9	3	TR1270	-	BOLT M 10x080 931 8.8 ZN	
10	5	TR5520	-	NUT M 10 985 8.8 ZN	
11	4	TR5820	-	FLAT WASHER M 10 125 ZN	
12	1	TR5560	-	NUT M 20 985 8.8 ZN	
13	1	TR5090		NUT M 20 934 8.8 ZN	
14	2	TR5871	-	WASHER DIN-9021 M20	
15	1	TR5870	-	FLAT WASHER M 20 125 ZN	
16	6	TR4103		BOLT DIN-603 8.8 ZN M08X20	
17	14	TR5810	-	BOLT M 08x020 933 8.8 ZN	
18	6	TR5510		WASHER M 08 125 ZN	
19	8	TR5920	-	GROWER WASHER M 08 127 ZN	
20	8	TR5030		NUT M 08 934 8.8 ZN	
21	2	TR5500		NYLON INSERT LOCK NUT M 06 985 8.8 ZN	
22	2	TR5825	-	FLAT WASHER M 10 9021 ZN	
23	2	TR5040		NUT M 10 934 8.8 ZN	
24	2	TR1220	-	BOLT M 10x040 933 8.8 ZN	
25	1	A3M000140	-	PIVOT ROLLER	
26	1	A4P000033	-	ROLLER SUPPORT BAR	
27	1	OT15016S03		DISPLACABLE SUPPORT	
28	1	OT15016S02		SUPERIOR SHEATH	
29	3	A3P00040401	-	SPRING FIXATION	-
30	1	A3P000404		PICK UP TORSION SPRING	
31	3	A3P00040402	-	RING SPRING	-
32	1	A3S000372	-	INFERIOR SHEATH	
33	1	A4S000018		TILTING MECHANISM	
34	1	A3S000120	-	TUBE GUIDE	
35	1	XX2205000A		CHAIN WHEEL PROTECTOR	-
36	2	A3P000385		TORSION SPRING PICK UP	
37	1	A3P000870	*	C14 BALE DIVERTER C14	-
38	1	A4P000068	-	TILTING MECHANISM SUPPORT BRACKET	-
39	1	A4P000068s		TILTING MECHANISM SUPPORT BRACKET	
40	1	A4P000045		SPRING GUIDE SUPPORT TUBE	-
41	2	AM20210003		PLUG FOR TUBE Ø42 mm	

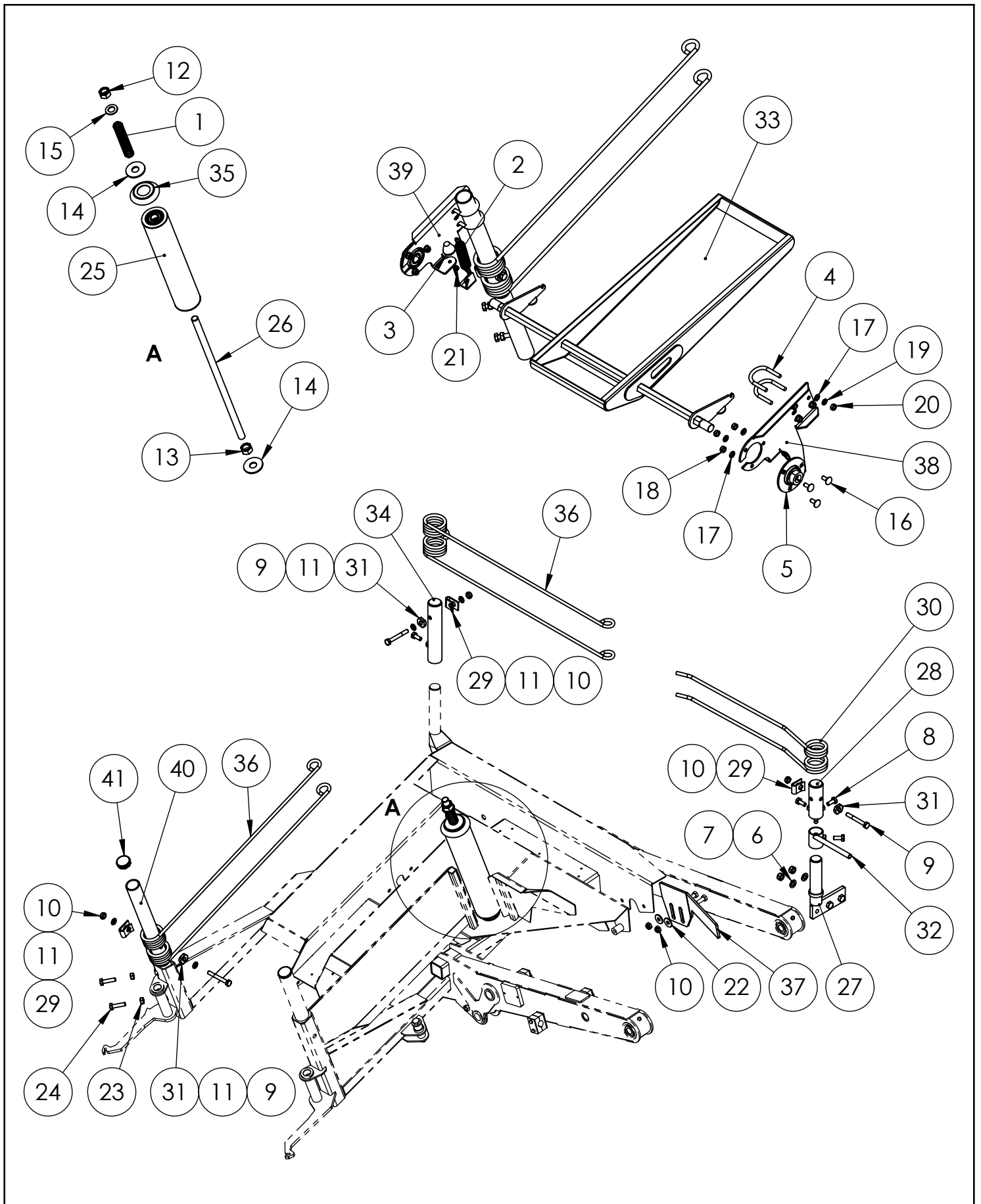


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
10	PICK UP ATTACHMENTS	HR00304	B





<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00305</b>	<b>C</b>	<b>PICKUP ASSEMBLY TO FRAME</b>	11

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	2	TR1053		BOLT M 06x050 933 8.8 ZN	
2	2	TR5910		GROWER WASHER M 06 127 ZN	
3	2	TR5800		WASHER M 06 125 ZN	
4	2	TR1985		BOLT M 20x120 931 8.8 ZN	
5	2	TR5560		NUT M 20 985 8.8 ZN	
6	2	TR1180		BOLT DIN-933 M10x20 8.8 ZN	
7	2	TR5820		FLAT WASHER M 10 125 ZN	
8	3	TR5930		GROWER WASHER M 10 127 ZN	
9	2	TR5050		NUT M 12 934 8.8 ZN	
10	2	TR5970		GROWER WASHER M 20 127 ZN	
11	2	TR5870		FLAT WASHER M 20 125 ZN	
12	4	TR5090		NUT M 20 934 8.8 ZN	
13	2	TR1976		BOLT DIN-933 12.9 ZN M20x70	
14	1	TR1179		BOLT DIN-933 8.8 ZN M10x15	
15	2	TR06386		STRAIGHT NIPPLE 10x100 3AF	
16	1	A5S000071		PICKUP FRAME	
17	1	EC035005		CYLINDER.DE.30-50/350	
18	2	EJAG25x85		AXLE ANTITURN ø25x85	
19	1	A3S000367		SECURITY PIN	
20	4	A3P000884		BUSH DETACHED	-
21	1	AM00126		SILENT BLOCK STANDING 70x60 M-12 CONICAL	
22	2	A32116000		BUSH JOINT PICK UP 35x45x61	
23	2	A32115000		PICK UP AXLE JOINT	
24	1	KR305009		SEALS KIT CYLDR.30/50	-
25	2	RC20200002		SWIVEL FITTING 3/8" 90°	-
26	1	EHVSL00801		SECUCENTIAL VALVE R. VSQ 30 CC 1/2"	-
27	1	TR06110		PIN R-4 ZN	
28	1	A4S000002		PICK-UP SUPPORT	
29	1	AM0011001		SILEMBLOCK ANTIVIBRATION FOOT 60x28 M-10 50/120	

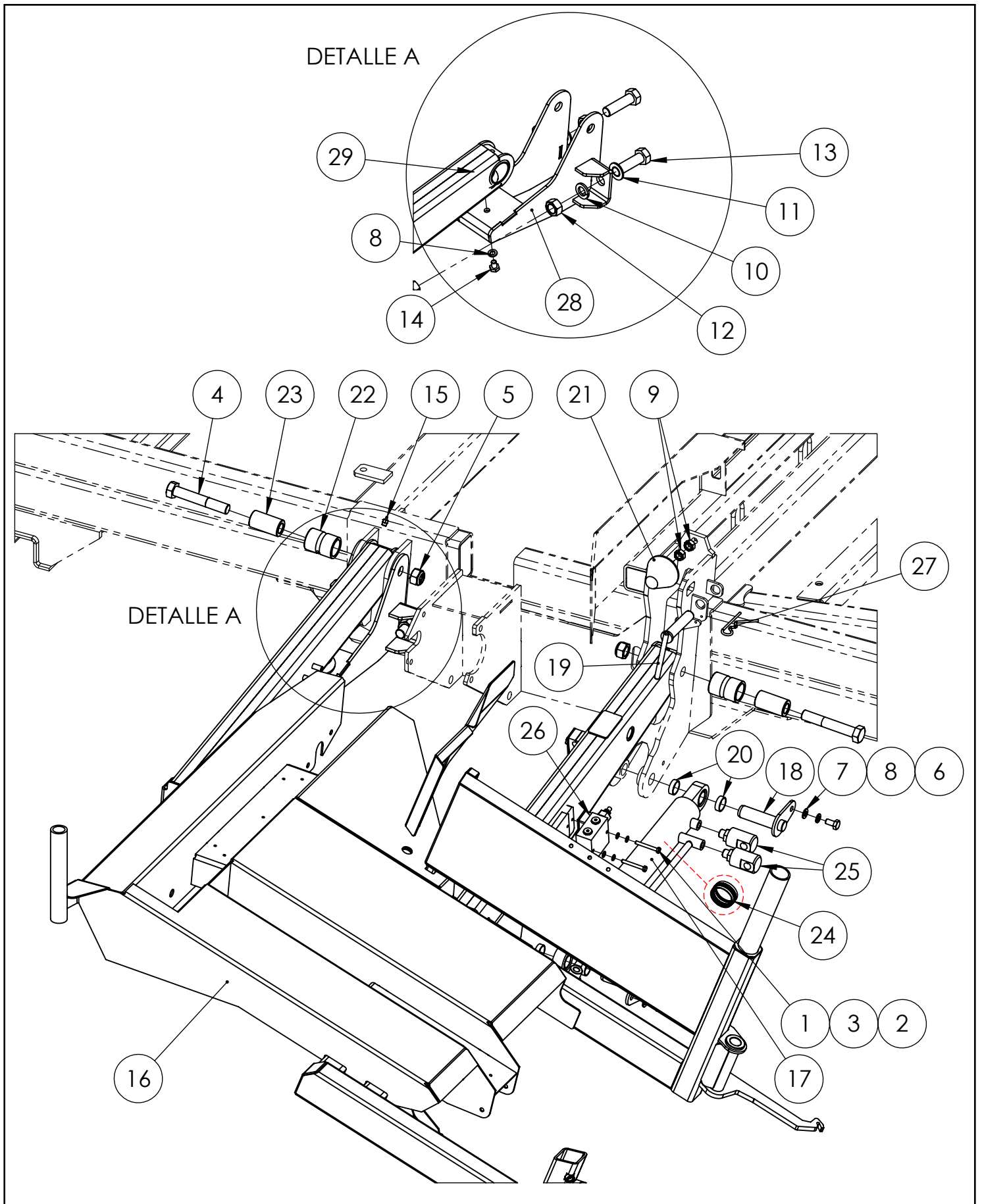


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
12	PICKUP ASSEMBLY TO FRAME	HR00305	C



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00306</b>	<b>B</b>	<b>ENTRANCE PICK UP GUIDE ASSEMBLY</b>	<b>13</b>

POSICIÓN POSITION POSITION	CANTIDAD QUANTITY QUANTITÉ	CODIGO ARTICULO PART CODE	*	DENOMINACION NAMING DÉNOMINATION	NOTAS NOTES NOTES
1	1	TR1356	-	BOLT M 12x090 931 8.8 ZN	
2	1	TR5530	-	NYLON INSERT LOCK NUT M 12 985 8.8 ZN	
3	2	TR5920	-	GROWER WASHER M 08 127 ZN	
4	2	TR1073	-	BOLT DIN-933 M08x20 8.8 ZN	
5	8	TR5820	-	FLAT WASHER M 10 125 ZN	
6	3	TR1241	-	VOLT DIN 931 M10x65 8.8 ZN	
7	5	TR5520	-	NUT M 10 985 8.8 ZN	
8	2	TR1232	-	BOLT M 10x050 931 8.8 ZN	
9	2	TR5850	-	WASHER DIN-125 ZN M16	
10	1	TR1545	-	VOLT DIN 931 M16x80 8.8 ZN	
11	1	TR5541		NUT M 16 985 8.8 ZN	
12	1	AL1303003	-	LASER FLAT WASHER	
13	1	EC010009		CYLINDER 25-40/100 M W/BALL JOINT ø25	
14	1	A4S000021	*	LATERAL PICK-UP GUIDE	
15	2	EJAG20x205	-	AXLE ANTITURN Ø20x205	
16	2	PL0104187		SPRING 24x3x80	
17	2	PL0109188		SPRING 16x2x90	
18	2	A3S000285	-	RETENTION TRIGGER	
19	4	EMCP20215		PERMAGLIDE BUSH 20 21,5 WITH VALONA	
20	1	A4S000163	*	LATERAL PICK-UP GUIDE	
21	1	A3P000752		PERMAGLIDE BUSH	-
22	1	KR254011		KIT SEAL CYLINDER 25-40 CIC	-

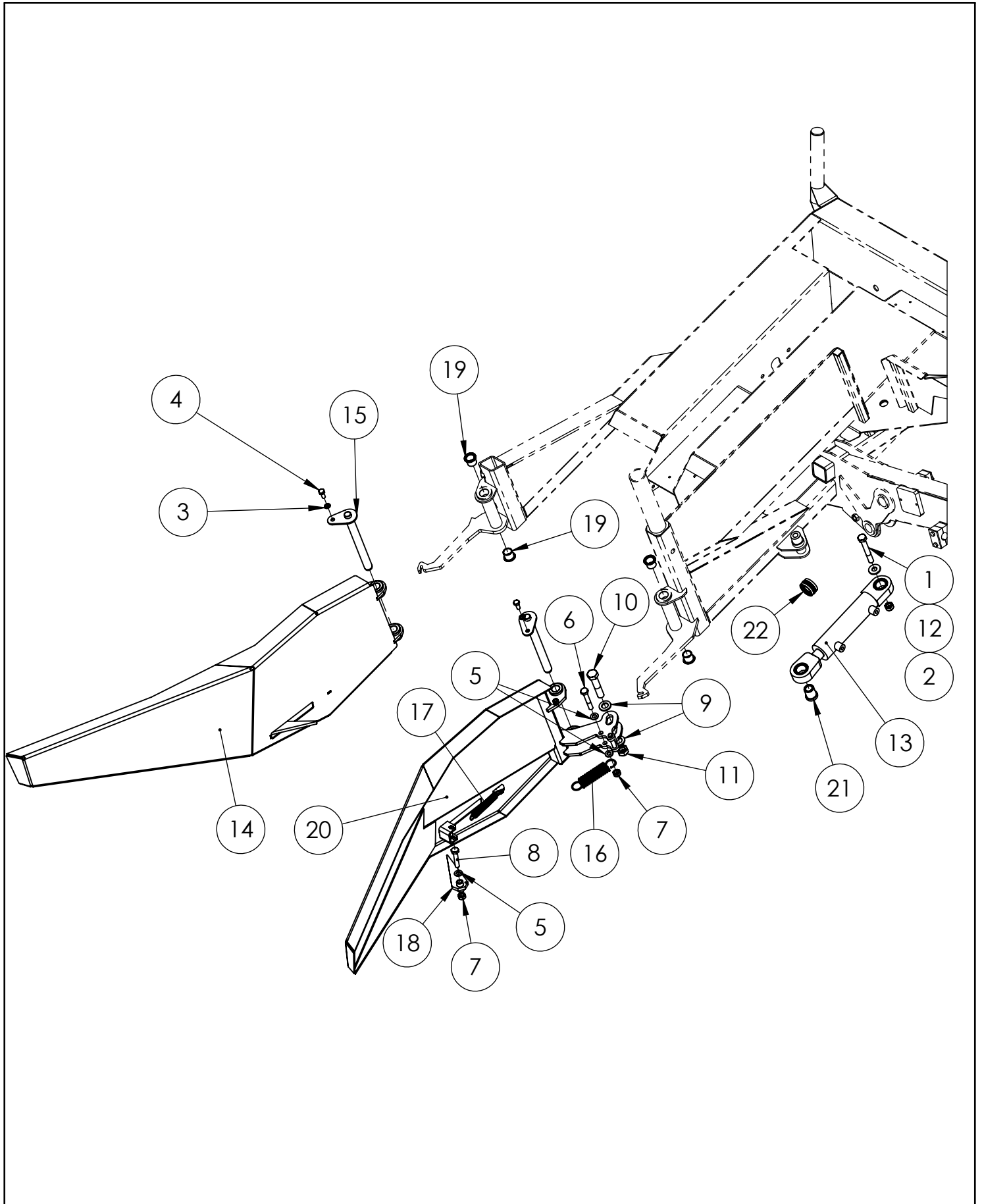


PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
14	ENTRANCE PICK UP GUIDE ASSEMBLY	HR00306	B



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00307</b>	<b>C</b>	<b>CONVEYOR ASSEMBLY</b>	<b>15</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	2	TR1245		BOLT M 12x045 933 8.8 ZN	
2	2	TR5530		NYLON INSERT LOCK NUT M 12 985 8.8 ZN	
3	1	TR5920		GROWER WASHER M 08 127 ZN	
4	1	TR5030		NUT M 08 934 8.8 ZN	
5	2	TR1211		BOLT M 10x035 933 8.8 ZN	
6	2	TR5520		NUT M 10 985 8.8 ZN	
7	4	TR5830		FLAT WASHER M 12 125 ZN	
8	8	TR5820		FLAT WASHER M 10 125 ZN	
9	3	TR1546		BOLT M 16x170 931 8.8 ZN	
10	3	TR5541		NUT M 16 985 8.8 ZN	
11	5	TR2991		BOLT M 06x015 7991 8.8 ZN	
12	4	TR2046		BOLT M 06x035 912 8.8 ZN	
13	8	TR5040		NUT M 10 934 8.8 ZN	
14	4	TR5930		GROWER WASHER M 10 127 ZN	
15	2	A22202000A		DEFLECTING ROLLER 47-72-34	
16	1	A3P000230	*	SHAFT	
17	4	EM00078		BEARING 6005 2RS	
18	4	EM00195		ELASTIC RING I-047 DIN 472	
19	5	EM00172		ELASTIC RING E-025 DIN 471	
20	1	PL0104041		WHEEL	-
21	1	A3P000031	*	AXLE SHAFT TENSING	
22	1	EM00075		BEARING 6206 2RS	
23	2	EM00212		ELASTIC RING I-062 DIN 472	
24	2	EM00175		ELASTIC RING E-030 DIN 471	
25	1	A3P000054	*	REDRIVE CHAIN AXLE	
26	1	A3S000017		MOTOR COUPLING AXLE	
27	1	PL0104042		WHEEL	
28	1	EM00011		OVAL FLANGED BEARING SUPPORT ø25	
29	1	TR06295		PIN 08x7x22	
30	1	EH20200001		MOTOR H. ORBITAL 80cc. WR-80 REINFORCED	
31	0.16	A4P000393		BAR TREATED M 08 ZN	-
32	1	A5P000122		PLATE	-
33	4	XX2207000		TENSOR	
34	1	A4P000031	*	LOWER CHAIN GUIDE	
35	1	A4P000032	*	LATERAL CHAIN GUIDE	-
36	1	A4M000016		CHAIN 75 STEPS	
37	1	EHMTROK320		SEALS KIT ORBITAL MOTOR 320	-
38	1	EHBQ028		BLOCK D14	-
39	1	AM00019		CHAIN LINK 41.4 DELTA TONE MOD.00 08	OPCIONAL
40	1	A3P000032		SPECIAL CHAIN	
41	1	A3P000021		4 POINT STAR	
42	1	A3P000020		BUSH	-
43	2	TR5810		WASHER M08 8.8 ZN	
44	1	TR5510		WASHER M 08 125 ZN	
45	1	TR2063		BOLT M 08x020 912 8.8 ZN	



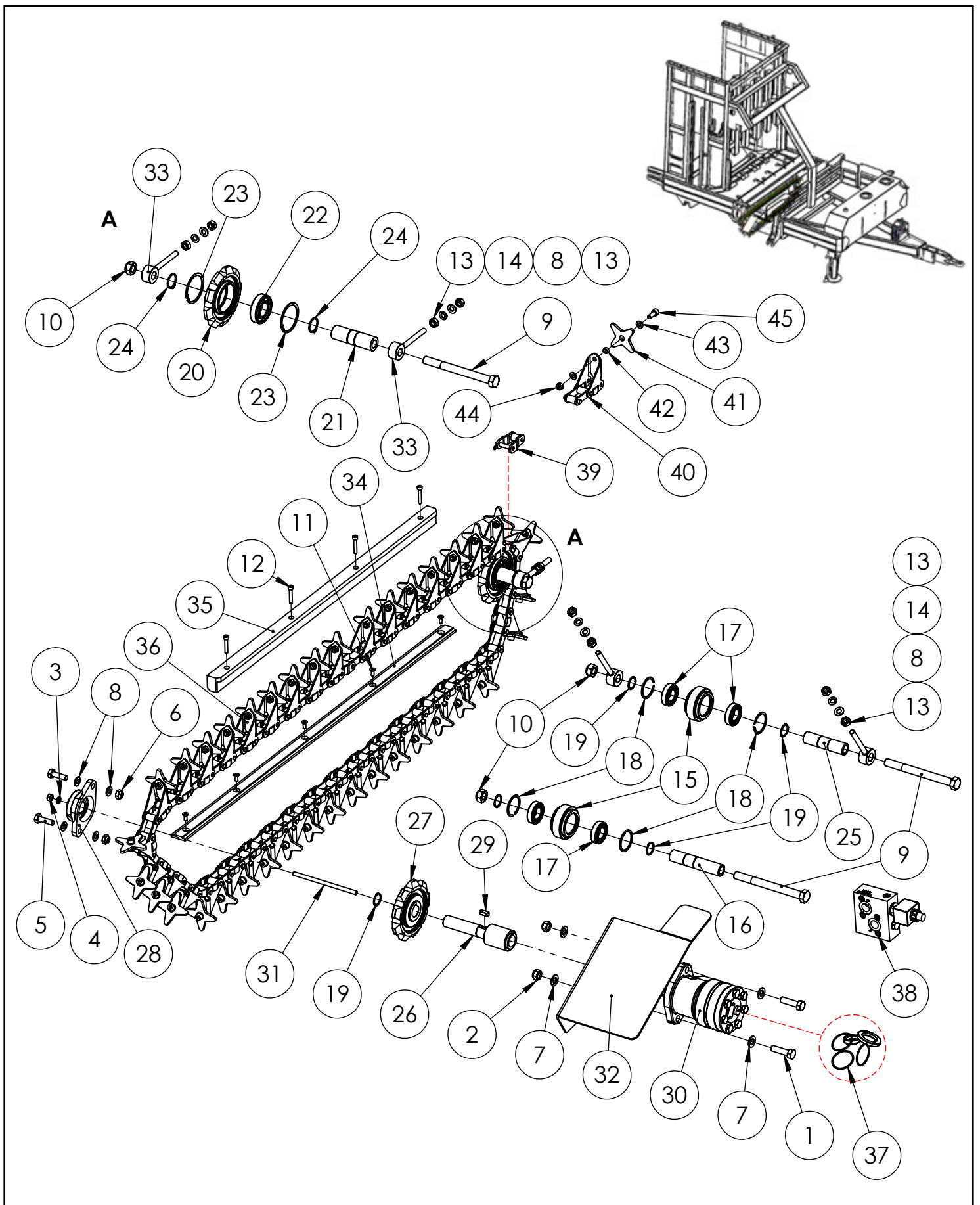
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16	CONVEYOR ASSEMBLY	HR00307	C



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00257</b>	<b>A</b>	<b>PUSHER ASSEMBLY</b>	17

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	EC027005		CYLINDER 25-40/270	
2	1	KR254003	-	SEALS CYLDR.25-40/150 GIRO-COL./ AG	-
3	2	EM00245		PERMAGLIDE BUSH 20 20 P10	
4	1	AM00126		SILENT BLOCK STANDING 70x60 M-12 CONICAL	
5	2	TR2991		BOLT M 06x015 7991 8.8 ZN	
6	2	TR1010	-	BOLT M 06x016 933 8.8 ZN	
7	1	TR5940	-	GROWER WASHER M 12 127 ZN	
8	8	TR5811		WASHER M 08 9021 ZN	
9	8	TR5920	-	GROWER WASHER M 08 127 ZN	
10	8	TR5030		NUT M 08 934 8.8 ZN	
11	4	TR1090	-	BOLT M 08x030 933 8.8 ZN	
12	1	TR5050		NUT M 12 934 8.8 ZN	
13	1	A3S000034	-	AXLE BOTTOM OF THE RAM	
14	2	A3S000033	-	AXLE JOINT	
15	1	A3S000303	*	FRAME	
16	2	A3S000159	-	UPPER GUIDE ENTRANCE CHAMBER	
17	1	A3S000760		GUIDE	
18	1	A3P000783		DETECTION FLAG	
19	2	EM00256		BUSH 20 15 P10	



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<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00340</b>	<b>C</b>	<b>D11 + D12 PHOTOCELL</b>	<b>19</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	AE20220004		CABLE W/CONNECTOR M12 M90°-H L=3000MM	
2	2	AEFTC08		PHOTOCELL E3Z-D82-M1J03	
3	1	A5P000124	*	PHOTOCELL SUPPORT	-
4	1	XXP000001		SUPPORT PHOTOCELL E3Z-D82	-
5	1	A5P000128	*	PHOTOCELL SUPPORT PLATE	-
6	1	AE20210024		CABLE W/CONNECTOR M12 M90°-H L=5000MM	
7	6	TR5800		WASHER M 06 125 ZN	
8	4	TR5500		NYLON INSERT LOCK NUT M 06 985 8.8 ZN	
9	2	TR1020		BOLT DIN 933 M06x20 8.8 ZN	
10	2	TR5810		WASHER M08 8.8 ZN	
11	2	TR5920		GROWER WASHER M 08 127 ZN	
12	2	TR1072		BOLT M 08x015 933 8.8 ZN	
13	2	TR3000		BOLT M 06x20 7991 8.8 ZN	
14	2	TR1024		BOLT M 03x020 933 8.8 ZN	

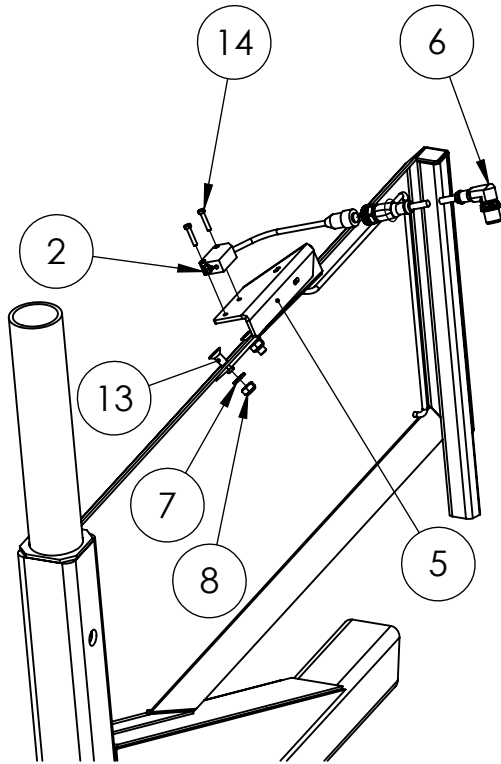


PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
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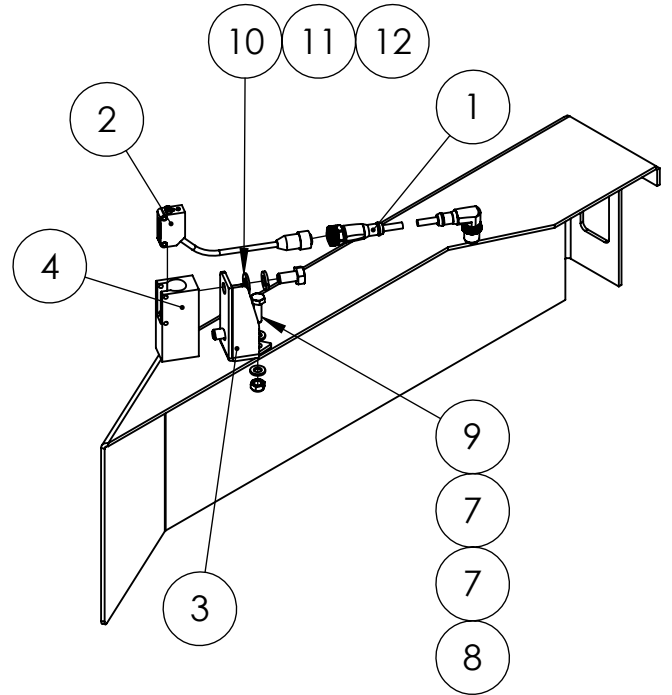
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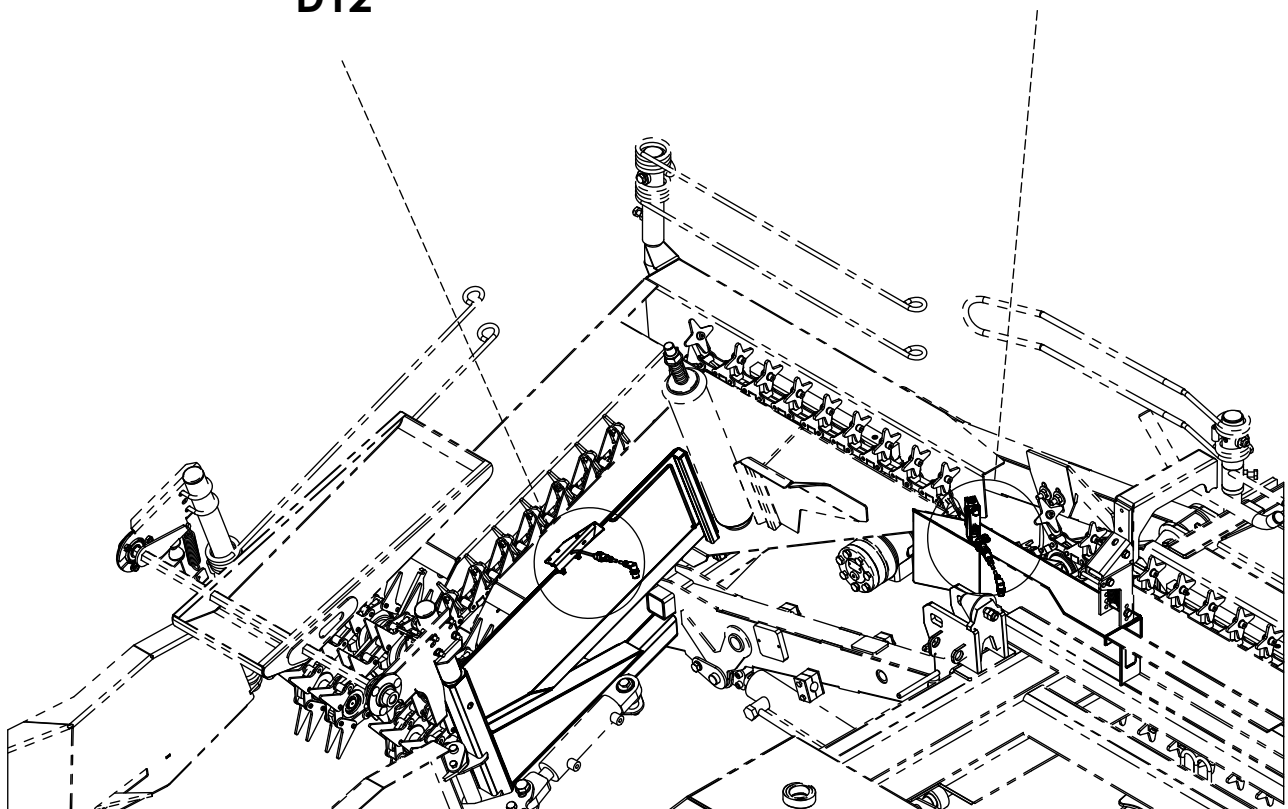
PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
20	PHOTOCELL D11 + D12	HR00340	C



**D12**



**D11**





<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00271</b>	<b>C</b>	<b>LIFTING ASSEMBLY</b>	<b>21</b>

POSICIÓN POSITION POSITION	CANTIDAD QUANTITY QUANTITÉ	CODIGO ARTICULO PART CODE	*	DENOMINACION NAMING DÉNOMINATION	NOTAS NOTES NOTES
1	48	TR5830		FLAT WASHER M 12 125 ZN	
2	25	TR5530		NYLON INSERT LOCK NUT M 12 985 8.8 ZN	
3	24	TR1312		BOLT M 12x040 933 8.8 ZN	
4	32	TR3020		ALLEN VOLT M.10x20 7991 8.8 ZN	
5	4	TR5820		FLAT WASHER M 10 125 ZN	
6	4	TR1180		BOLT DIN-933 M10x20 8.8 ZN	
7	4	TR5520		NUT M 10 985 8.8 ZN	
8	16	TR1428		BOLT M 14x035 933 8.8 ZN	
9	2	TR5940		GROWER WASHER M 12 127 ZN	
10	2	TR1313		BOLT M 12x035 933 8.8 ZN	
11	22	TR5840		FLAT WASHER M 14 125 ZN	
12	22	TR5950		GROWER WASHER M 14 127 ZN	
13	6	TR2140		ALLEN HEAD BOLT M 14x025 912 8.8 ZN	
14	9	TR5510		WASHER M 08 125 ZN	
15	9	TR3010		BOLT DIN-7991 8.8 ZN M08x20	
16	3	TR1757		BOLT M 24x130 931 8.8 ZN	
17	2	TR5564		NYLON INSERT LOCK NUT M 24 985 8.8 ZN	
18	2	EC060004		CYLDR. DE.30-50/600 ELEV. AG-PT-03	
19	1	KR305001		SEALS KIT 30/50	-
20	2	A23001000A		PIN ø25x80 WITH PLATE CYLDR.ELEV.SUP.	
21	1	AR1706S62	*	LEFT ELEVATOR COLUMN	
22	8	AR1706R47		PLATE	-
23	8	A23202000A	*	PLATE WITH BEARING	
24	1	AR1706S62s	*	RIGHT ELEVATOR COLUMN	
25	1	A5P000146		D9 DETECTOR	-
26	1	A3S000320	*	FRAME BASE PRESS	
27	3	A3P000795	*	ELEVATOR PACKAGE GUIDE	-
28	1	A3P000796	*	LEFT LIFT BASE GUIDE	-

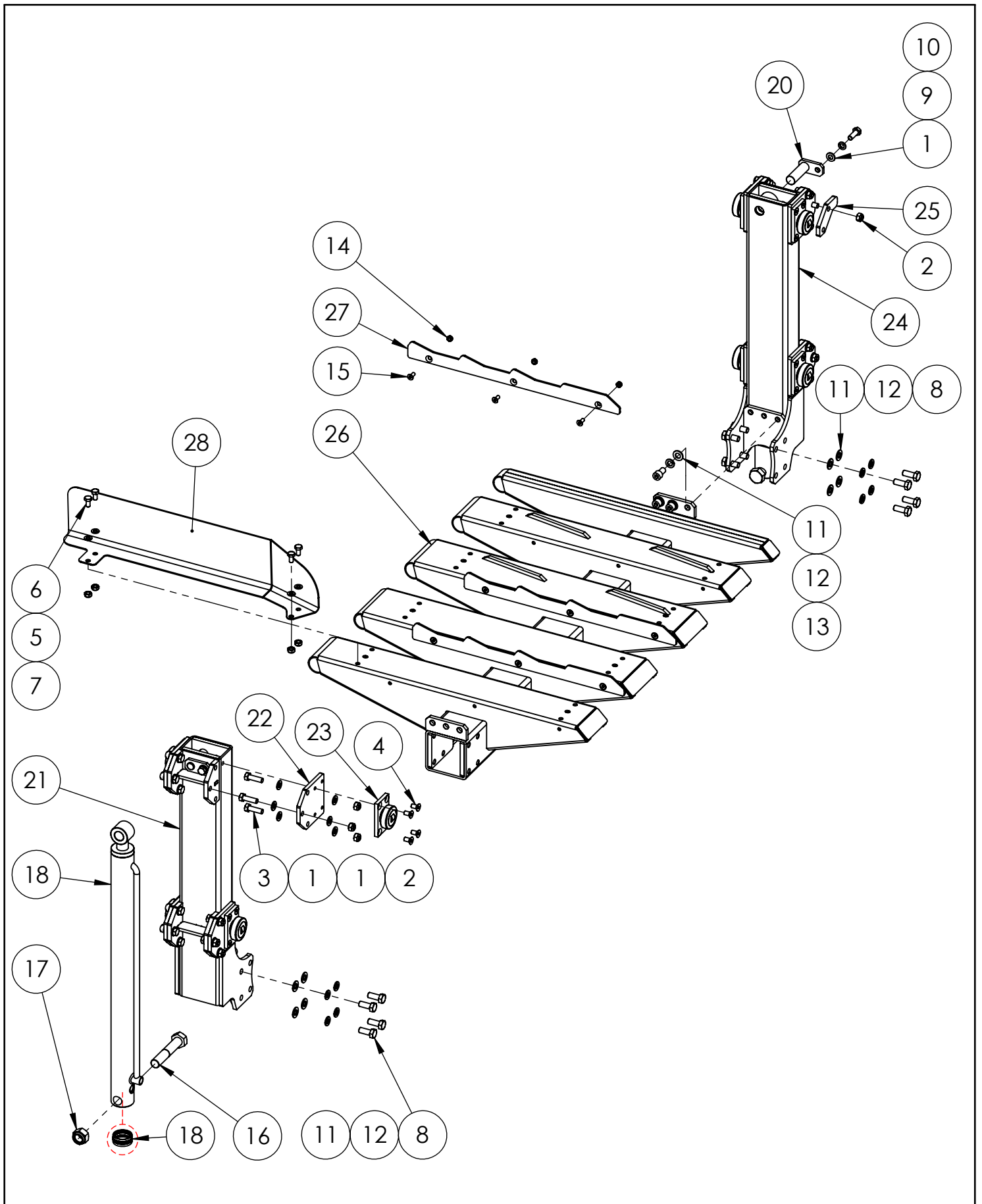


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
22	LIFTING ASSEMBLY	HR00271	C



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00251</b>	<b>C</b>	<b>KNOTTER-NEEDLE ASSEMBLY</b>	<b>23</b>

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	A3S000335	*	NEEDLE HOLDER BRIDGE	
2	4	A3M000106		CURVED NEEDLE 354x15 WITH ROLLER GUIDE	
3	1	A5P000283		THREAD GUIDE PLATE	-
4	1	A34106000		RING	
5	6	A14101000B		FLAT WASHER 10.5-45-5 ROD TYERS	
6	1	EHMTRO3150		ENGINE H. ORBITAL WR-315 REINFORCED SAE-A	-
7	1	EHMTROK320		SEALS KIT ORBITAL MOTOR 320	-
8	1	PIR0320		SPROCKET 5/8" SIMPLE Z-17 AXLE 25 CHV.8	
9	1	EMTCD10S01		TENSOR BLOCK 5/8" SIMPLE	
10	1	AM20210025		CHAIN COUPLING	
11	1	AM20210026		CHAIN CONNECTION	
12	1	A4P000365		5/8" REINFORCED CHAIN	
13	2	A14504000B		PIN ø30x170 M24 NEEDLE BRIDGE	
14	2	A14505000B		BUSH 30-40-71 SEPARATOR NEEDLE BRIDGE	
15	2	A14104000B	*	ROD ADJUSTMENT NEEDLES	
16	1	EHR00031		HELD GREASABLE PIN TA4M ø 30 WITH NIPPLE	
17	4	EMCP4020		PERMAGLIDE BUSH 40 20 P10	
18	1	TR5825		FLAT WASHER M 10 9021 ZN	
19	1	TR1080		BOLT M 08x025 933 8.8 ZN	
20	1	TR5920		GROWER WASHER M 08 127 ZN	
21	2	TR5940		GROWER WASHER M 12 127 ZN	
22	2	TR1312		BOLT M 12x040 933 8.8 ZN	
23	2	TR5050		NUT M 12 934 8.8 ZN	
24	2	TR5564		NYLON INSERT LOCK NUT M 24 985 8.8 ZN	
25	2	TR5881		FLAT WASHER M 24 125 ZN	
26	2	TR06386		STRAIGHT NIPPLE 10x100 3AF	
27	6	TR5930		GROWER WASHER M 10 127 ZN	
28	4	TR1200		BOLT M 10x030 933 8.8 ZN	
29	2	TR5820		FLAT WASHER M 10 125 ZN	
30	2	TR1220		BOLT M 10x040 933 8.8 ZN	

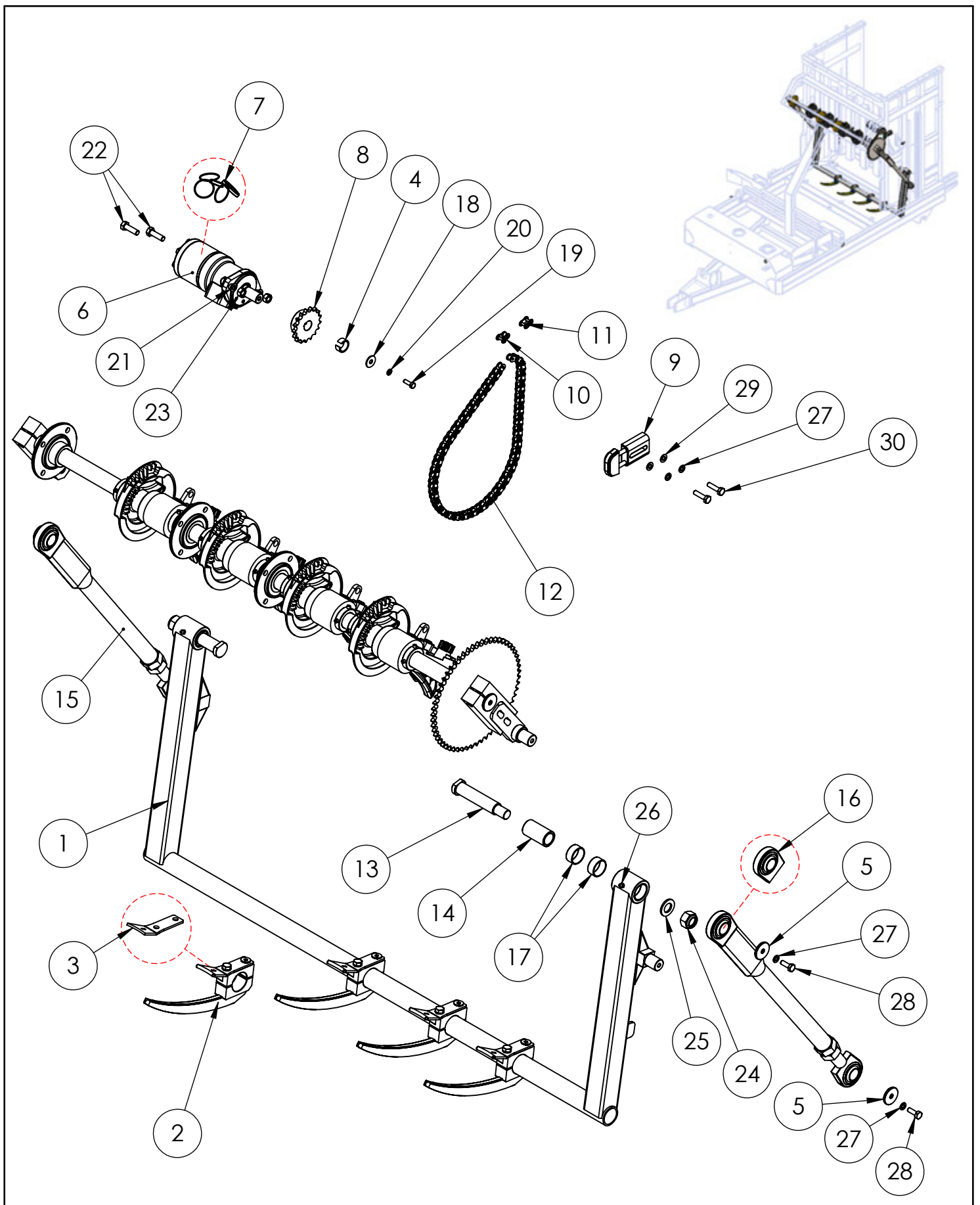


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
24	<b>KNOTTER-NEEDLE ASSEMBLY</b>	<b>HR00251</b>	<b>C</b>



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00258</b>	<b>A</b>	<b>TIE AXLE ASSEMBLY</b>	<b>25</b>

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	2	A14101000B		FLAT WASHER 10.5-45-5 ROD TYERS	
2	2	A14103000C	*	REGULABLE LEVER	
3	1	A3P000807	*	TIE AXLE	
4	1	A14105000C	*	DISC CHAIN WITH ADJUSTABLE LEVER CUBE	
5	1	A34105002		CUBE LEVER	
6	4	EMRDSR208C		ROUND BEARING SUPPORT ø40	
7	16	TR5940	-	GROWER WASHER M 12 127 ZN	
8	12	TR5050		NUT M 12 934 8.8 ZN	
9	4	TR5520	-	NUT M 10 985 8.8 ZN	
10	7	TR1200	-	BOLT M 10x030 933 8.8 ZN	
11	4	TR06313		COTTER 12x8x152	
12	1	TR06309		COTTER 12x8x45	
13	2	TR1467	-	BOLT M 14x095 931 8.8 ZN	
14	12	TR1310	-	BOLT M 12x030 933 8.8 ZN	
15	4	TR5840	-	FLAT WASHER M 14 125 ZN	
16	2	TR5540		SELFLOCKING NUT M14 8.8 985 ZN	
17	3	TR5930	-	GROWER WASHER M 10 127 ZN	
18	4	TR5830	-	FLAT WASHER M 12 125 ZN	
19	4	TR1312	-	BOLT M 12x040 933 8.8 ZN	
20	8	A14102000B		RING 40.5-60-15 KNOTTERS FIXATION	
21	4	EMAT610140	-	KNOTTER RS 6101 TMK 3.3 (201.6100.10)	-
22	16	TR06525		ALLEN HEAD SET SCREW M 08x16 DIN 914	



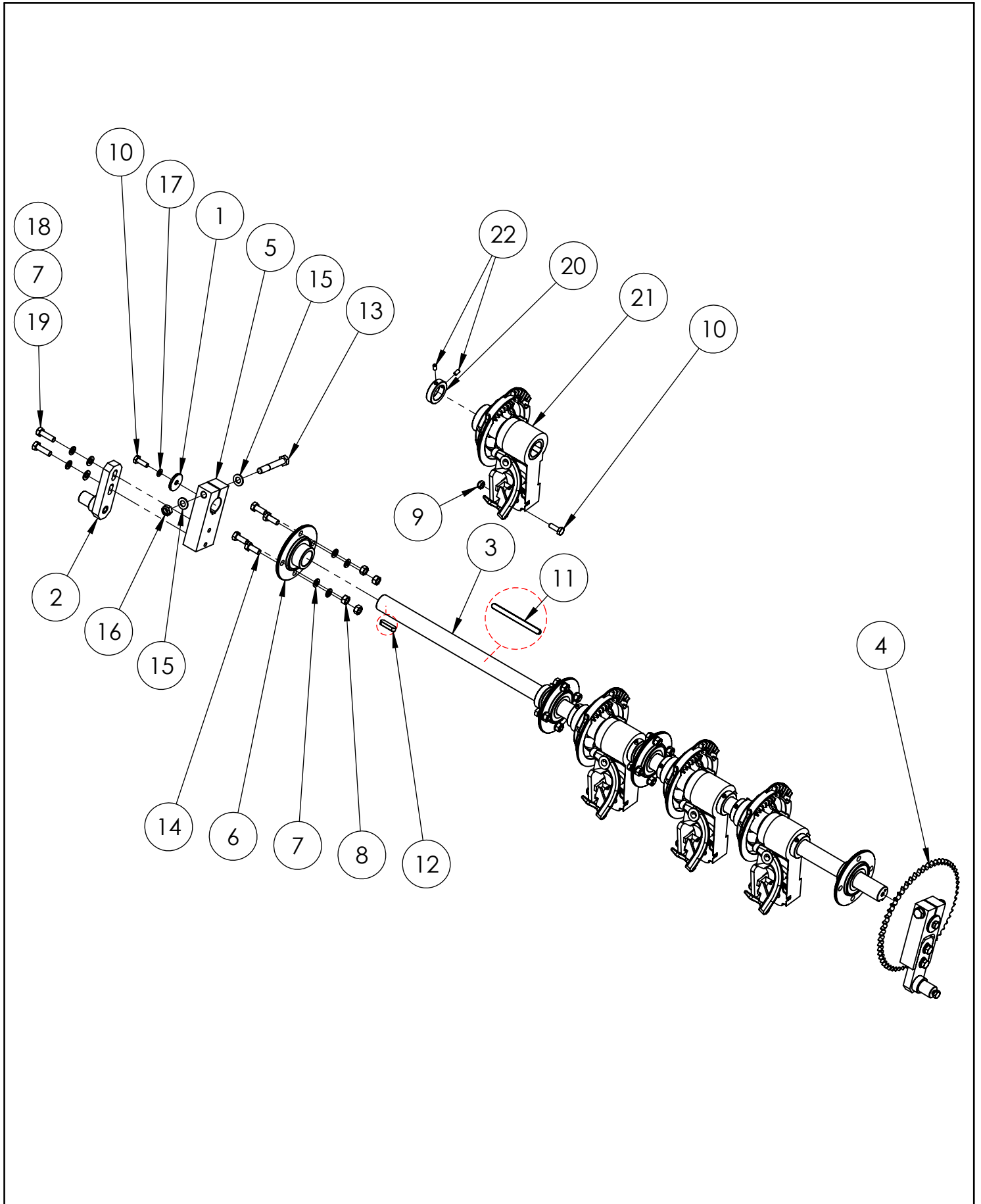
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
26	TIE AXLE ASSEMBLY	HR00258	A



DIBUJO / PICTURE	REV.	DESCRIPCIÓN / DESCRIPTION	PAG.
<b>HR00354</b>	<b>A</b>	<b>KNOTTER</b>	<b>27</b>

POSICIÓN POSITION	CANTIDAD QUANTITY QUANTITÉ	CÓDIGO ARTÍCULO PART CODE	*	DENOMINACIÓN DESCRIPTION DÉNOMINATION	NOTAS NOTES
1	1	EMAT61014041		CAM GEAR	
2	1	EMAT61014001		KNOTTER FRAME	
3	1	EM20220017		BUSHING FOR BILL HOOK	
4	1	EM20220016		BUSHING FOR TWINE DISC	
5	1	TR20220018		PLUD IN GROOVED PIN 9X26	
6	1	EM20220018		BUSHING FOR KNIFE ARM	
7	1	EMAT61014018		PINION	
8	1	EMAT61014020		WORM SHAFT ASSY.	
9	2	EMAT61014010		SPIRAL COCKING PIN 5X22 ISO 8748	
10	1	EMAT61014033		PINION	
11	1	TR20220019		SPIRAL COCKING PIN ISO 8748 - 5X30-ST	
12	1	EMAT61014016		WORM PINION	
13	1	EMAT61014024		CLEANER	
14	2	EMAT61014012		SPRING	
15	1	EMAT61014026		LEVER	
16	1	EMAT61014002		KNIFE ARM ASSY. (18,19,20,21,22 INCLUDED)	
17	1	EMAT61014003		TWINE KNIFE	
18	1	TR1999		HEXAGON HEAD SCREW DIN 933 - M4X10	
19	1	EMAT61014005		ROLLER - KNIFE ARM	
20	2	EMAT61014006		SPACER	
21	1	EM00169		CIRCLIP	
22	1	EMAT61014009		SUPPORT DISC 20X26X0,2	
23	1	EMAT61014008		SUPPORT DISC 20X26X0,5	
24	1	EM20220020		CIRCLIPS FOR SHAFTS 19X1,2	
25	1	EMAT61014011		RS 6006/6101 (ATSK)	
26	1	TR20220020		LOCKING SCREW	
27	1	TR5810		SHIM DIN 125	
28	1	TR5510		SECURING NUT DIN 985 - M8	
29	1	EMAT61014028		BOLT	
30	1	EMAT6104027		SPRING	
31	1	TR5810		SPACER	
32	1	EMAT61014015		TWINE DISC CPL.	
33	1	EMAT61014025		TWINE HOLDER	
34	1	EMAT61014032		BILL HOOK ASSY	
35	1	EMAT61014042		SPACER 58X72X3,5	
36	1	EMAT61014043		SPACER 58X72X0,5	
37	1	EMAT61014044		SPACER 58X72X0,2	
38	1	EM00170		CIRCLIP RS 6106	
39	2	TR1190		HEXAGON HEAD SCREW DIN 933 - M10 X 25	
40	2	TR5930		SPRING LOCK WASHER B10 DIN 127	
41	2	EMAT61014007		SHIM 15X21X0,5 DIN 988	
42	2	EMAT61014004		SHIM 15X21X0,2 DIN 988	
43	2	EMAT61014006		SHIM 15X21X1 DIN 988	
44	4	AM20220019		PIPE CONNECTION, ANGLE M8X1	
45	1	AM20220018		PIPE CONNECTION, STRAIGHT M8X1	
46	1	EMAT61014013		SAFETY PLATE 46 4STAHL A2E	
47	1	EMAT61014031		BILL HOOK ALONE	
48	1	EMAT61014030		SPIRAL COCKING PIN 5X18 ISO 8748	
49	1	EMAT6101402A		KNIFE ARM	

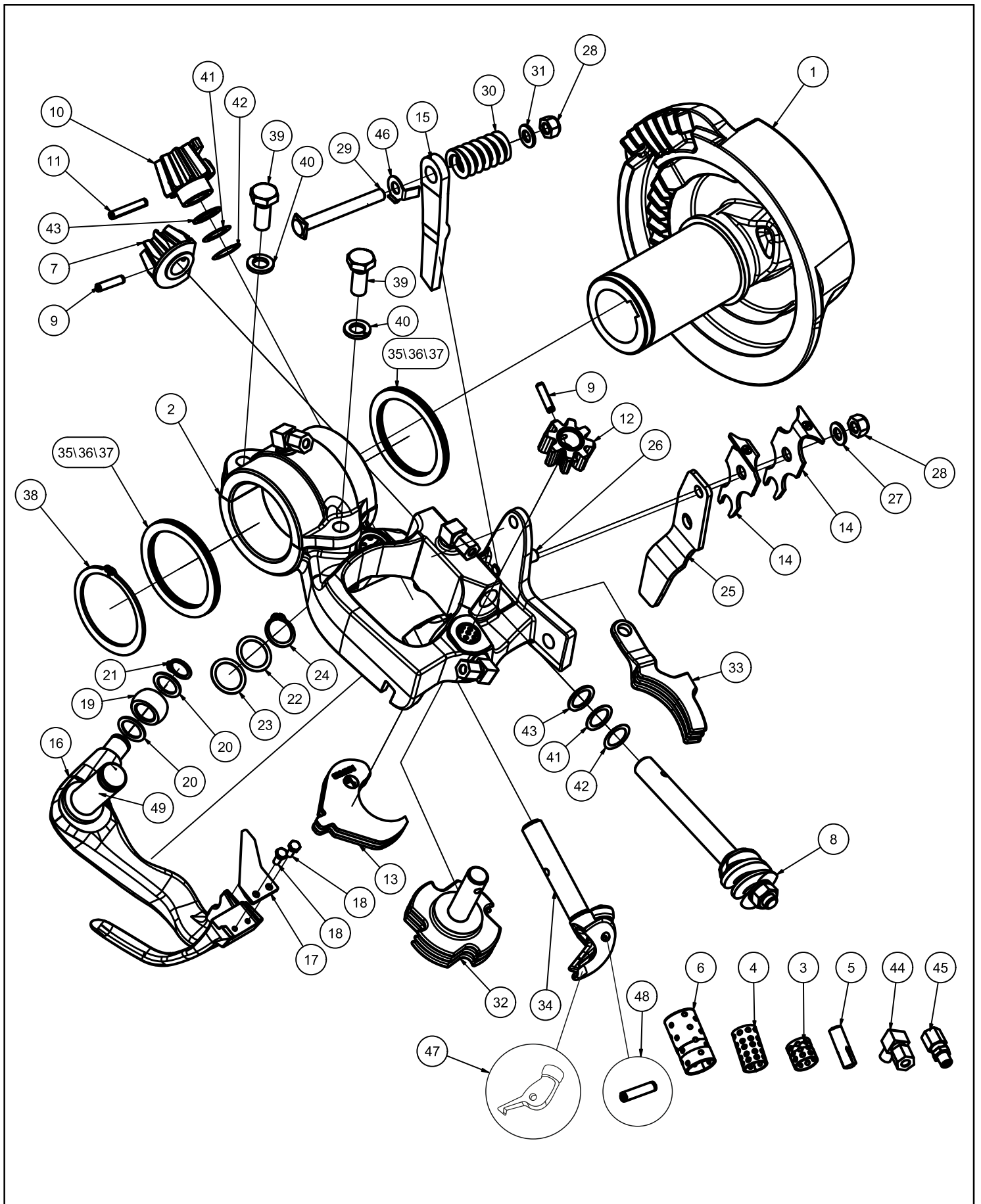


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
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
28	<b>KNOTTER</b>	<b>HR00354</b>	<b>A</b>

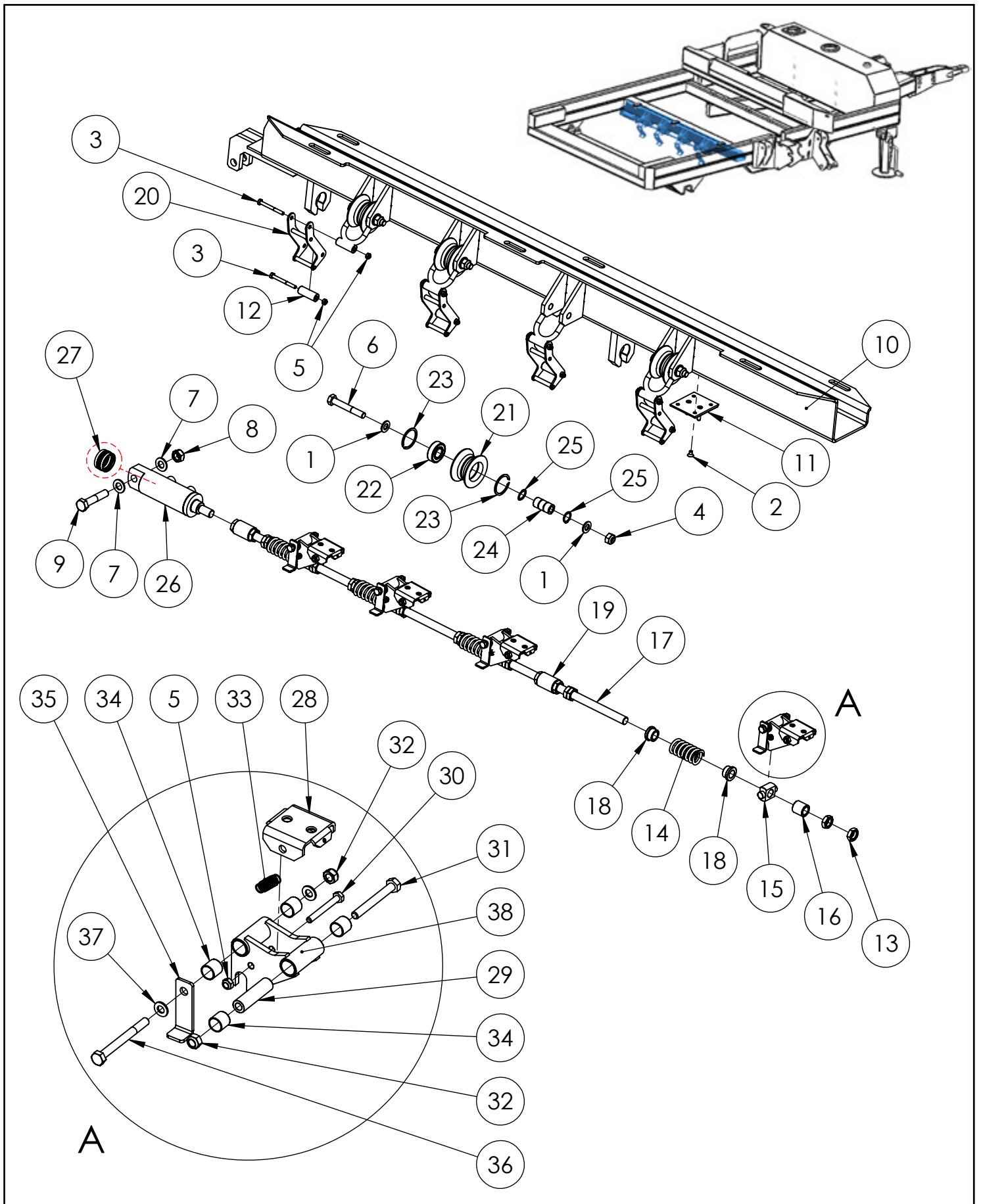


<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00259</b>	<b>A</b>	<b>RECOVERY TENSIONER ASSEMBLY</b>	<b>29</b>

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	8	TR5830	-	FLAT WASHER M 12 125 ZN	
2	12	TR2990		ALLEN HEAD SOCKET BUTTON SCREW M 06x01	
3	8	TR1056	-	BOLT M 06x060 931 8.8 ZN	
4	4	TR5530	-	NYLON INSERT LOCK NUT M 12 985 8.8 ZN	
5	12	TR5500		NYLON INSERT LOCK NUT M 06 985 8.8 ZN	
6	4	TR1353	-	BOLT M 12x080 931 8.8 ZN	
7	2	TR5840	-	FLAT WASHER M 14 125 ZN	
8	1	TR5540		SELFLOCKING NUT M14 8.8 985 ZN	
9	1	TR1442	-	BOLT M 14x070 931 8.8 ZN	
10	1	A3S000294	*	SUPPORT	
11	8	A14301100C		GUIDE SUPPORT ANTIWEARING WITH ROUNDS	
12	4	A14610003C	*	BUSH 6.5-16-44 ROCKER ROLLER	
13	20	TR1P169360		NYLON INSERT LOCK NUT M 12 985 8.8 ZN	
14	4	MUCM006501		COMP. SPRING 5x35x65 THREAD TENSION	
15	4	A14307000C	*	ROCKER ALXE TENSIONER BA	
16	4	A14323000C		BUSH 16,5-25-25 TOP TENSIONER	
17	1	TR06412		THREADED ROD M 12 ZN	
18	8	A14311000C		BUSH 16.5-24/29-15 SPRING ZN	
19	2	A14312000C		BUSH 16-30-40	
20	4	A14610000C	*	RECUPERATOR ROCKER	
21	4	A3P000001		THREAD ROLLER GUIDE	
22	4	EM00072		BEARING 6004 2RS	-
23	8	EM00190		ELASTIC RING I-042 DIN 472	
24	4	A3P000002	-	DISTANCING AXLE	
25	8	EM00171		ELASTIC RING E-020 DIN 471	
26	1	EC002003		CYLINDER 40-25-20	
27	1	KR254009		SEALS CYLDR.25-40	
28	4	A14305001C		PRESSURE PLATE	
29	7	A14308000C	*	BUSH 08-14-50 TENSIONER DISTANCIATOR	
30	4	TR1053	-	BOLT M 06x050 933 8.8 ZN	
31	4	TR1115	-	BOLT M 08x065 933 8.8 ZN	
32	8	TR5510		WASHER M 08 125 ZN	
33	4	MUTR002001		TRACTION SPRING 12x1x20 TENSING THREAD BA	
34	16	EMCP1415		BUSH PERMAGLIDE 14 15 P10	
35	4	A3P000462		PLATE	-
36	4	TR1160	-	BOLT DIN 931 M8x80 8.8 ZN	
37	8	TR5810	-	BOLT M 08x020 933 8.8 ZN	
38	4	A14306000C	*	TENSIONER LEVER	


**PLAZO DE ENTREGA SEGUN DISPONIBILIDAD** | **DELIVERY TIME ACCORDING TO AVAILABILITY** | **DATE DE LIVRAISON SELON STOCK**  
 Los precios están sujetos a cambios sin previo aviso | Les tarifs sont sujets à changement sans préavis

PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
30	RECOVERY TENSIONER ASSEMBLY	HR00259	A





<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00260</b>	<b>C</b>	<b>SPOOL CABINET ASSEMBLY</b>	<b>31</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	A3S000324	*	COIL BOX	
2	1	A3S000325		COVER	
3	1	AMGMPFNG01		BLACK RUBBER PROFILE ROLL 50 MTS	1300 mm.
4	2	AMGMPFNG01		BLACK RUBBER PROFILE ROLL 50 MTS	700 mm.
5	1	TR1218402		SS BOX LOCK REF.:1203003	
6	4	RTP13025BS		HINGE REF776711 DOOR SPOOL / PLATE	
7	2	T14201000A		GAS RESORT 550-250-8/18 M6	
8	1	A3S000322		TOOLS BOX	
9	3	TR1021	-	BOLT M 06x025 933 8.8 ZN	
10	16	TR20200011		VOLT ALLEN M6x20 INOX DIN 7380	
11	27	TR5500		NYLON INSERT LOCK NUT M 06 985 8.8 ZN	
12	3	TR1010	-	BOLT M 06x016 933 8.8 ZN	
13	4	TR2951		VOLT ALLEN M 05x10 INOX DIN 7380	
14	4	TR5496		SELFLOCKING NUT M 05 985 8.8 ZN	
15	8	TR5810	-	BOLT M 08x020 933 8.8 ZN	
16	4	TR5510		WASHER M 08 125 ZN	
17	4	TR5030		NUT M 08 934 8.8 ZN	
18	2	TR1090	-	BOLT M 08x030 933 8.8 ZN	
19	8	TR5801	-	FLAT WASHER M 06 9021 ZN	
20	1	A3S000323	-	COMPARTMENT COVER	
21	1	AM20190004		KNOB CLOSURE	-
22	1	A3P000801		SHEET	-
23	3	AR1706T01		SEPARATOR	-
24	8	MUCM003002		SPRING COMP. 15x1x30	
25	4	A24403004B		TUBE 120°	

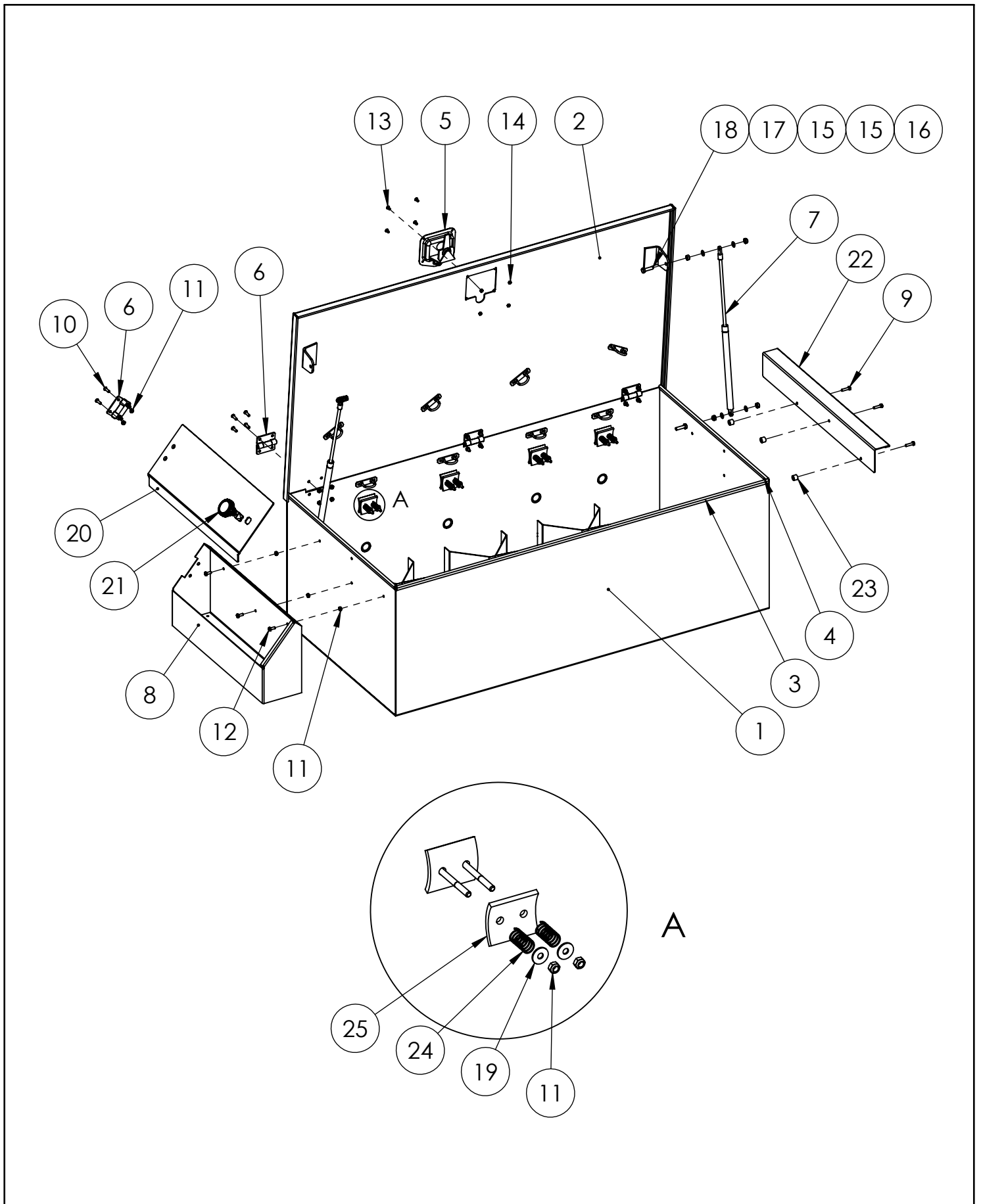


PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
Los precios están sujetos a revisión sin previa notificación

DELIVERY TIME ACCORDING TO AVAILABILITY  
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DATE DE LIVRAISON SELON STOCK  
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
32	SPOOL CABINET ASSEMBLY	HR00260	C



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00262</b>	<b>B</b>	<b>UPPER FRAME ASSEMBLY</b>	<b>33</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	2	TR5820	-	FLAT WASHER M 10 125 ZN	
2	2	TR1180	-	BOLT DIN-933 M10x20 8.8 ZN	
3	1	A4S000158	*	SUPERIOR CHASSIS	
4	1	A37300000	*	SENSOR D6	
5	1	A3S000319	*	UPPER CHASSIS	
6	4	EM00248		PERMAGLIDE BUSH 30 20 P10	
7	2	A15302000D		SPACER A1-BA 03	
8	2	TR5541		NUT M 16 985 8.8 ZN	
9	4	TR5825	-	FLAT WASHER M 10 9021 ZN	
10	4	TR1190	-	BOLT M 10x025 933 8.8 ZN	
11	2	TR1560	-	BOLT M 16x100 931 8.8 ZN	
12	2	EC035501		CYLDR.DE.25-40/355 UPPER DOOR WITH BRAKE	
13	1	KR254011	-	SEALS KIT CYLDR.25-40 CIC	-
14	2	AM0011001		SILEMBLOCK ANTIVIBRATION FOOT 60x28 M-10 50/120	

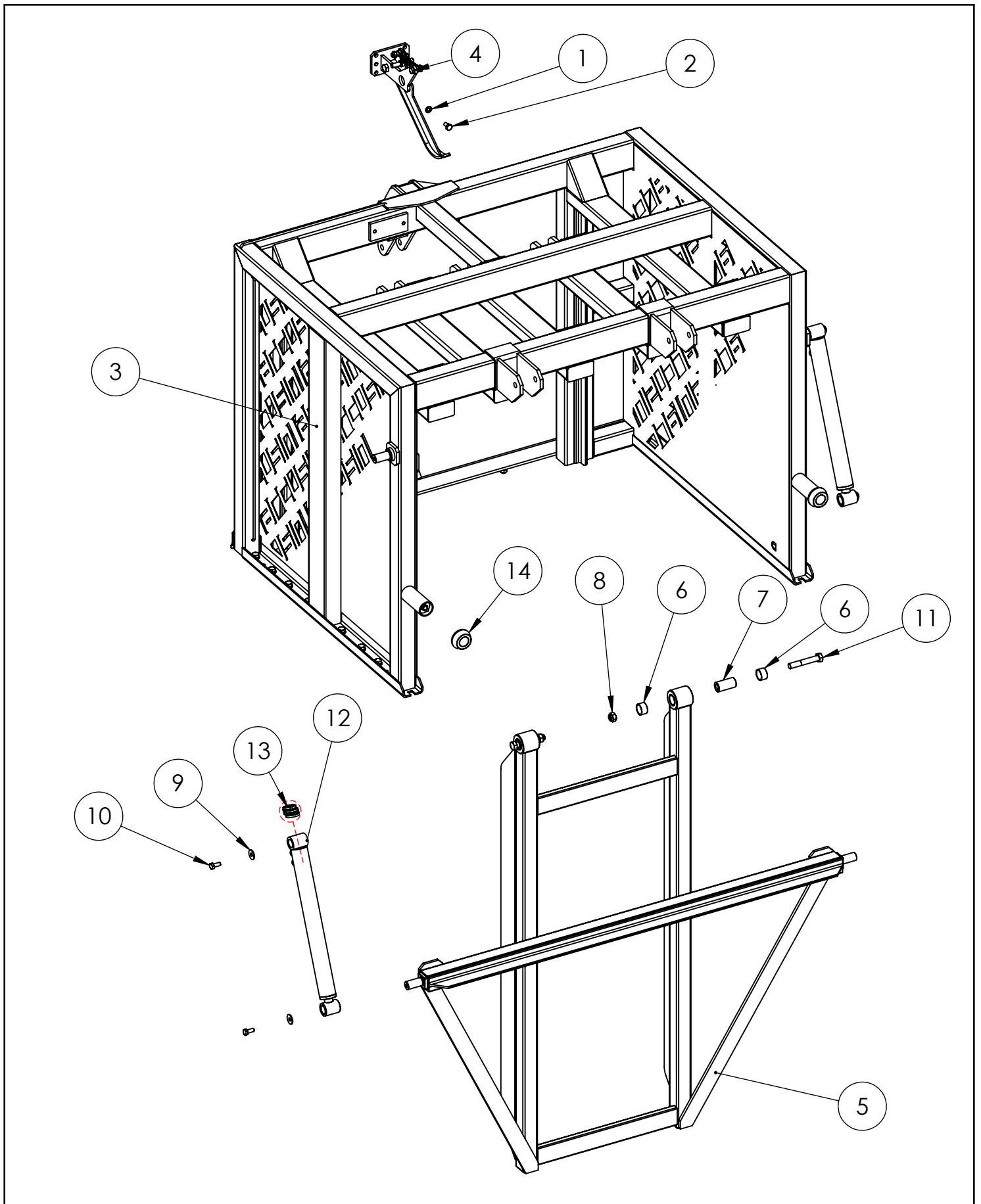


PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
34	UPPER FRAME ASSEMBLY	HR00262	B



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00348</b>	<b>B</b>	<b>D6 DETECTION MECHANISM</b>	<b>35</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES</b>
1	1	A4S000056	*	SUPPORT D6 C14	
2	1	A3S000126	*	CAM MECHANISM D6	
3	1	A14605000B	*	BUSH 14-22-50 MEC.DETECTOR D6	
4	1	MU20220004		SPRING 18x2x100	
5	1	AE00285		INDUCTIVE DETECTOR ø30 15 mm PNP WITH CONNECTION	
6	1	TR5540		SELFLOCKING NUT M14 8.8 985 ZN	
7	1	TR1465	-	BOLT M 14x090 931 8.8 ZN	
8	4	TR5040		NUT M 10 934 8.8 ZN	
9	2	TR1200	-	BOLT M 10x030 933 8.8 ZN	
10	1	TR1245	-	BOLT M 12x045 933 8.8 ZN	
11	1	TR5530	-	NYLON INSERT LOCK NUT M 12 985 8.8 ZN	



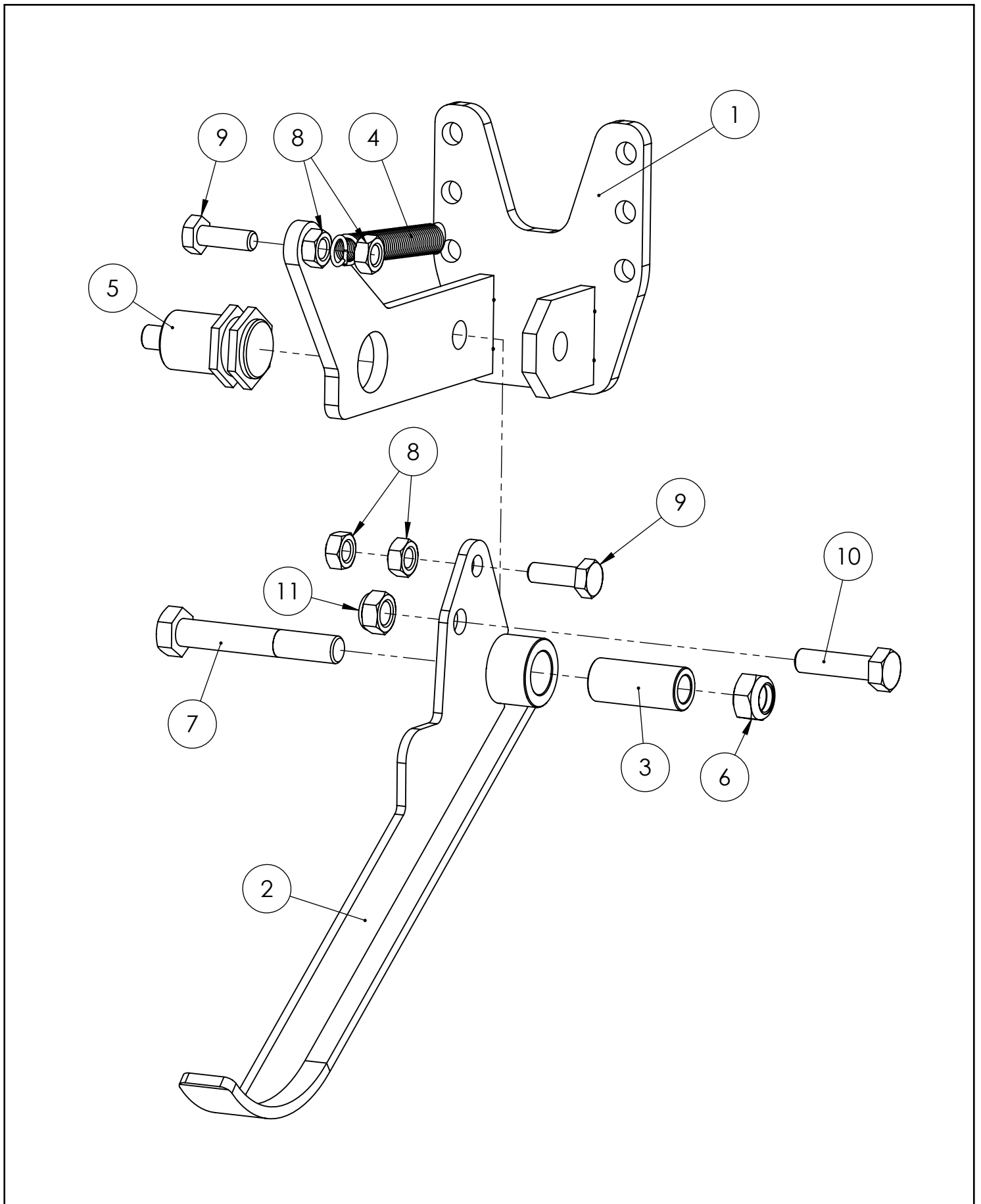
PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
36	D6 DETECTION MECHANISM	HR00348	B



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00263</b>	<b>C</b>	<b>BALE EXTRACTOR ASSEMBLY</b>	<b>37</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES</b>
1	5	TR1560		BOLT M 16x100 931 8.8 ZN	
2	5	TR5541		NUT M 16 985 8.8 ZN	
3	1	A3S000318	*	EXTRACTOR CHASSIS	
4	3	A35302000		BUSH	
5	2	A35303000		BUSH	
6	1	EC040009		CYLDR.DE.25-40/400 ALC. WITH EXTRACTOR BRAKE	
7	6	EMCP2520		PERMAGLIDE BUSH 25 20 P10	
8	1	KR254009		SEALS CYLDR.25-40	
9	1	EC01300201		HOLLOW SCREW G 3/8" WITH REGULATOR	
10	1	EH20220017	*	MULTIPACK DOOR SEQUENCE DISTRIBUTOR BLOCK	
11	1	RCJMB06		METAL BUNA JOINT 3/8"	

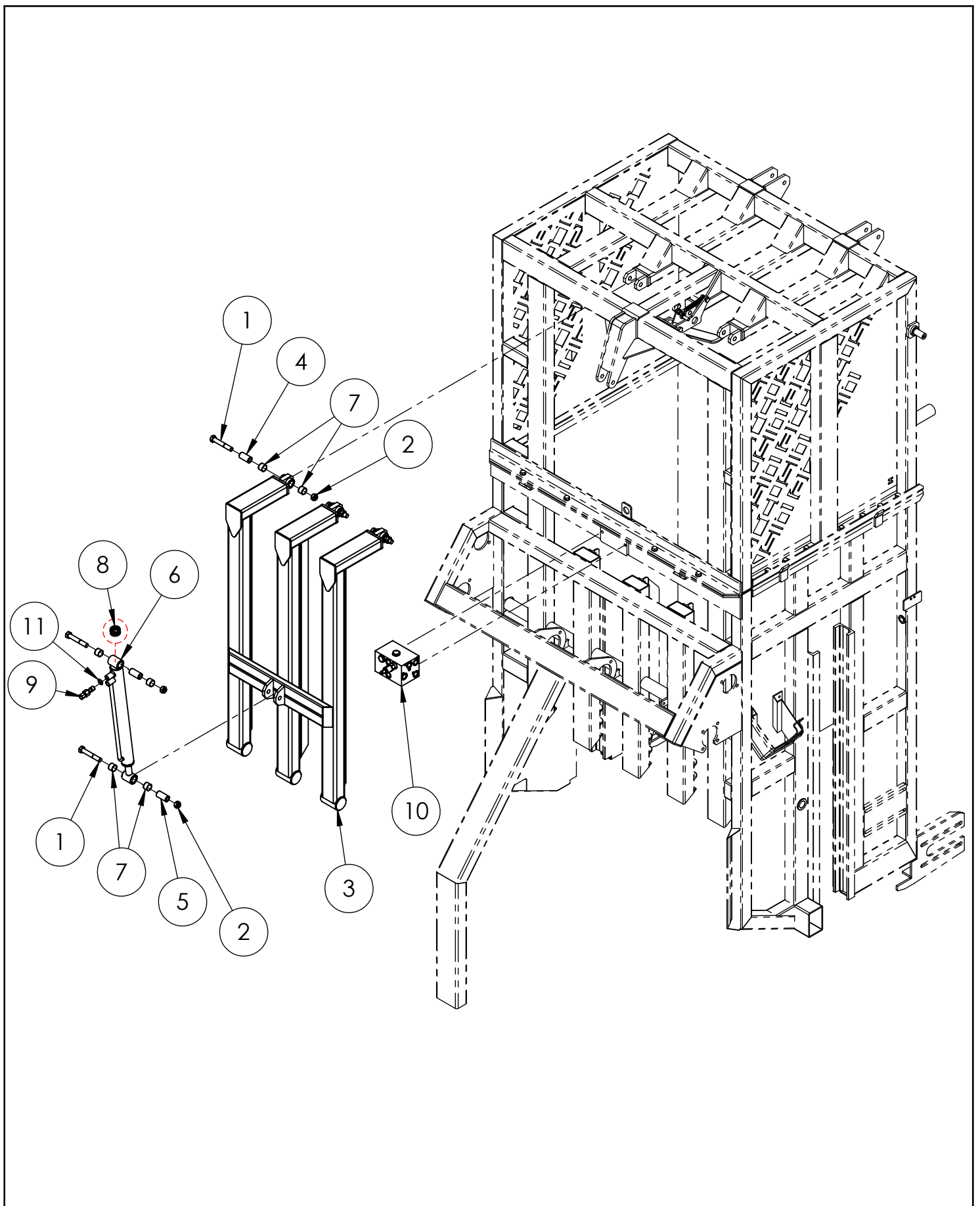


PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
38	<b>BALE EXTRACTOR ASSEMBLY</b>	<b>HR00263</b>	<b>C</b>



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00264</b>	<b>D</b>	<b>DISCHARGE DOOR</b>	<b>39</b>

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	6	TR5070		NUT M 16 934 8.8 ZN	
2	2	TR5069		NUT DIN 6330B 8.8 M16	
3	8	TR1441		BOLT M 14x060 933 8.8 ZN	
4	3	TR1190		BOLT M 10x025 933 8.8 ZN	
5	6	TR5090		NUT M 20 934 8.8 ZN	
6	8	TR1349		VOLT DIN 933 M12x55 8.8 ZN	
7	8	TR5830		FLAT WASHER M 12 125 ZN	
8	8	TR5940		GROWER WASHER M 12 127 ZN	
9	2	ROR0278		BEARING Ø40	-
10	2	EC071502		CYLINDER.DE.30-50/705	
11	1	KR305007		SEALS CYLINDER 30-50/300 CIC LATERAL	-
12	2	AM0011001		SILEMBLOCK ANTIVIBRATION FOOT 60x28 M-10 50/120	
13	1	AR1706S18s	*	SYNCHRONIZATION DOOR PLATE	
14	1	AR1706S18	*	DOOR SINCRONIZATION PLATE	
15	2	AR1706P52		FIXATION PLATE	-
16	1	A4S000137	*	DOOR CHASSIS	
17	3	A14101000B		FLAT WASHER 10.5-45-5 ROD TYERS	
18	2	A3P000016	*	DOOR FIXATION	-
19	2	A3P000154		THREADED ROD ZINC	-
20	2	A3P000388		ROD M20 - M10	

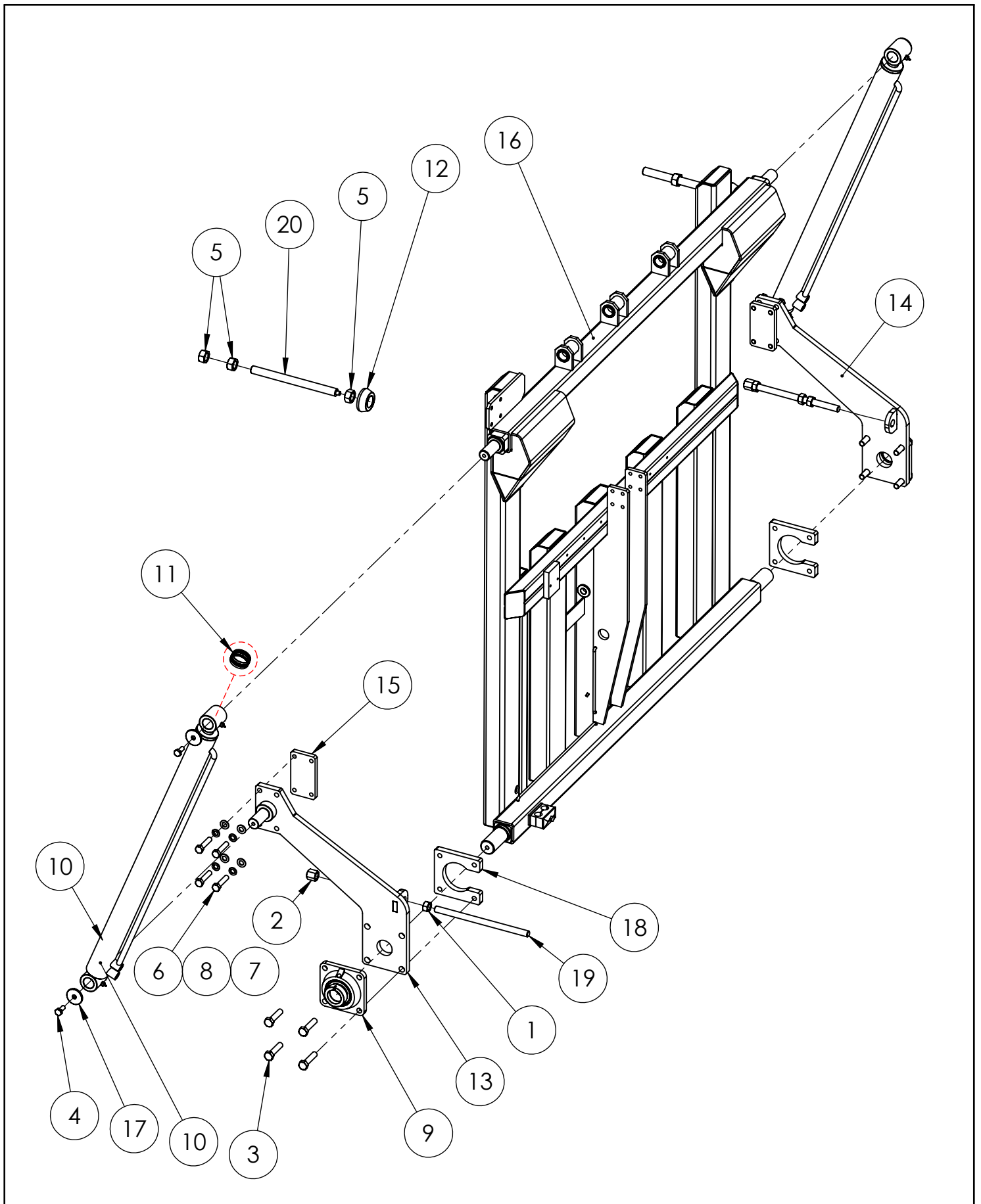


PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
40	<b>DISCHARGE DOOR</b>	<b>HR00264</b>	<b>D</b>





<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00267</b>	<b>B</b>	<b>RETAINER ASSEMBLY</b>	41

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	2	TR06535		GRUB SCREW ALLEN M 08x10 DIN 914	
2	3	TR1570	-	BOLT M 16x110 931 8.8 ZN	
3	3	TR5541		NUT M 16 985 8.8 ZN	
4	11	TR1021	-	BOLT M 06x025 933 8.8 ZN	
5	8	TR5820	-	FLAT WASHER M 10 125 ZN	
6	8	TR5930	-	GROWER WASHER M 10 127 ZN	
7	8	TR1190	-	BOLT M 10x025 933 8.8 ZN	
8	1	EC014004		CYLINDER.DE.30-50/140	
9	1	KR305012	-	SEALS CYLINDER.30-50/340 ELEV.PICK UP & GROUPE	-
10	2	AR1706S03	-	FIXATION FLANGE	
11	3	A35108000		FRAME SPACER RETENTION	
12	1	A3S000308	*	RETENTION CHASSIS	
13	1	A25109000A		PIN CYLINDER COMPRESSION	
14	1	A25107000A		FIXATION PLATE PROTECTOR	
15	2	A25110000A		SHORT PLATE PROTECTOR	
16	1	A3P000643	-	RUBBERIZED PROTECTOR	
17	6	EMCP2520		PERMAGLIDE BUSH 25 20 P10	

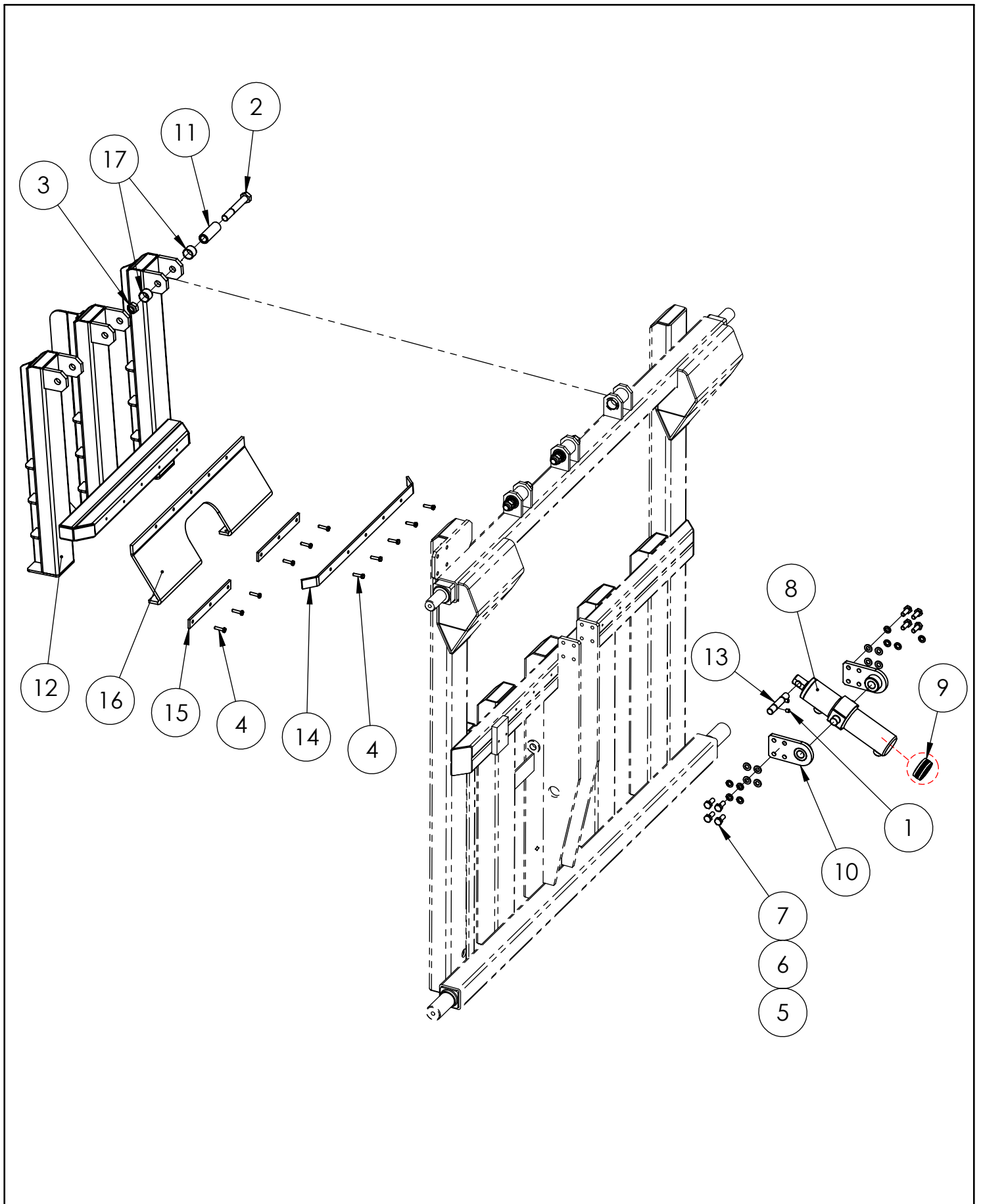


PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
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DELIVERY TIME ACCORDING TO AVAILABILITY  
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
42	RETAINER ASSEMBLY	HR00267	B



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00268</b>	<b>D</b>	<b>DETECTOR D4 + D8</b>	<b>43</b>

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	AR1706S02	*	DETECTION MECHANISM	
2	2	MU20220004		SPRING 18x2x100 D4	
3	2	EMCP25215		PERMAGLIDE BUSH 25 21.5	
4	1	A37202000		SEPARATOR BUSH	
5	1	XXP000001		SUPPORT PHOTOCELL E3Z-D82	-
6	1	A3S000233		PHOTOCELL SUPPORT	
7	1	A2P000053		FLAG D8	-
8	1	AEFTC08		PHOTOCELL E3Z-D82-M1J03	
9	1	AE00285		INDUCTIVE DETECTOR ø30 15 mm PNP WITH CONNECTION	
10	1	AECNT01		CONNECTOR 4P M12 90° C/CABLE Y92E-P1D4V5-E1	-
11	1	TR1572		BOLT M 16x130 931 8.8 ZN	
12	1	TR5541		NUT M 16 985 8.8 ZN	
13	4	TR5510		WASHER M 08 125 ZN	
14	6	TR5810		WASHER M08 8.8 ZN	
15	4	TR1080		BOLT M 08x025 933 8.8 ZN	
16	4	TR5920		GROWER WASHER M 08 127 ZN	
17	4	TR1072		BOLT M 08x015 933 8.8 ZN	
18	2	TR1024		BOLT M 03x020 933 8.8 ZN	

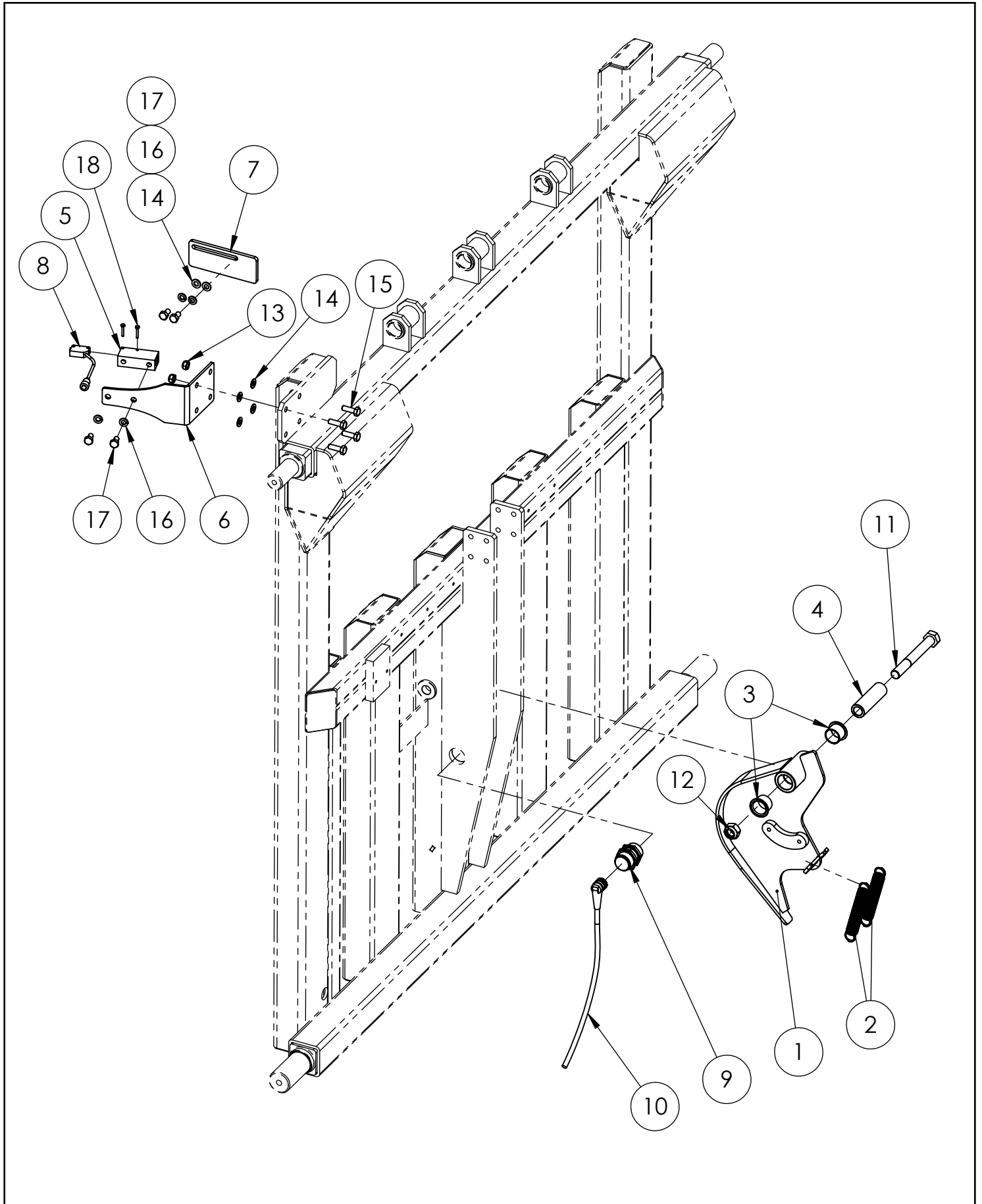


PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD  
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DELIVERY TIME ACCORDING TO AVAILABILITY  
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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
44	<b>DETECTOR D4 + D8</b>	<b>HR00268</b>	<b>D</b>



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>A30018</b>	<b>H</b>	<b>WHEEL ASSEMBLY</b>	<b>45</b>

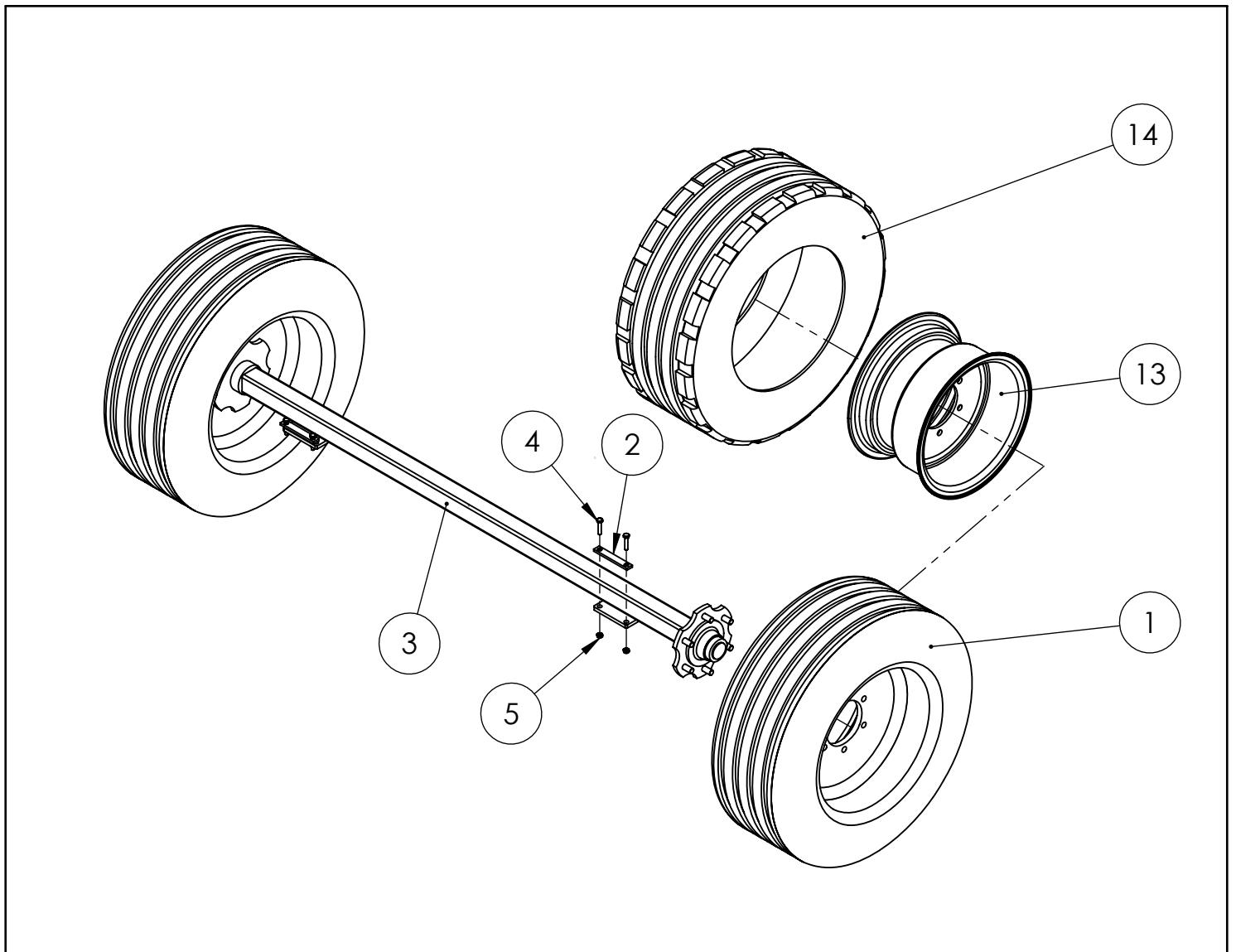
<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	2	AMRD01803		COMPLETE WHEEL 13.0/65-18 16PR ALLIANCE	
2	4	A31302000		SPACER THICKNESS	
3	1	A31301000		AXIS ASSEMBLY	
4	8	TR1232	-	BOLT M 10x050 931 8.8 ZN	
5	8	TR5520	-	NUT M 10 985 8.8 ZN	
6	1	EMRD30208A	-	BEARING 30208A	-
7	1	TR20160005	-	NUT M 18x150	-
8	1	TR1762	-	SHAFT M18/150x54	-
9	1	EMRD32013	-	BEARING 32013	-
10	1	KEMEJ702101	-	KIT SEAL AXLE WITHOUT BRAKE 70.65 160.18 PISA 2100	-
11	1	EMER702101	-	NAVE PLATES ø80 ADR PRESSURE	-
12	1	KEMEJ702103	-	KIT NUT AXLE WITHOUT BRAKE 70.65 160.18 PISA 210	-
13	1	AMRD0180301	-	WHEEL RIM 13.0/65-18	-
14	1	AMRD018012		WHEEL COVER 13.0/65-18	
15	1	EMEJ7021011	-	SHAFT 70.65 160.18 PISA 2100 AG-06	-
16	1	EMRD32210	-	BEARING 32210	-
17	1	EMRD30213	-	BEARING 30213 - DIN 720	-
18	1	EM20180011	*	HUB 70.60 S/BRAKE 160.18	-
19	1	EM20180008	*	AXIS CAPS S/BRAKE 70.60 160.18	-
20	1	EM20180009	*	SEALS AXIS KIT S/BRAKE 70.60 160.18	-
21	1	EM20180010	*	NUT AXIS KIT S/BRAKE 70.60 160.18	-
22	1	EM20180012		STUD HUB WHEEL M18x150	-



PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD / DELIVERY TIME ACCORDING TO AVAILABILITY / DATE DE LIVRAISON SELON STOCK

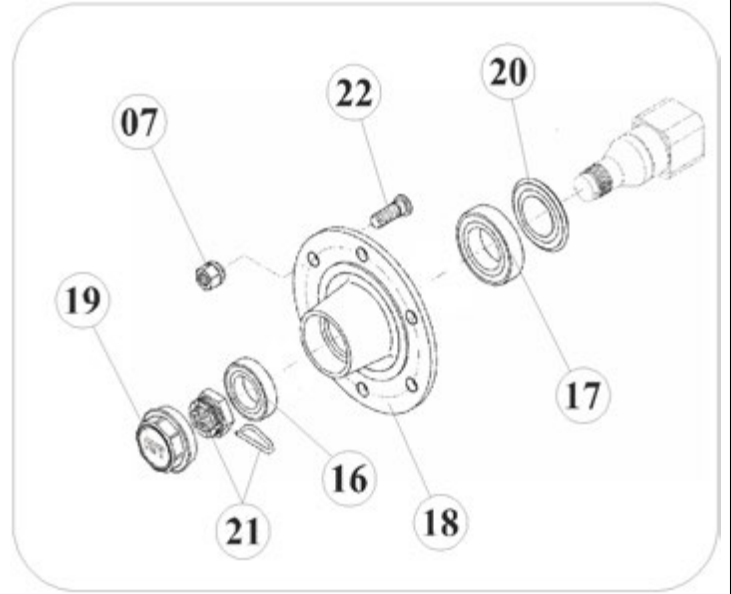
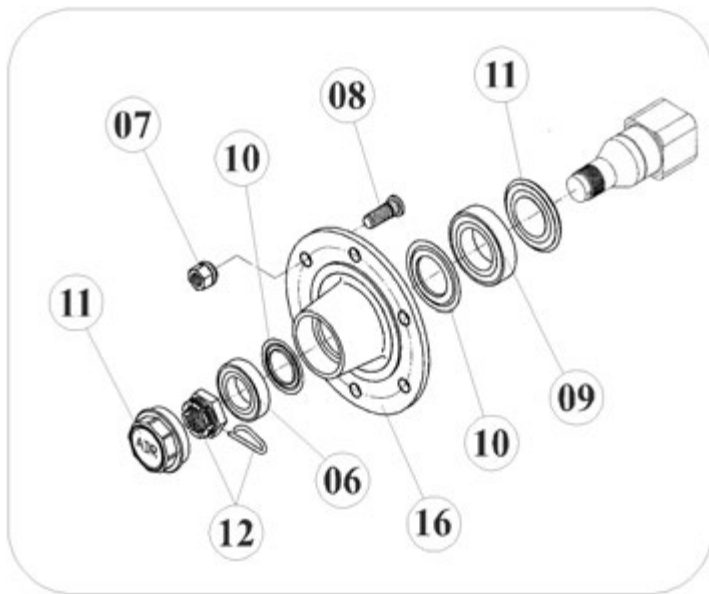


PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
46	<b>WHEEL ASSEMBLY</b>	<b>A30018</b>	<b>H</b>



**A.D.R.**

**Fd7**



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00256</b>	<b>D</b>	<b>DETECTOR SET D1 + BALE GUIDANCE</b>	<b>47</b>

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	8	TR5810		WASHER M08 8.8 ZN	
2	3	TR5510		WASHER M 08 125 ZN	
3	1	TR20160010		BOLT DIN 931 M8x65 8.8 ZN	
4	2	TR1155		BOLT DIN 931 M8x75 8.8 ZN	
5	2	TR1073		BOLT DIN-933 M08x20 8.8 ZN	
6	2	TR1200		BOLT M 10x030 933 8.8 ZN	
7	4	TR5930		GROWER WASHER M 10 127 ZN	
8	1	TR5020		NUT M 06 934 8.8 ZN	
9	2	TR1180		BOLT DIN-933 M10x20 8.8 ZN	
10	1	A3S000153		LINKAGE ARM HOLDER	
11	1	A3S000300		ARM HOLDER	
12	2	PL0109188		TRACTION SPRING 16x2x90	
13	1	AR1706S61	*	DETECTION SUPPORT D1	
14	1	A3S000299	*	CAM DETECTOR D1	
15	2	EMCP2010		BUSH P. 20 10 P10	
16	1	AR1706R45		PLATE	-
17	2	PL0104185		SPRING 16x2x90	
18	1	AM002530T		BUSHING Ø25x30 M06x16	
19	1	A3P000222		SHAFT D1	-
20	1	AE00285		INDUCTIVE DETECTOR ø30 15 mm PNP WITH CONNECTION	
21	1	AE20220036		CABLE W/CONNECTOR M12 M90°-H90° L=1500MM	

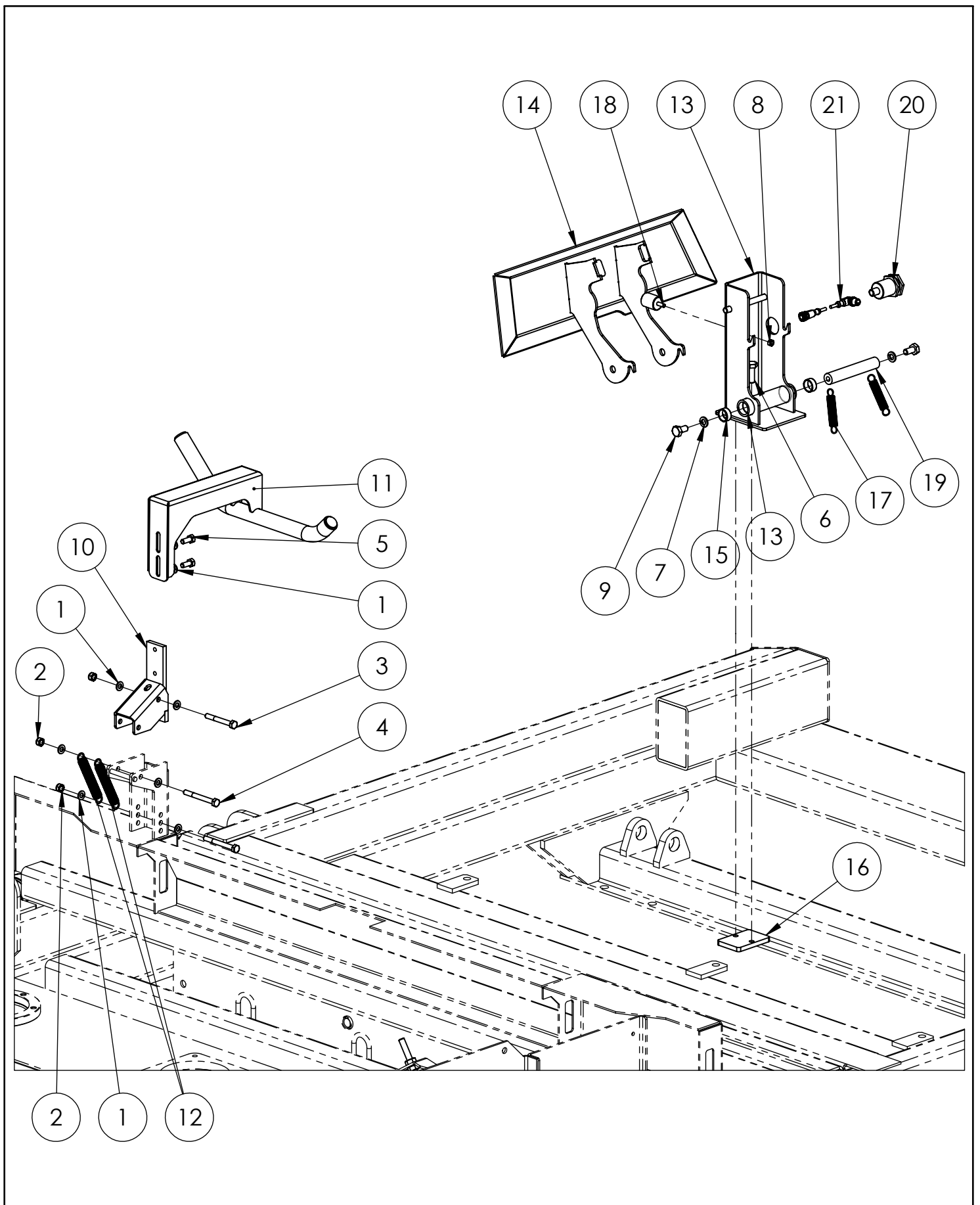


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
48	<b>DETECTOR SET D1 + BALE GUIDANCE</b>	<b>HR00256</b>	<b>D</b>



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00269</b>	<b>C</b>	<b>PROTECTOR SET</b>	<b>49</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	35	TR5810	-	BOLT M 08x020 933 8.8 ZN	
2	36	TR5510		WASHER M 08 125 ZN	
3	24	TR3013		BOLT M 08x030 7991 8.8 ZN	
4	4	TR65112	-	WASHER M 12 9021 ZN	
5	7	TR1091	-	BOLT M 08x035 933 8.8 ZN	
6	2	TR5800	-	WASHER M 06 125 ZN	
7	4	TR5500		NYLON INSERT LOCK NUT M 06 985 8.8 ZN	
8	17	TR20190009	-	VOLT DIN 912 M04x12 8.8 ZN	
9	40	TR5802	-	WASHER DIN-125 M04	
10	20	TR5495		NUT DIN-985 8.8 ZN M4	
11	2	TR2001	-	VOLT DIN 912 M04x16 8.8 ZN	
12	2	TR1426	-	BOLT M 14x040 933 8.8 ZN	
13	2	TR5540		SELFLOCKING NUT M14 8.8 985 ZN	
14	4	TR1020	-	BOLT DIN 933 M06x20 8.8 ZN	
15	2	TR20200011		VOLT ALLEN M6x20 INOX DIN 7380	
16	1	A3S000329	-	SIDE FRONT FAIRING	
17	5	AM0011002		SILENT BLOCK ANTI-VIBRATION STAND 40X23 M-8 0-80	
18	3	TR9T994130		FASTENER 994-130MM	
19	1	AM20200018	-	STEP	
20	1	FXM000058		DOOR ASSEMBLY	
21	1	A3S000209	-	FRONT COVER	
22	1	A3S000220		TETHER WELDING	
23	7	A3P000615		BUSH JOINT	-
24	2	AM002530T		BUSHING Ø25x30 M06x16	
25	1	A3S000332	-	GUARDS	
26	1	A3S000332s	-	GUARDS	
27	2	AM20170011		MAGNET	-
28	3	AM20180006		HINGE 60x60	
29	3	AM20180007		HINGE 60x60	
30	2	AMSS059001		CABLE SIDE PANELS L=590 WITH SEATH	
31	1	TR9A157030	-	HOLDER 1570 30 RIU	-
32	2	TR5920	-	GROWER WASHER M 08 127 ZN	
33	4	TR5030		NUT M 08 934 8.8 ZN	

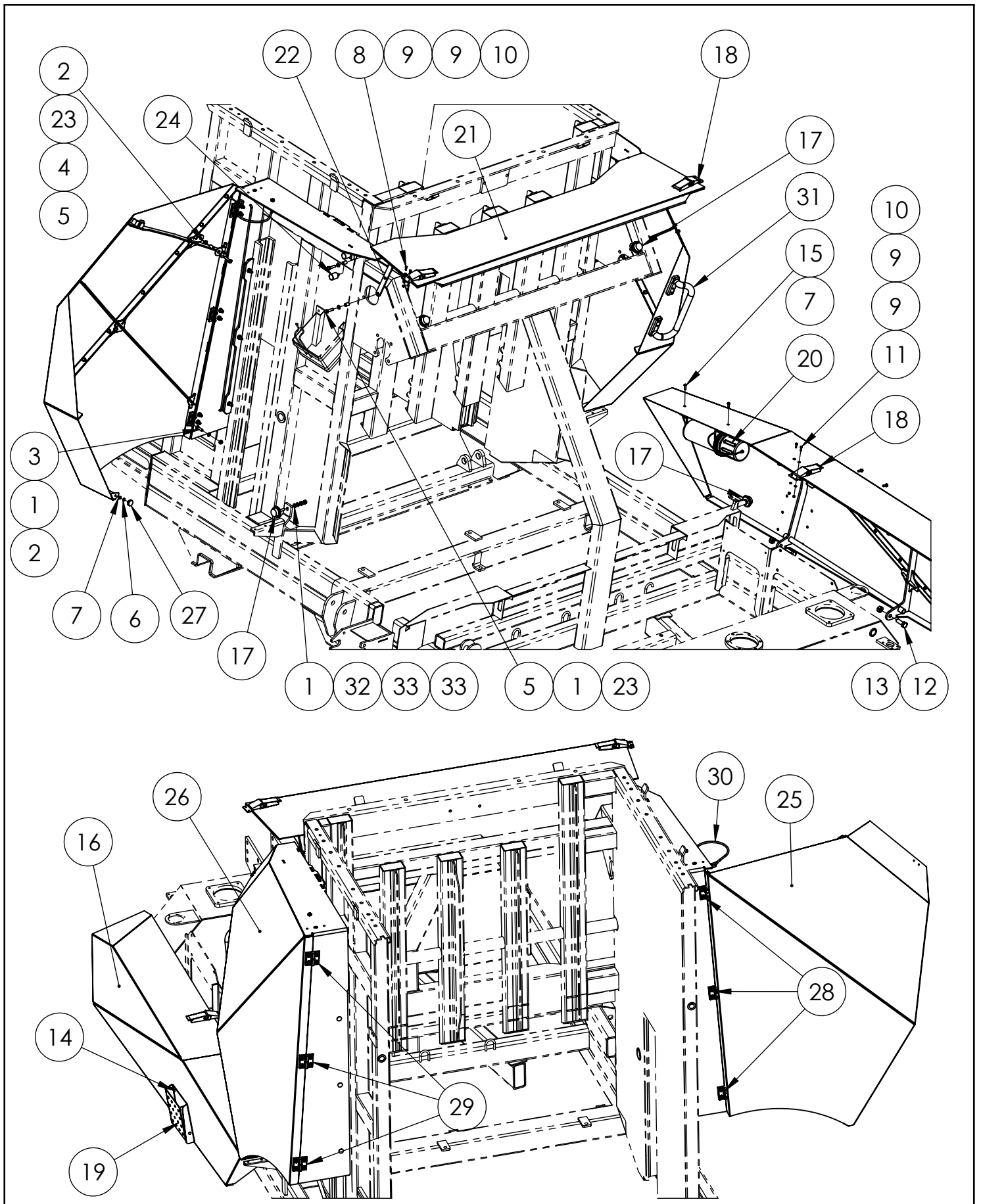


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
50	PROTECTOR SET	HR00269	C



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00298</b>	<b>B</b>	<b>ELECTRIC GROUP</b>	<b>51</b>

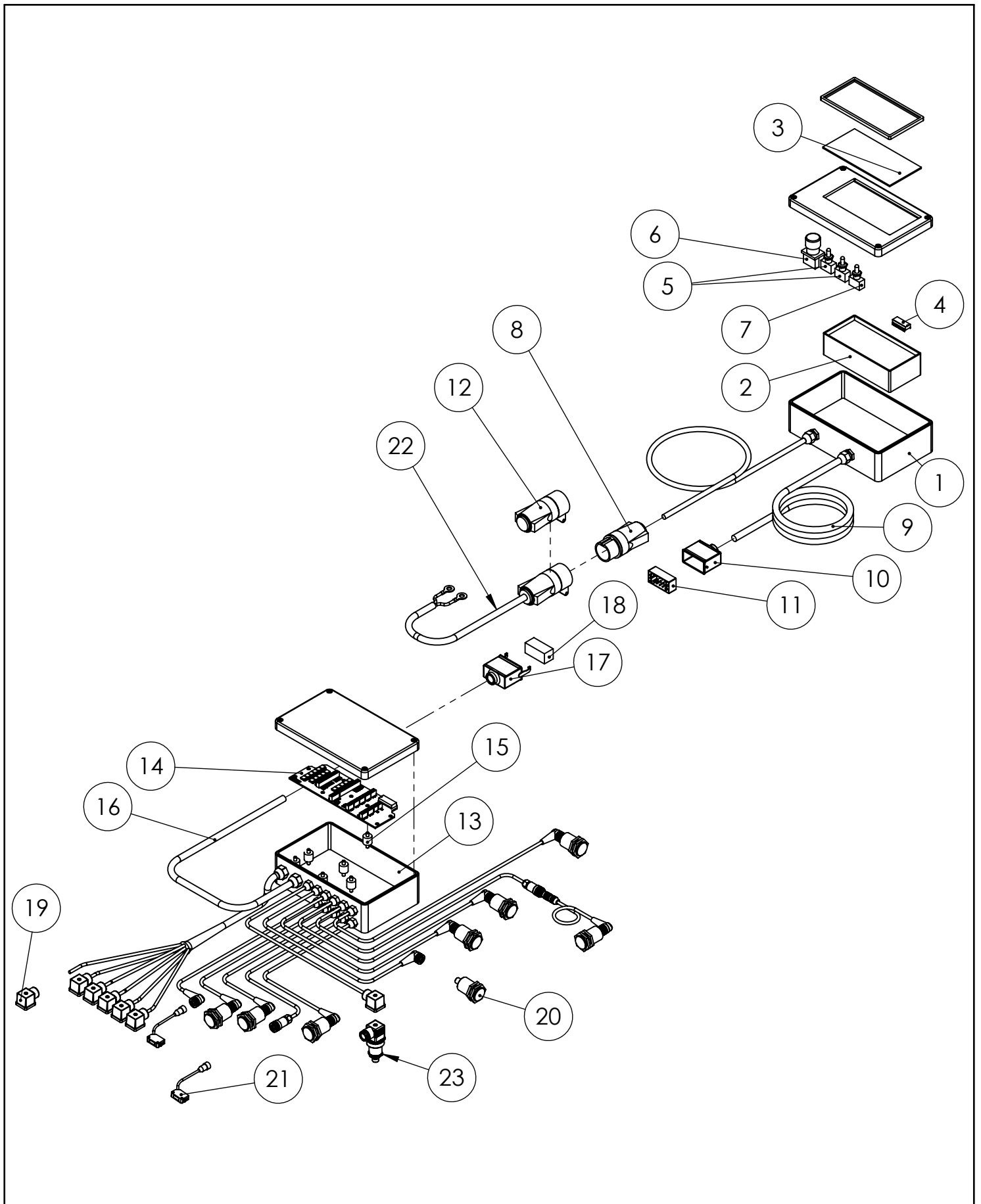
<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	AE0015		ELECTRONIC BOX 260x160x90 POLYESTER	
2	1	AE011001		AUTOMAT- NGV- YEAR 2009	
3	1	SR400004		AUTOMATON STICKER COMMON B14/C14 186x89,062mm	
4	1	AE20200003	*	MICROCHIP GRP V29	
5	2	AE0203		3 POSITION PUSH-BUTTON PROTECTED WITH SIMPLE RUBBER	
6	1	AEIPE30RJ0		PUSH BUTTON ø40 RED EMERGENCY	
7	1	AE0202		MANUAL & AUTOMATIC PUSH-BUTTON CP94 (2 POSITIONS)	
8	1	AECP02M320		MANUAL & AUTOMATIC PUSH-BUTTON CP94 (2 POSITIONS)	
9	1	AE1023	*	CABLE 2x4 + 4x1 D=13mm	
10	1	AE00361		UNLOCKED COVER 10 P	
11	1	AE00321		MALE PLUG Han 10AM 16A (Socket with holes)	
12	1	AECP02V320		FEMALE BASE 32-20-25 2P IP44 GW62073	
13	1	AE0015		ELECTRONIC BOX 260x160x90 POLYESTER	
14	1	AE99C1FT01		MOTHERBOARD E/S ESV4	
15	8	AM00109		SILEMBLOCK ø16x15 M 05x12	
16	1	AE1023	*	TYRE 10 P WITH CLOSER	
17	1	AE00367		TYRE 10 P WITH CLOSER	
18	1	AE00322		FEMALE PLUG 10P 16A (SOCKET WITH PINS)	
19	7	AE0043		CONNECTORS DIN 43650 LED 12V	
20	8	AE00285		INDUCTIVE DETECTOR ø30 15 mm PNP WITH CONNECTION	
21	2	AEFTC08		PHOTOCELL E3Z-D82-M1J03	
22	1	AE00363		WIRE WITH PLUG TO CONNECT TO THE BATTERY	
23	1	AE20220025		PRESSURE TRANSDUCER	



PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD / DELIVERY TIME ACCORDING TO AVAILABILITY / DATE DE LIVRAISON SELON STOCK



PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
52	<b>ELECTRIC GROUP</b>	<b>HR00298</b>	<b>B</b>



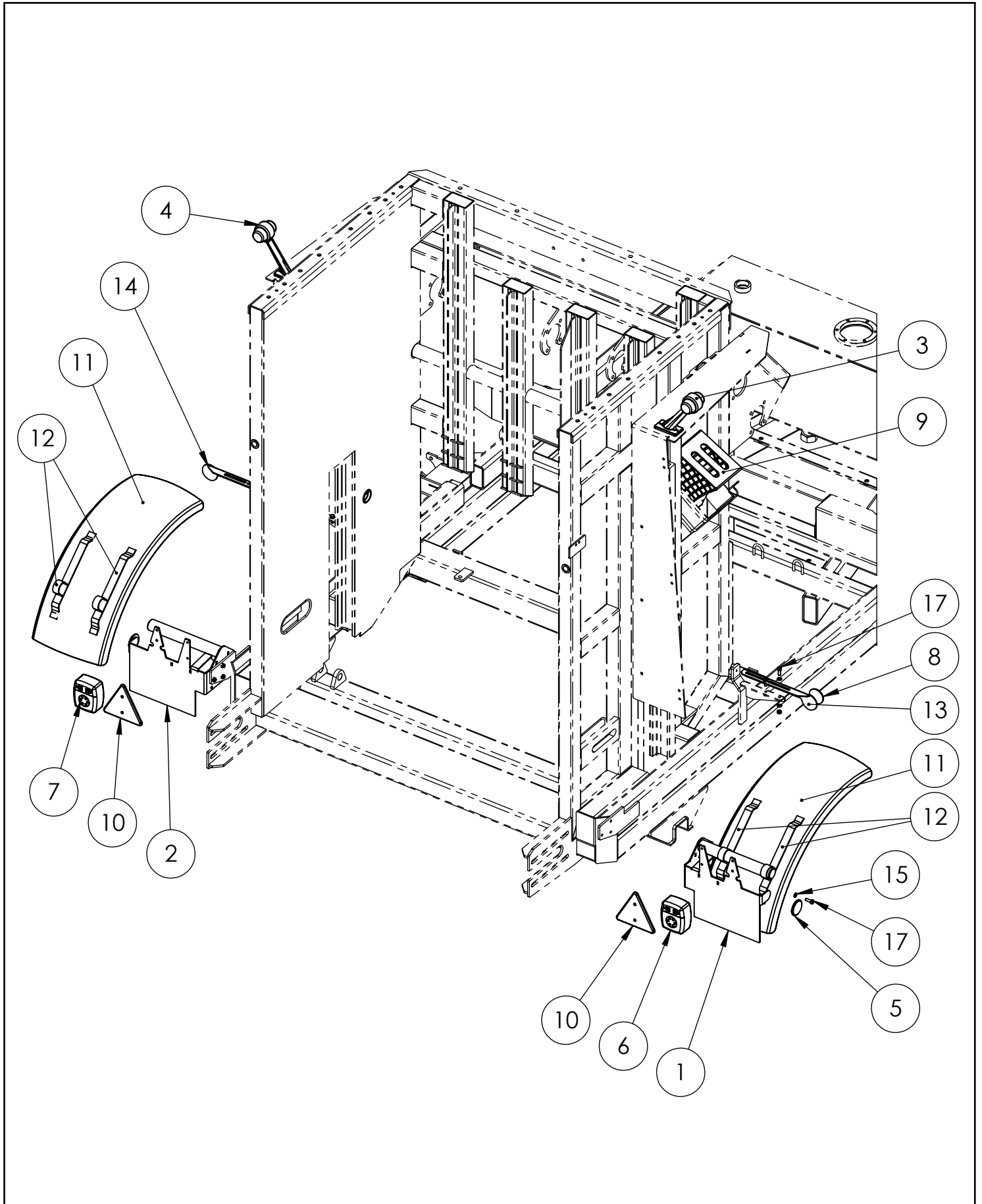
<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00195</b>	<b>A</b>	<b>SIGNALISATION</b>	<b>53</b>

<b>POSICIÓN POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	A3S000215	-	SUPPORT	
2	1	A3S000215s	-	SUPPORT	
3	1	AE20160009		PILOT LIGHT	
4	1	AE20160008		PILOT LIGHT	
5	3	AEC04007		RETRO-REFLECTOR ø 60 ORANGE	
6	1	AE20160011		RIGHT TAIL LED	-
7	1	AE20160010		LEFT TAIL LED 1mt	-
8	2	AEC04006		RETRO-REFLECTOR ø 60 WHITE	
9	2	AMCL1102135	-	CHOCK PLASTIC WHEEL YELLOW HOM.	-
10	2	RECV00251		RED TRIANGULAR CATADIOPTRIC	
11	2	AM20170023		MUDGUARD	-
12	4	AM20180005		MUDGUARD SUPPORT	-
13	1	ACP000351		ARM	-
14	1	ACP000351s		ARM	-
15	20	TR5810	-	BOLT M 08x020 933 8.8 ZN	
16	10	TR5510		WASHER M 08 125 ZN	
17	10	TR1080	-	BOLT M 08x025 933 8.8 ZN	



PLAZO DE ENTREGA SEGÚN DISPONIBILIDAD / DELIVERY TIME ACCORDING TO AVAILABILITY / DATE DE LIVRAISON SELON STOCK

PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
54	<b>SIGNALISATION</b>	<b>HR00195</b>	<b>A</b>



<i>DIBUJO / PICTURE</i>	<i>REV.</i>	<i>DESCRIPCIÓN / DESCRIPTION</i>	<i>PAG.</i>
<b>HR00273</b>	<b>B</b>	<b>HYDRAULIC DISTRIBUTOR</b>	<b>55</b>

<b>POSICIÓN POSITION POSITION</b>	<b>CANTIDAD QUANTITY QUANTITÉ</b>	<b>CODIGO ARTICULO PART CODE</b>	<b>*</b>	<b>DENOMINACION NAMING DÉNOMINATION</b>	<b>NOTAS NOTES NOTES</b>
1	1	EHEV543X01D		BASIC MODUL PVB DSANFOSS	
2	6	EHDEB4216D		ELECTRIC ACTUATOR PVEO DANFOSS	
3	6	EHDM543XXXD		MANUAL ACTUATOR PVM DANFOSS	
4	6	EHDM543XX1D		HAND LEVER PVM	
5	1	EH00196		MANOMETER WIKA ø63 0/400 G1/4"dorsal class 1,6	
6	1	EH20190012		ACCUMULATOR HDR. 0.16 Lts.-75 BAR	
7	1	EHEKB39990		SEALS ACTUATOR MANUAL PVM DANFOSS	
8	1	EHEKB89990		SEALS MOUNTING MODULE PVG DANFOSS	
9	1	EHEKB69990		SEALS MODULE PVB DANFOSS DISTRIBUTOR	
10	1	EHEKB49970		SEALS COIL PVEO DANFOSS	
11	1	EHLP0206		RELIEF PRESSURE VALVE 3/8"	

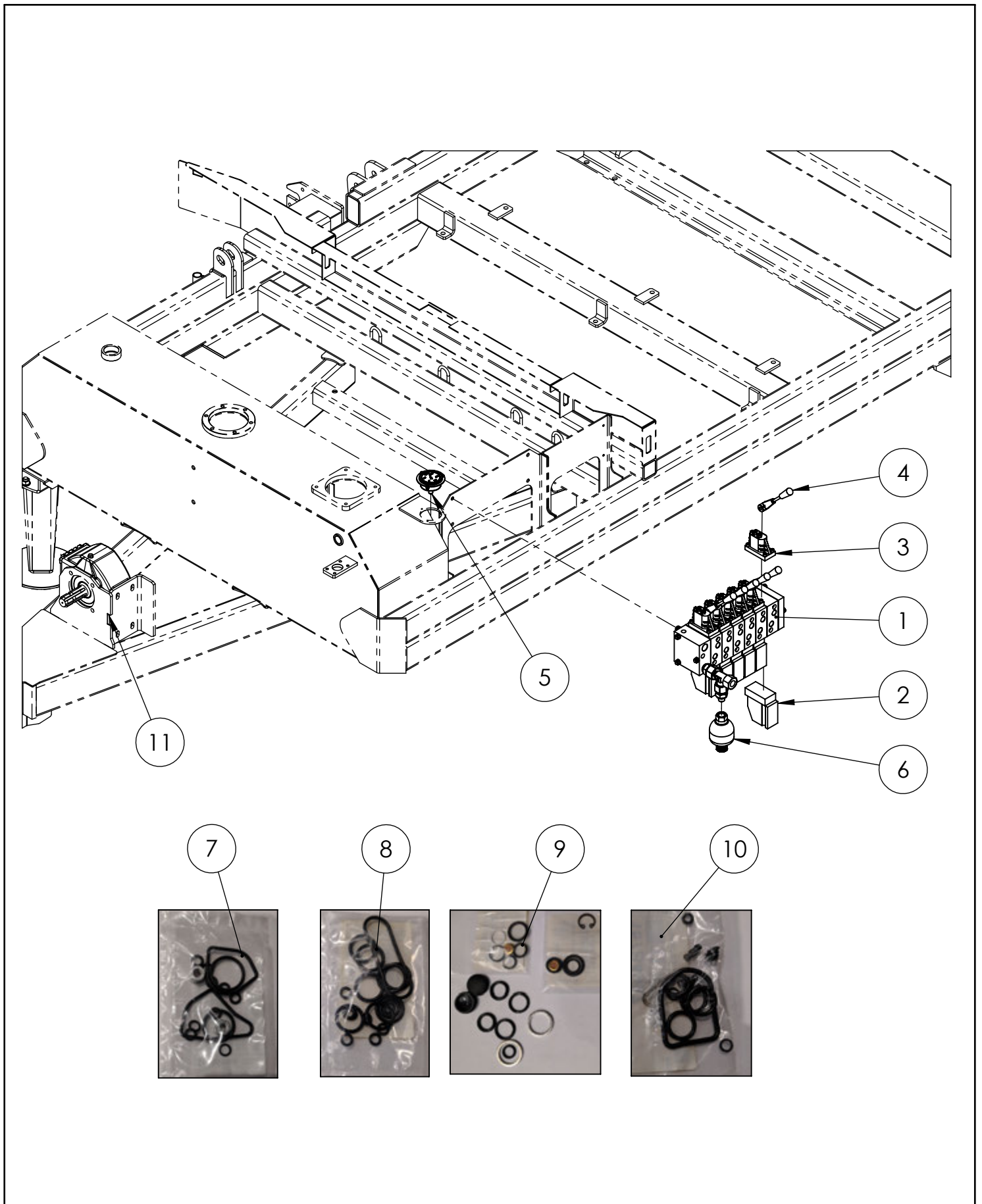


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PAG.	DESCRIPCIÓN / DESCRIPTION	DIBUJO / PICTURE	REV.
56	HYDRAULIC DISTRIBUTOR	HR00273	B









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