

MINI-NH/NF

REV 2021



INSTRUCTION AND SPARE PARTS MANUAL



CONGRATULATIONS!

You have just purchased a Mini-N from Ovlac.

As the country's largest producer of agricultural machinery for tillage and soil tillage, we are honoured that you have chosen Ovlac as your trusted choice.

After many years of experience in the field, we make sure that you will be proud of your purchase in the same way that we are proud of the product we have created under the strictest quality standards.

For the correct use and enjoyment of this equipment, we strongly recommend that the customer read the instructions contained in this manual and use it as a reference for any questions that may arise regarding the operation of your Ovlac equipment.

Yours sincerely: Jorge Calvo
CEO of Ovlac



CONSIDERATIONS

This instruction manual describes the Operating and Maintenance Instructions and Spare Parts for the indicated equipment.

This agricultural equipment, called MINI-N, is designed for tilling the soil, applied to a Tractor with lifting gear and universal three-point linkage.

The proper functioning of the machine depends on its correct use. It is therefore advisable to read the instructions given in this manual carefully in order to avoid any inconvenience that could impair the proper functioning and durability of the machine.

It is also important to follow the instructions in the manual, as the Manufacturer declines all responsibility for negligence and non-observance of these instructions.

The Manufacturer is at your disposal to guarantee immediate and accurate technical assistance and to provide all that may be necessary for a better functioning and performance of the machine.

The Manufacturer reserves the right to modify the Machine without the need to urgently update this publication.



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1.- Safety Rules

Read carefully all the instructions for use of the cultivator.

The manufacturer declines all responsibility for any inconvenience caused by NOT observing the Safety and Accident Prevention Regulations described below.

- 1.- Pay attention to the danger and warning symbols shown in this manual and indicated on the equipment.
- 2.- Repairs and adjustments to the equipment must always be carried out with the engine stopped and the tractor locked.
- 3.- It is strictly forbidden to transport people or animals on the equipment.
- 4.- It is strictly forbidden to entrust the driving of the tractor, with the equipment hooked up, to people without a driving license, inexperienced, or who are not in good condition.
- 5.- Scrupulously observe all the accident prevention measures recommended and described in this manual.
- 6.- The application of additional equipment to the tractor implies a different weight distribution on the tractor axles.
- 7.- Before putting the tractor and the equipment into operation, check that all the safety elements for transport and use are in perfect condition.
- 8.- The symbols with warnings displayed on the equipment give the appropriate suggestions for the use of the same.
- 9.- To circulate on the road, it is necessary to observe the rules of circulation according to the country where it's operated.
- 10.- Respect the maximum weight foreseen on the tractor, the total mobile weight, the transport regulations and the road code.
- 11.- Before starting to work, familiarise yourself with the control devices.
- 12.- Pay the utmost attention to hitching and unhitching the equipment.
- 13.- Never leave the driving position when the tractor is in motion.
- 14.- Remember that road adherence, steering and braking capacity may vary significantly due to the presence of suspended equipment.
- 15.- It is strictly forbidden to remain in the area of action of the equipment.
- 16.- Before leaving the tractor, lower the suspended equipment, stop the engine, apply the parking brake, and remove the ignition key from the dashboard.
- 17.- The category of the hitch pins of the equipment must correspond to that of the linkage of the lift.
- 18.- Pay maximum attention when working in the area of the arms of the tractor, it is a very dangerous area.
- 19.- It is strictly forbidden to stand between the tractor and the equipment to manoeuvre the external lifting control.
- 20.- During road transport with the equipment suspended, put the control lever of the hydraulic lift in the locking position.
- 21.- The spare parts must correspond to the requirements defined by the Manufacturer. Always use original spare parts.
- 22.- The safety instruction decals must always be clearly visible. Clean and replace them if they are not legible (You can ask your dealer for them).
- 23.- The instruction manual must be kept for the whole life of the equipment.



WARNING

Before starting to work, read the instructions in the manual.

DANGER

Do not handle the equipment when it is suspended, danger of crushing. Maintain the safety distance.

DANGER

Lifting the equipment can cause injuries due to reaching. Maintain the safety distance.

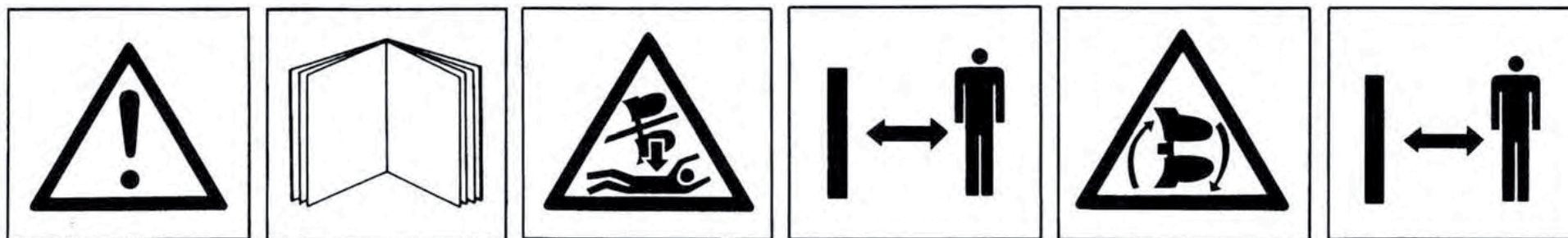
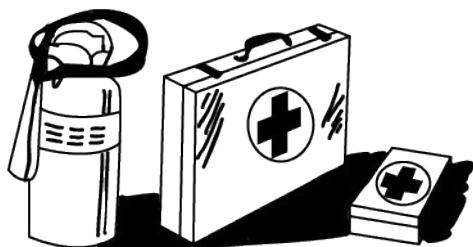
To be ready in case of an emergency

Keep a first aid kit and fire extinguisher on hand. Write down the telephone numbers of doctors, ambulance and fire brigade and keep them near the phone.

Use adequate clothes

Avoid loose clothing and use appropriate safety equipment depending on the type of work. Safe operation of the machine requires the full attention of the operator.

Don't use headphones for listening to the radio while working with the machine.



SPECIFIC INSTRUCTIONS FOR WELDING REPAIRS

When repair by welding is **authorised by the manufacturer**, the following points shall be taken into account generally. In particular cases, appropriate welding instructions shall be provided for each application.

1 Repair welding should be carried out by qualified welders and in accordance with good technical and safety code practice.

2 Before welding repairs, remove paint, oxides, dirt or any other substances harmful to the weld.

3 To avoid damage to mechanical or hydraulic components such as bearings, shafts, hydraulic actuators, hydraulic systems, etc., care should be taken to place the earth connection in an area of good contact, free of paint and oxides.

On machines with hydraulic bending, we must ensure that the welding current does not flow through such elements. For this purpose, the earth connection shall be placed on the same part of the machine to be repaired.

4 Our machines are made of high elastic limit (HEL) steels, which means that special attention must be paid to welding processes and filler materials. In general, basic coated electrodes E7016 or E7018 will be used. For the MAG (semi-automatic) welding process, ER70S6 wire and Ar+20CO₂ will be used as shielding gas. In both cases, follow the recommendations for drying times and temperatures recommended by the manufacturers of the filler material.

5 When the parts to be welded are thicker than 15 mm, or the ambient temperature is lower than 15 C, preheating by flame between 75-100 C is recommended.

6 It is strictly forbidden to cool welding seams with water, air or any other substance.

In case of questions during repair, please contact the manufacturer via the usual means of communication.

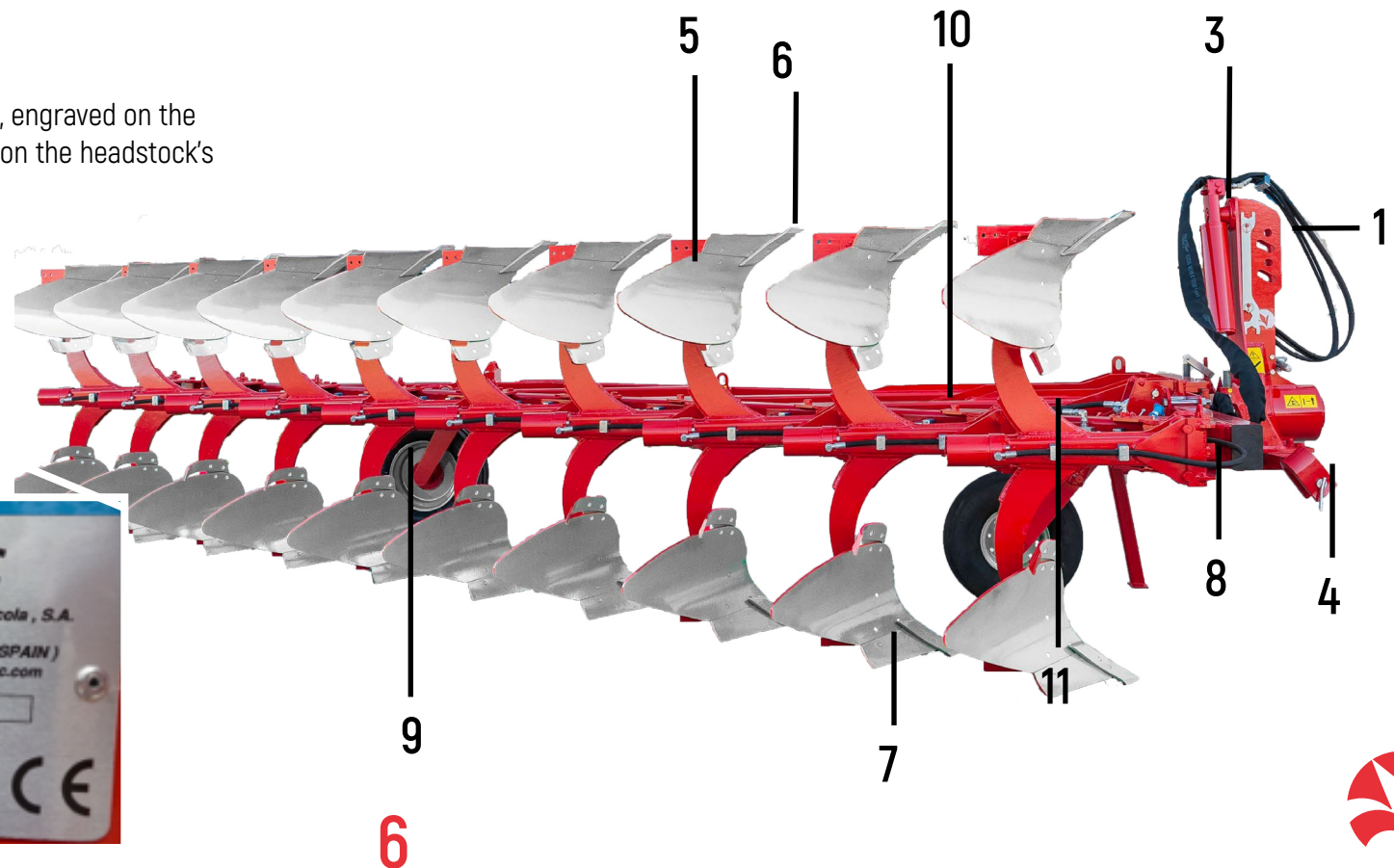


2.- Description and Technical Data

1. HEADSTOCK
2. NAMEPLATE*
3. TURNING CYLINDER
4. OSCILLATING SHAFT
5. SKIMMERS
6. TRASH BOARDS
7. REJA
8. HYDRAULIC SYSTEM
9. REAR WHEEL
10. FRAME
11. LEG

Note: the number of the plough's manufacture, engraved on the nameplate, must match the number engraved on the headstock's support.

*2. NAMEPLATE



Technical Data

MODELS	MINI-NF/NH 5 / 5+1 / 5+2	MINI-NF/NH 7 / 7+1 / 7+2	MINI-NF/NH 9 / 9+1 / 9+2*
WORKING WIDTH	1,92 / 2,31 / 2,69	2,69 / 3,08 / 3,463	3,46 / 3,85 / 4,21
Recommended Power (HP)	85 to 140	120 to 180	150 to 220
INTERBODY DISTANCE		66 cm	
UNDERBEAM CLEARANCE		72 cm	
STANDARD WHEEL		1 x 200/60 14'5" 10PR	
FRAME		150 x 100 mm	
Working Width per body		38,3 cm	

*Model 9+2 only Shearbolt (F)



3.- Non Stop Security Systems and Shear bolt

NF Models:

Security guaranteed through shearbolts. When the point meets an obstacle it breaks in order to allow the tine to turn over its placing. In order to continue the labor you must rearrange

the tine again and change the shearbolt F (Fig. 2).

NOTE: Ovlac shearbolts are calculated to break at a certain pressure. It is important to use original shearbolts. The use of other kind of bolts fully cancels any warranty the machine may had.

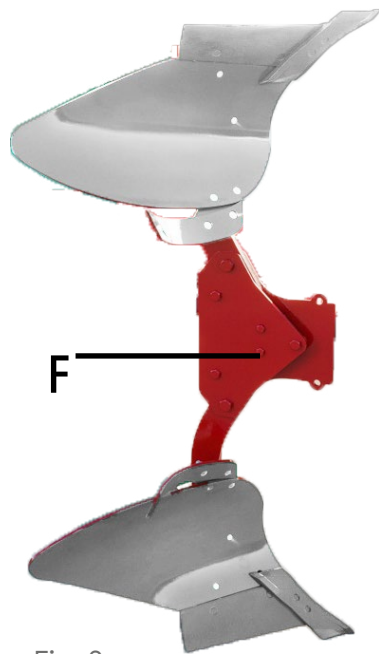


Fig. 2



Fig. 1

NH Models: "Non-Stop" Hydraulic Security System works automatically. When the point meets an obstacle, the system gives up, allowing the tine to lift up and save the obstacle, getting back its original position without stopping the tractor. (Fig. 1) In the HYDRAULIC models, in order to adapt the plough to the conditions of the terrain, you may regulate the trigger pressure by injecting (hard terrains) or retiring (soft terrains) oil from the circuit and modifying the pressure in the whole system. This operation is done from the tractor's cabin through the pressure gauge M, supplied for such purpose, after opening the key L (Fig. 3). The key L closes in parallel position to the tube, opposite to the normal, in order to avoid any object at the terrain impacts against it while laboring, causing an opening on the circuit.

Important: always works with a pressure in between 100 and 135 bars.

NOTE: OVLAC Non-Stop security systems are regulated in factory with an optimum pressure for mid hardness terrains.

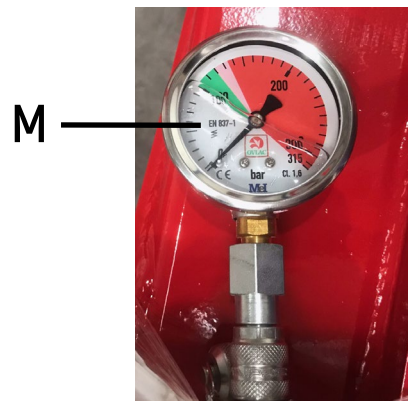


Fig. 3



Fig. 5

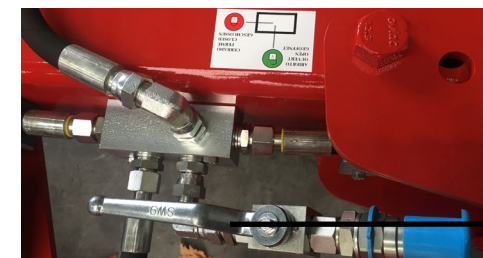


Fig. 4



4.- Start-Up

4.1 - Adaptation to the tractor

OVLAC's machinery are designed to adapt to the 3 universal points of any tractor.

The oscilating shaft, o barra de enganche, is supplied in two versions (distanc between centers):

Category II	890 mm.
Category III	1025 mm.

The oscilating shaft must have the right length in order to converge the trigger pressures in the center of the front axis, such as it is shown in the Fig. 6.

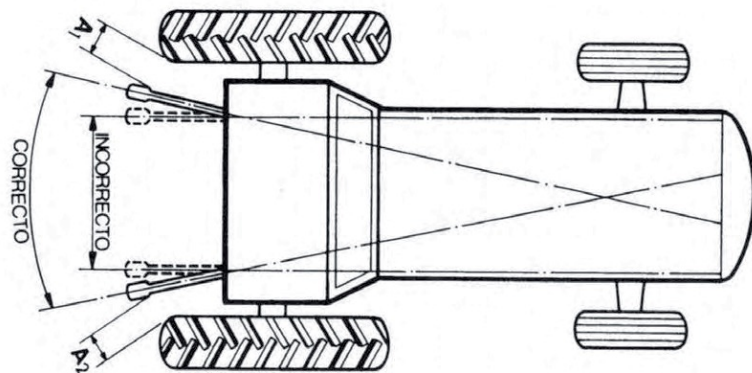


Fig. 6

4.2 - Bodies

Eliminate the painting layer of protection from the bodies before starting the labor so the earth doesn't stick to the bodies.



4.3 - Aligment

The plough must be aligned with the tractor, if not it will tend to drift appart from the path. Check that the distance between A1 and A2 is the same (Fig. 6. Pag. 11).

At Ovlac' ploughs the slack is automatically corrected thanks to the oscilating shaft.

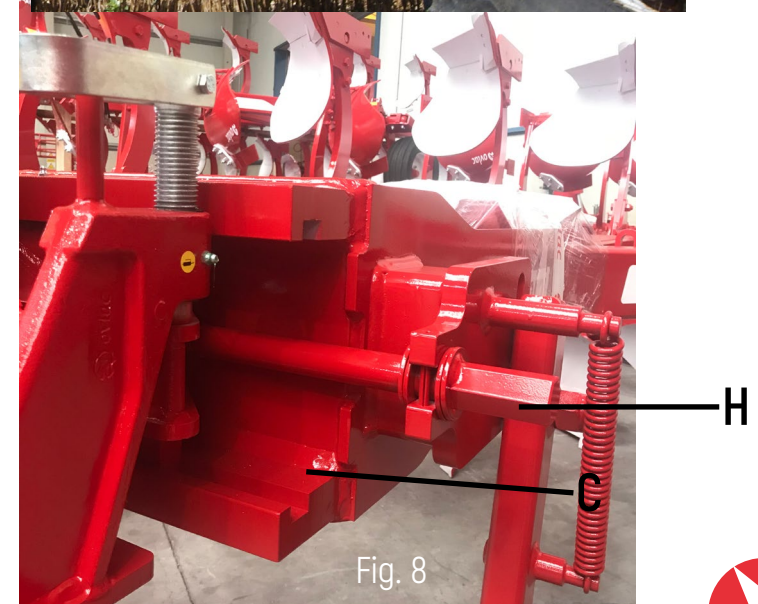
The third point's tine must be coupled in order that the end linked over the machine remains slightly higher than the end linked to the tractor. The third point must be coupled always to the torn drill E, trying that its length allows its free movement while on labor (except for tractors with control on the third point).



4.4 - First Body working width

The Mini-N is a plough that works out of the path so it's only necessary to regulate the adjustment of the 1st body according to the tractor's width in a way that the distance from the furrow allows to drive with relative ease without falling into the path itself.

This adjustment can be made by moving the plough through the slide C thanks to the spindle H. Optionally this adjustment can be made hydraulically. In this case it is important to always use the cylinder when the plough is resting on the ground so the channels of the spool doesn't get damaged.

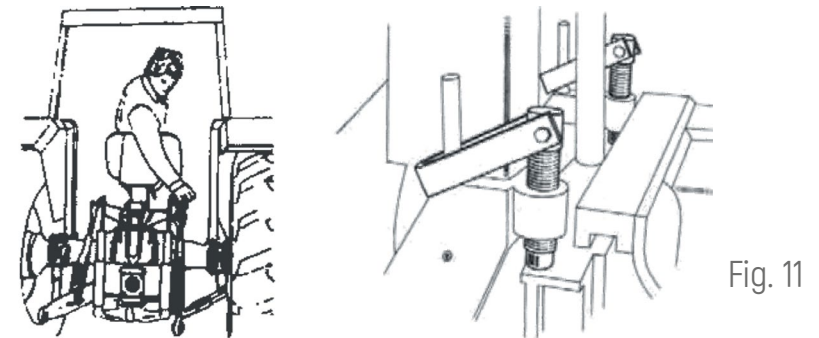
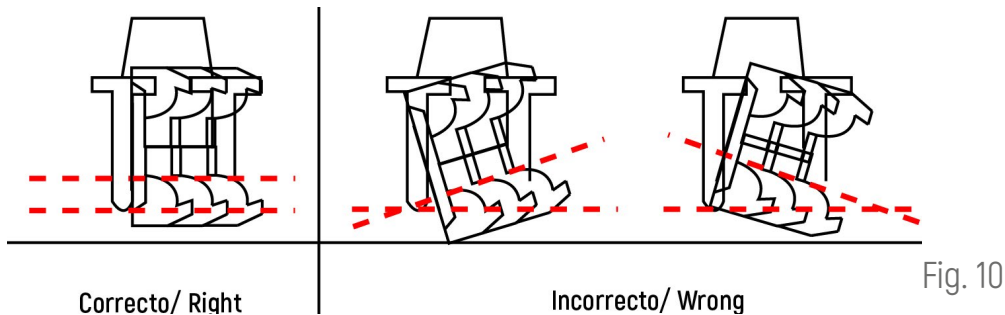
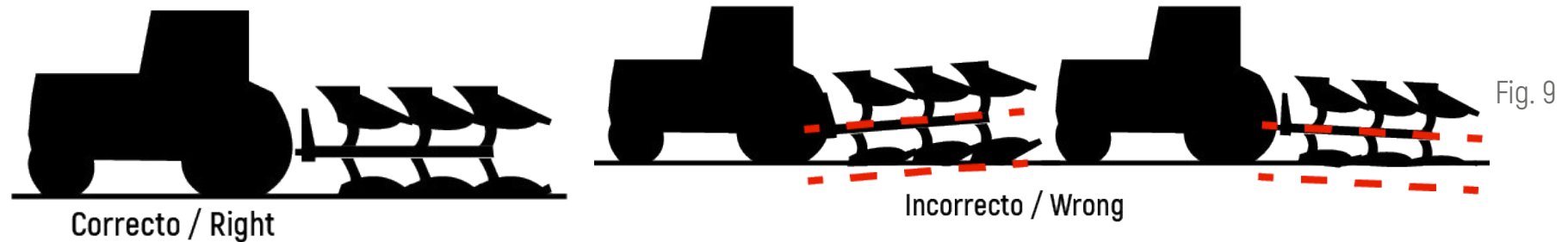


4.5 - Other adjustments

The length of the third option must be adjusted in a way that the frame adopts a parallel position to the ground, since the opposite action would make the different rows of tines to work at different heights, hence making an uneven labor. (Fig. 9).

For this very same reason, you must check that the tines get a perpendicular position to the ground. (Fig. 10).

The tractor' tines must be at the same height as the turning points located at the headstock (Fig. 11).



5.- Working depth

Working depth is regulated through the lifting control of the tractor' arms. Nevertheless, in order to get an even working depth, all ploughs are equipped with a limiting working depth wheel(Fig. 12) whose height can be regulated through the cylinder T.

There is a conection between depth and working width that should be respected for achieving satisfactory results.



Fig. 12

1∅ = 1,2 cm

Working width per body	38,3 cm
Recommended depth	Between 5 and 20 cm

Depends on the size of the wheel

6.00*9" - 10PR V50	5 Bar.
200/60*14,5" - 10PR	5 Bar.
250/65*14,5" - 12PR	4,75 Bar.
320/60-12 132A8 421TT	4 Bar.
400/60*15,5"TL-14PR FLOTATION	3,6 Bar.
500/45*22,5"-16PR	3,6 Bar.
08" 18x7 - 16PR TT	8 Bar.



6.- Transport and parking

With the end of ease the transport, is recommended to display the Mini-N in half turning position to occupy a minimum width. Optionally, when it's not equipped with a control and transport wheel, it can be equipped with a blocker T (Fig. 13) which blocks the Mini-N in halfturning position in a safe way (Fig. 16).

The ploughs can be optionally equipped with polyvalent wheels both transport and control (Fig. 14). In order to use the wheel on its transport position follow the next steps:

- Slightly elevate the plough and place the wheel on its transport position. For that you must remove the bolt B, turn the wheel over its holder, and place the bolt on its C position (Fig. 15). Ovlac transport wheels are designed for maximum comfort and easy to use, no operation on the damper neither the depth tops needed.
- Block the oscillating shaft through the bolts B1.
- Act over the pull of the locker placed in the headstock so the blocking bolt shows off the rear part.
- Act the turning of the plough for it to be blocked in half turning position.
- Lay the plough and remove the 3rd point.

The support pawn assures an static position of the plough on the parking.

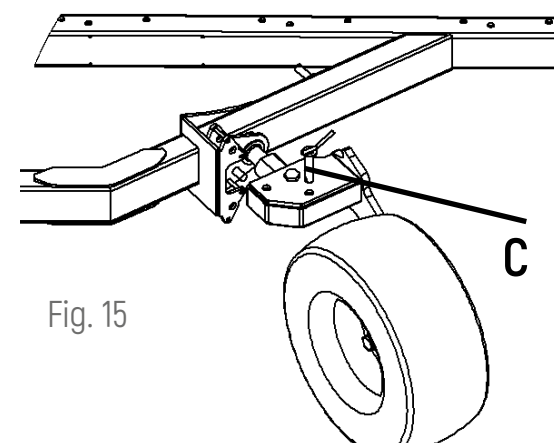
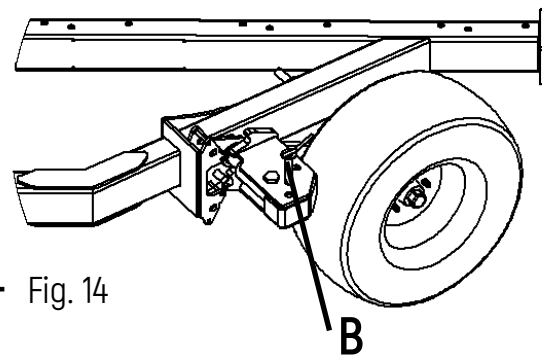
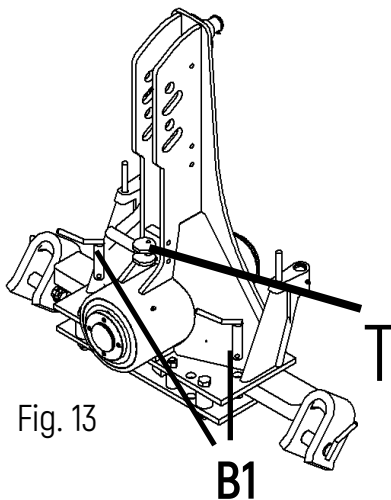


Fig. 16



7.- Maintenance

Must check how tight the bolts are after the first 2 hours of labor, specially the ones on the skimmers and shares. Afterwards, check every 100 hours of labor. By finishing the campaign, wash the plough and grease the skimmers to avoid rust.

Lubing: must grease regularly the turning points based on the conditions of the ambient conditions, both dust and humidity, to assure that no waste of the machine happens. In the reversible ploughs it's recommended to grease, if the greasers allow it, once per each hand (clockwise and counter-wise), assuring that the grease, affected by gravity, it extends for the whole turn and not just from the greasing point to below.

Safe maintenance

Get familiar with the maintenance procedures before doing any labor. The working area must be clean and dry. Not doing any greasing labor, repair or adjustment while the engine is running. Keep the hands, feet, and clothes always far from the moving components. Place all the hydraulic controls on neutral-gear in order to relieve pressure. Lower all gear to the ground. All the components must be in good shape and correctly installed. Repair damage immediately. Change any wasted or broken piece. Keep all the components of the machine clean off of grease, oil and accumulated dirt. By dealing with trailed equipment, disconnecting the group of cables from the tractor before doing any welding on the machine.

Watch out for the high pressure leaks

Leaking fluids from the system might leak strong enough to tear flesh, causing severe injuries. Therefore, it is indispensable to leave the system pressure-less before loosening or disconnecting any pipe and assure that all the connections and connectors are well-tightened before applying pressure to the system. In order to locate a hydraulic oil leak use a piece of cardboard placed in between the connections. Don't get near a high-pressure leak. Even if after all these measures an accident happens, go immediately to see a doctor, who should remove the fluid surgically in a few hours in order to avoid gangrene. Unexperienced doctors with injuries of such nature may go to a specialized medical center.

Maintenance of hydraulic cylinders. **IMPORTANT:** keep the plugs clean. Abrasive particles, such as sand, metal sharps, may damage the cylinders, causing inner leaks. Once unplugged off the tractor, place the protection bolts and make sure they're not touching the ground.



8.- Optional equipment

Ovlac' ploughs can be equipped with:

1. Trash boards (Fig. 21)
2. Landslide extension (Fig. 22)
3. Transport wheel (Fig. 23)
5. Advanced wheel (Fig. 24)
6. Hydraulic Adjustment of the 1st furrow width (Fig. 25)
7. Headstock blocking system for transport (Fig. 26)

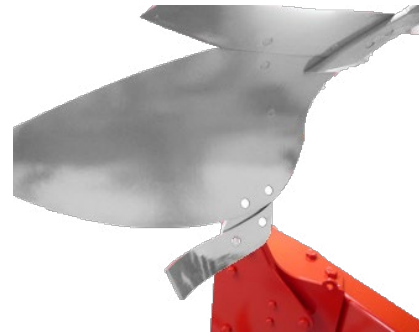


Fig. 21



Fig. 22



Fig. 23



Fig. 24



Fig. 25



Fig. 26



9.- Spare Parts

Spare parts' orders must be ordered through the distributor, and must always include the next directions:

- Type, model, and manufacturing number, indicated on the nameplate.
- Spare part' reference number (indicated on the spare parts pricelist).
- Name & quantity of the requested piece.
- Shipping method. Transport expenses are always charged to the buyer.
- NOTE: the terms Right or Left are meant to be facing the machine from its rear view. For the spare parts and optional parts, "right" is considered for those that are part of the tine that drift to the right and viceverse.
- Note about warranty: If the spare parts' order is placed on warranty it must be clearly specified. The manufacturer will always determine if the piece is in warranty or not. Plus, warranty loses its value if:

Unauthorized repairs by the manufacturer are made, non-original spare parts are set up or the wrong bolts are placed.
The power limits displayed on the technical data sheet are exceeded, or unusual maneuvers and/or operations are made.





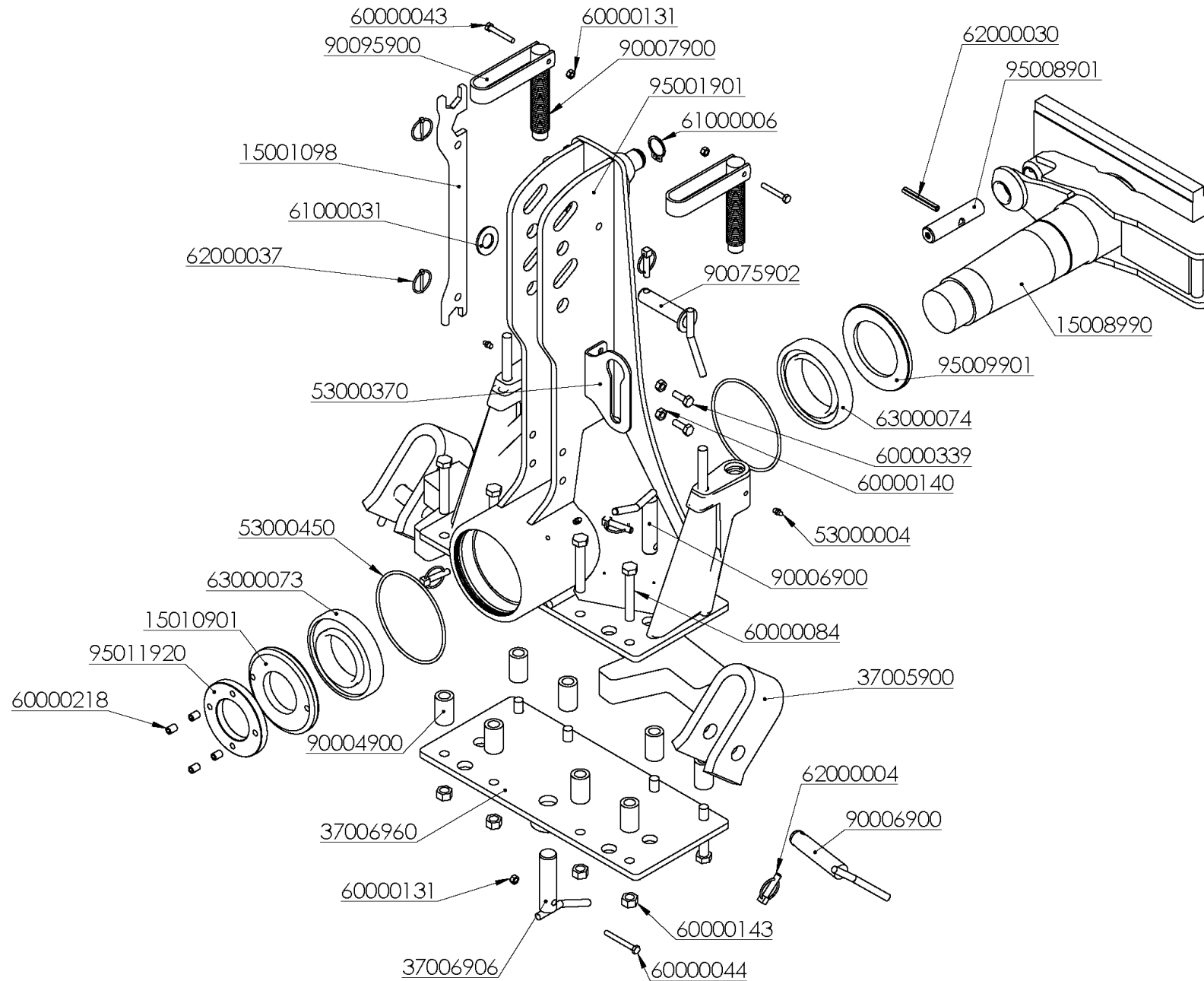
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HEADSTOCK 120

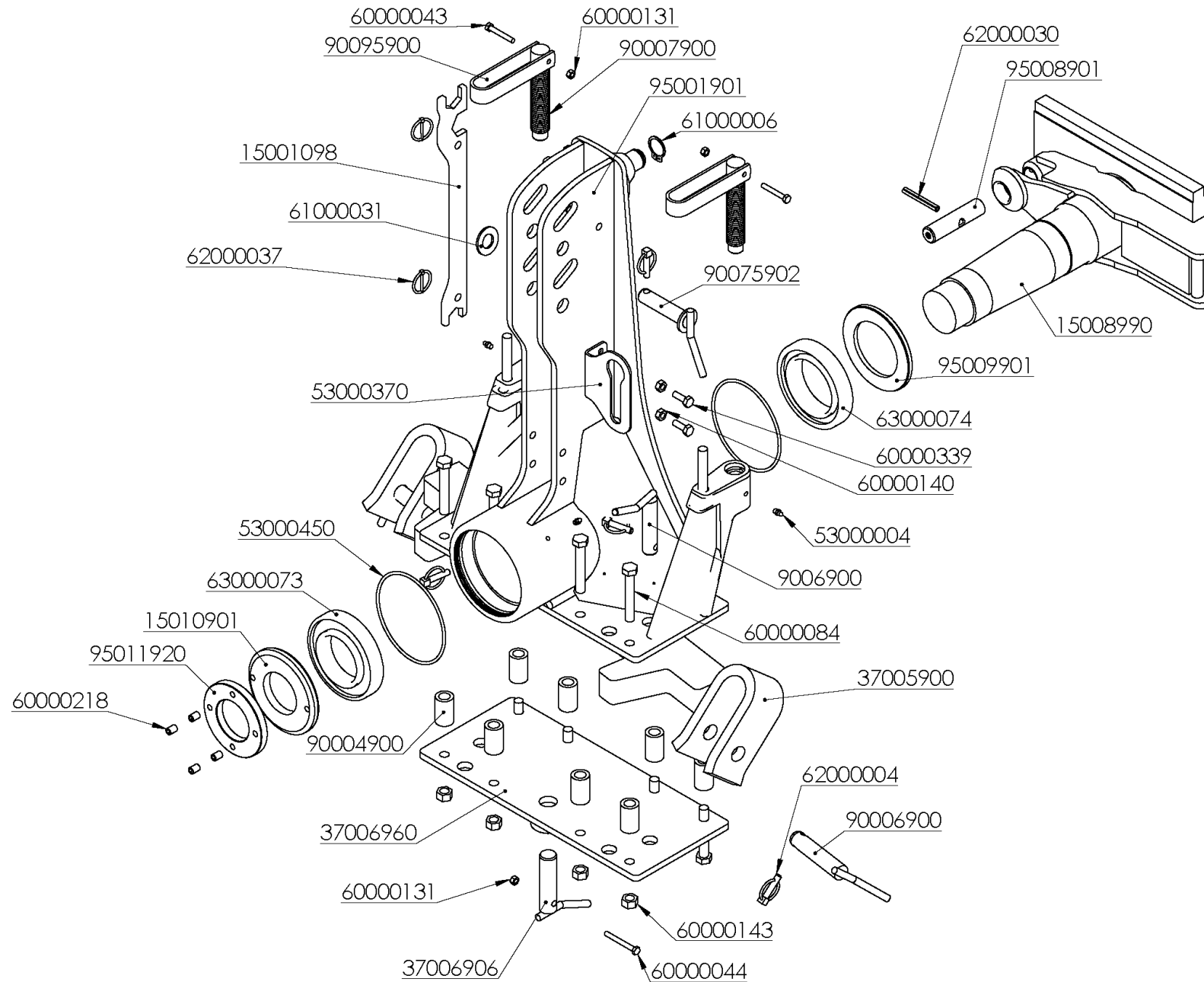


HEADSTOCK 120

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
15001098	LLAVE 32-38	61000031	ARAND.STANDAR S/BISEL CL-26 ZINC.(50x27x3)
15008990	EJE CABEZAL 120 (D/06)	62000004	PASADOR ANILLA 10 ZINC.
15010901	TUERCA EJE CABEZAL 120 (D/06)	62000030	PASADOR ELAST.DIN-1481 10* 80 ZINC.
37005900	BALANC.50mm.MR CAT.II	62000037	PASADOR ANILLA 4,5 ZINC.
37006906	BULON BALANCIN D=30*115mm.MR-6	63000073	RODAM.ANTER.30218 F (C-120/D-03)
37006960	PLACA PORTABALANC.MR-6	63000074	RODAM.POST.32021 XF (C-120/D-03)
53000004	ENGRASADOR AC° DIN-71412 8*125	90004900	SEP.B.P.32/20* 52,5mm.
53000370	SOPORTE LATIG.TORRETA 1 HUECO ZINC.	90006900	BULON D=28*130mm.BALANC.CAT.II ZINC.
53000450	JUNTA TORICA 160-3	90006900	BULON D=28*130mm.BALANC.CAT.II ZINC.
60000043	TORN.EXAG.DIN-931 8* 55 8.8 ZINC.	90006905	BULON D=36/28*140mm.BALANC.CAT.III ZINC.
60000044	TORN.EXAG.DIN-931 8* 70 8.8 ZINC.	90007900	HUSILLO TOPE 185mm.
60000084	TORN.EXAG.DIN-931 16*100 8.8	90075902	BULON D=25*110mm.3er.PTO.CAT.II ZINC.
60000131	TUER.AUTO.DIN-980 8 8.8 ZINC.	90095900	MANILLA TOPE ZINC.
60000140	TUER.AUTO.DIN-980 10 8.8 ZINC.	95001901	CABEZAL 120 (D/O4)
60000143	TUER.AUTO.DIN-980 16 8.8 ZINC.	95008901	BULON D=29,6*123mm.INF.VOLTEO 110(D/07)/120
60000218	TORN.ALLEN DIN-913 12* 16 12.9	95009901	ARAND.POST.120 (D/03)
60000339	TORN.EXAG.DIN-933 10* 30 8.8 ZINC.	95011920	CONTRATUERCA EJE CABEZAL 110 (D-07)/120/150
61000006	ANILLO ELASTICO DIN-471 35		



HEADSTOCK 150

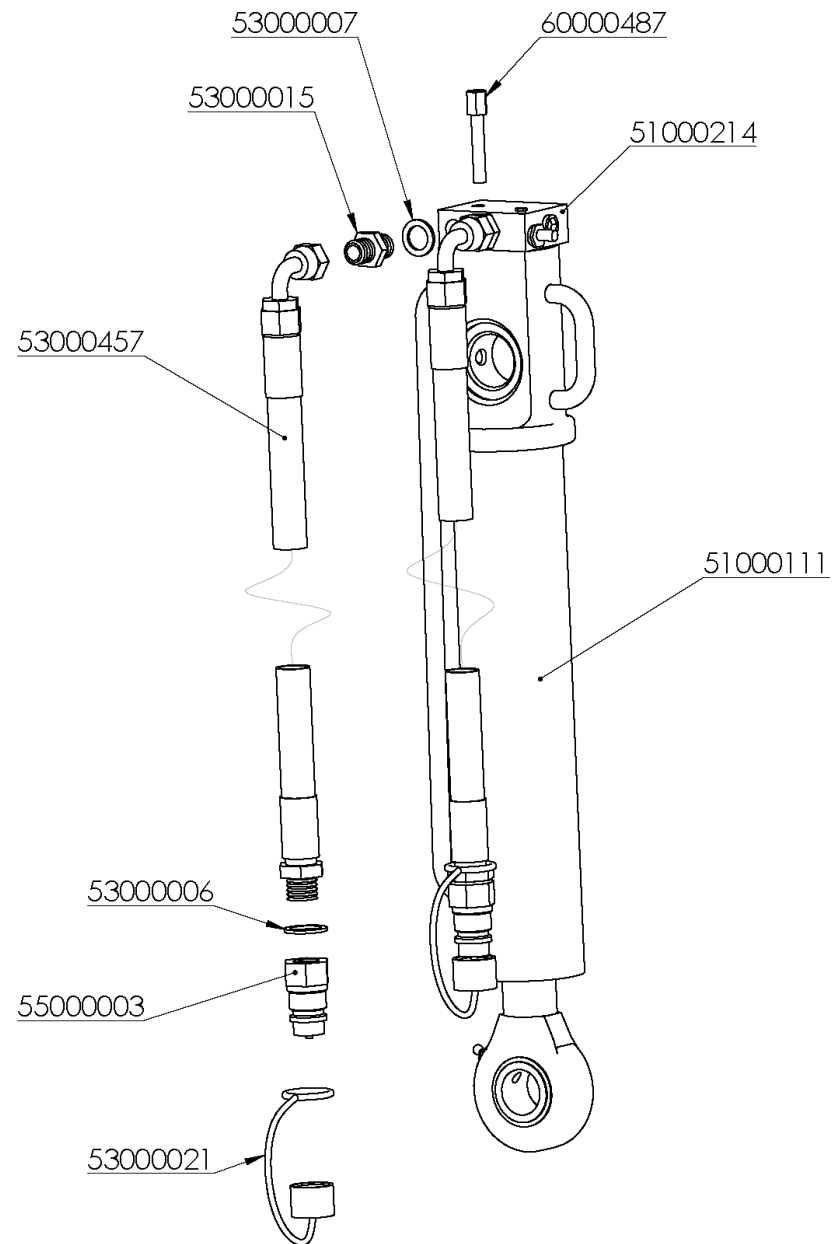


HEADSTOCK 150

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
15001098	LLAVE 32-38	61000042	ARAND.DIN-9021 8 ZINC.
15008931	EJE CABEZAL 150 (D/06)	62000004	PASADOR ANILLA 10 ZINC.
15008933	EJE CABEZAL 150 TRATADO (D/06)	62000030	PASADOR ELAST.DIN-1481 10* 80 ZINC.
15010930	TUERCA EJE CABEZAL 150 (D/06)	62000037	PASADOR ANILLA 4,5 ZINC.
53000004	ENGRASADOR AC° DIN-71412 8*125	63000075	RODAM.POST.32026 F (C-150)
53000370	SOPORTE LATIG.TORRETA 1 HUECO ZINC.	63000076	RODAM.ANTER.30222 F (C-150)
53000447	JUNTA TORICA 200-3 NBR (9-851)	64000670	DISCO CONCAVO MUESCADO MCH 15" 4mm.
55014900	BULON D=25*110mm.BLOQUEO/BRAZO RODILLO	64000717	PORTA-DOCUMENTOS ATORNILLABLE
60000043	TORN.EXAG.DIN-931 8* 55 8.8 ZINC.	90003923	BALANC.50mm.PENTAS.CAT.III
60000084	TORN.EXAG.DIN-931 16*100 8.8	90004900	SEP.B.P.32/20* 52mm.
60000131	TUER.AUTO.DIN-980 8 8.8 ZINC.	90004906	CASQ.D= 45/20,5*52mm.SEP.BALANC.PENTAS.
60000140	TUER.AUTO.DIN-980 10 8.8 ZINC.	90006905	BULON D=36/28*140mm.BALANC.CAT.III ZINC.
60000143	TUER.AUTO.DIN-980 16 8.8 ZINC.	90007900	HUSILLO TOPE 185mm.
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.	90095900	MANILLA TOPE ZINC.
60000160	TUER.EXAG.DIN-934 16 8.8 ZINC.	95001931	CABEZAL 150-L
60000218	TORN.ALLEN DIN-913 12* 16 12.9	95001935	BULON D=31,2*115mm.3er.PTO.PENT.CAT.III (D/02)
60000339	TORN.EXAG.DIN-933 10* 30 8.8 ZINC.	95002920	PLACA PORTABALANC.50mm.PENTAS.(D/02)
60000474	TORN.EXAG.DIN-931 20*110 12.9	95008921	BULON D=34,6*150mm.INF.VOLTEO PENT.(D/02)
60000534	TORN.EXAG.DIN-933 8* 20 8.8 ZINC.	95009931	ARAND.POST.150
61000033	ANILLO ELASTICO DIN-471 40	95011920	CONTRATUERCA EJE CABEZAL 110 (D-07)/120/150
61000036	ARAND.ESTANDAR-A 32 ZINC.		



HYDRAULIC TURNOVER SYSTEM 120

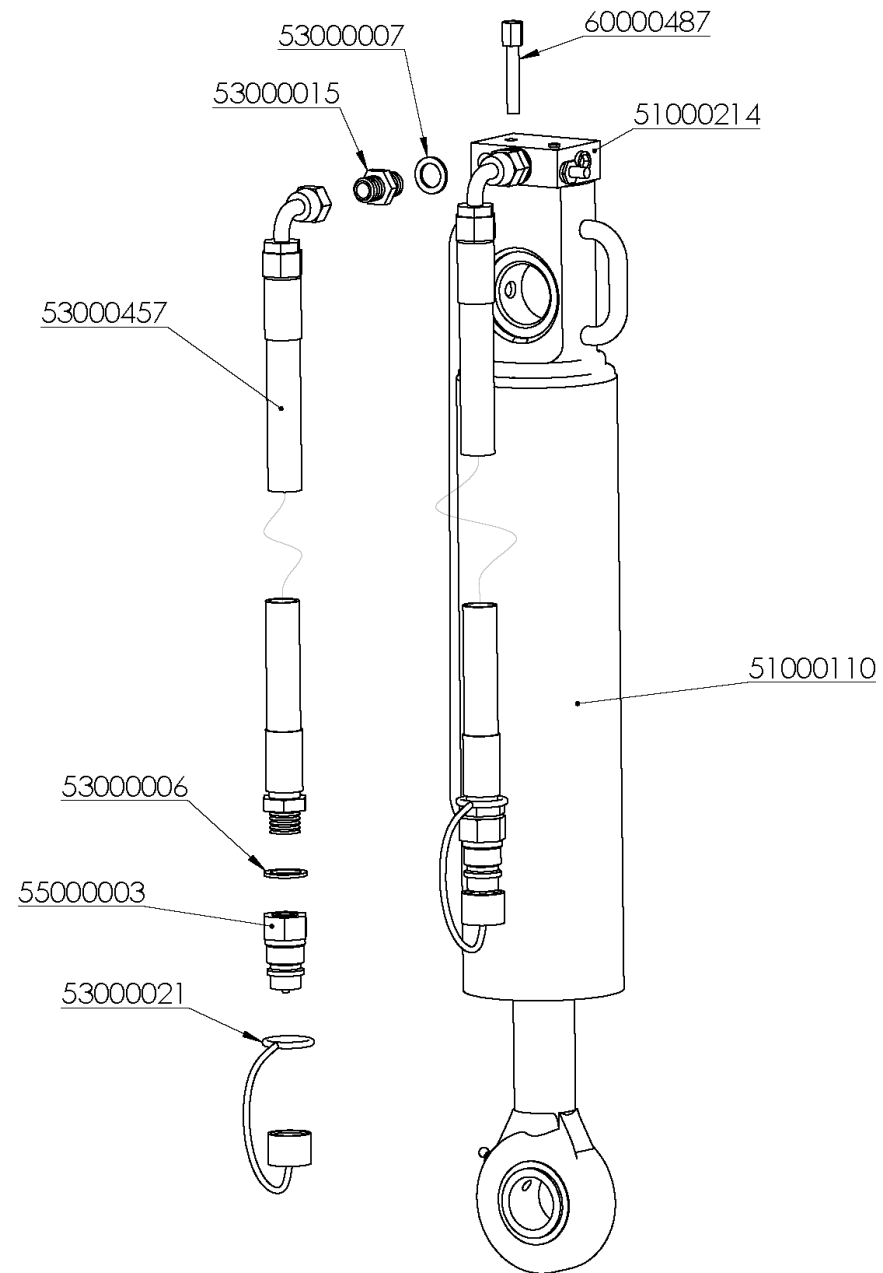


HYDRAULIC TURNOVER SYSTEM 120

REFERENCIA	DESCRIPCIÓN
51000111	CILIND.VOLTEO 35/63/260
51000214	VALV.VOLT.VRA-60/80-SE PLACA BASE
53000006	JUNTA METAL/GOMA 1/2" 11603
53000007	JUNTA METAL/GOMA 3/8" 11602
53000015	UNION MACHO 3/8 4062
53000021	PROTECTOR E.R.MACHO 1/2" ROJO 5029-4PR
60000487	TORN.APILABLE SERIE D M-8x60 AF5D
53000457	LATIG.R2-1/4*1500mm.MF-1/2/CTL-45°-3/8
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108



HYDRAULIC TURNOVER SYSTEM 150



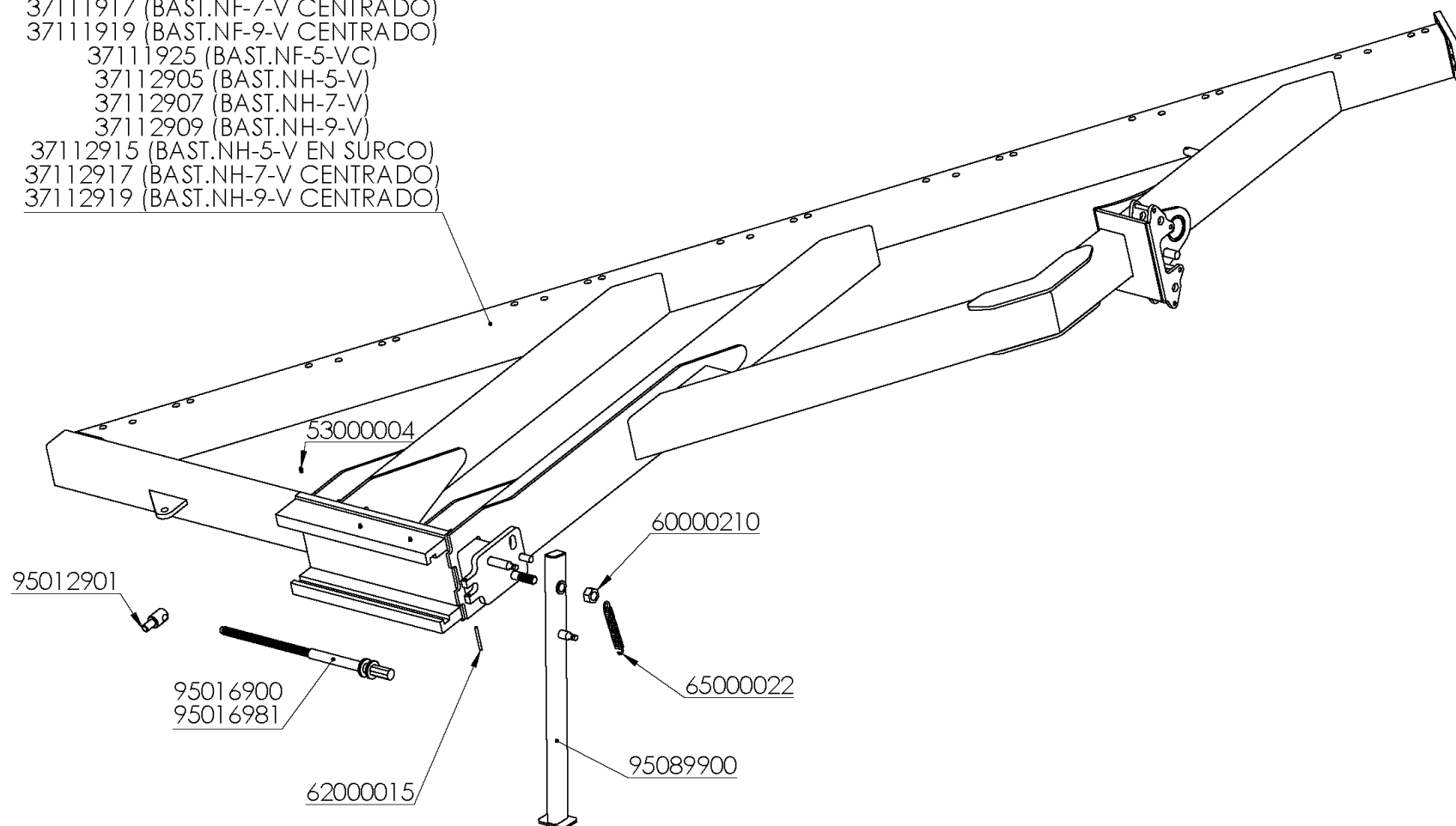
HYDRAULIC TURNOVER SYSTEM 150

REFERENCIA	DESCRIPCIÓN
60000487	TORN.APILABLE SERIE D M-8x60 AF5D
51000110	CILIND.VOLTEO 40/90/300
51000214	VALV.VOLT.VRA-60/80-SE PLACA BASE
53000006	JUNTA METAL/GOMA 1/2" 11603
53000007	JUNTA METAL/GOMA 3/8" 11602
53000015	UNION MACHO 3/8 4062
53000021	PROTECTOR E.R.MACHO 1/2" ROJO 5029-4PR
53000457	LATIG.R2-1/4*1500mm.MF-1/2/CTL-45°-3/8
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108



FRAME NF-V NH-V

- 37111905 (BAST.NF-5-V)
- 37111907 (BAST.NF-7-V)
- 37111909 (BAST.NF-9-V)
- 37111917 (BAST.NF-7-V CENTRADO)
- 37111919 (BAST.NF-9-V CENTRADO)
- 37111925 (BAST.NF-5-VC)
- 37112905 (BAST.NH-5-V)
- 37112907 (BAST.NH-7-V)
- 37112909 (BAST.NH-9-V)
- 37112915 (BAST.NH-5-V EN SÚRCO)
- 37112917 (BAST.NH-7-V CENTRADO)
- 37112919 (BAST.NH-9-V CENTRADO)

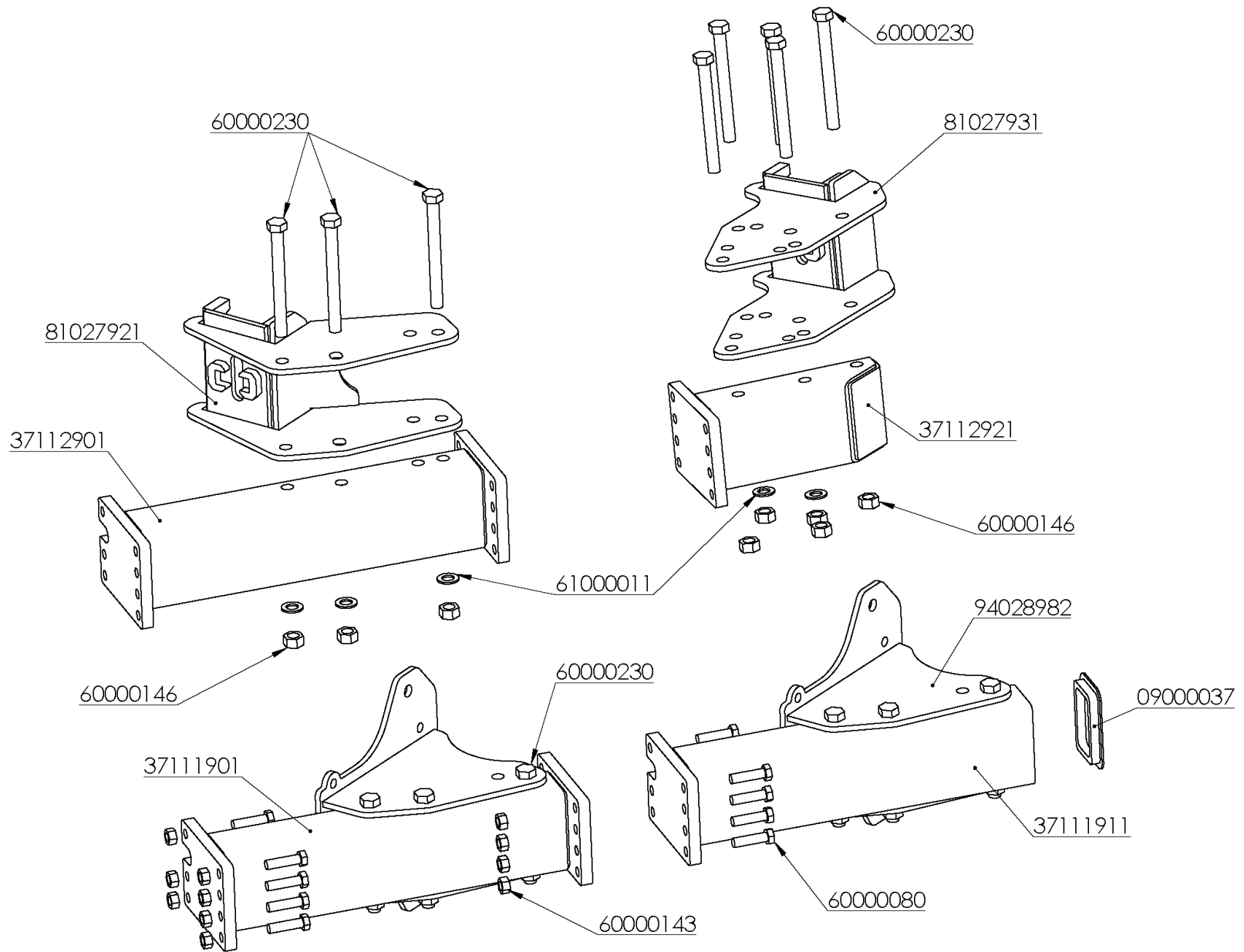


FRAME NF-V NH-V

REFERENCIA	DESCRIPCIÓN
37111905	BAST.NF-5-V
37111907	BAST.NF-7-V
37111909	BAST.NF-9-V
37111917	BAST.NF-7-V CENTRADO
37111919	BAST.NF-9-V CENTRADO
37111925	BAST.NF-5-VC
37112905	BAST.NH-5-V
37112907	BAST.NH-7-V
37112909	BAST.NH-9-V
37112915	BAST.NH-5-V EN SURCO
37112917	BAST.NH-7-V CENTRADO
37112919	BAST.NH-9-V CENTRADO
53000004	ENGRASADOR AC° DIN-71412 8*125
60000210	TUER.AUTO.DIN-985 1" SAE 8.8
62000015	PASADOR ELAST.DIN-1481 8* 80 ZINC.
65000022	MUELLE TRACCIÓN 225/175*26*5 EECC 195mm
95012901	TUERCA AJUSTE BASTIDOR MR
95016900	HUSILLO AJUSTE BASTIDOR 600mm
95016981	HUSILLO AJUSTE BASTIDOR 800mm
95089900	PEON REVERSIBLE D/70cm.(D/02) 75cm.SL (D/07) MINI-N



MODULE "V"

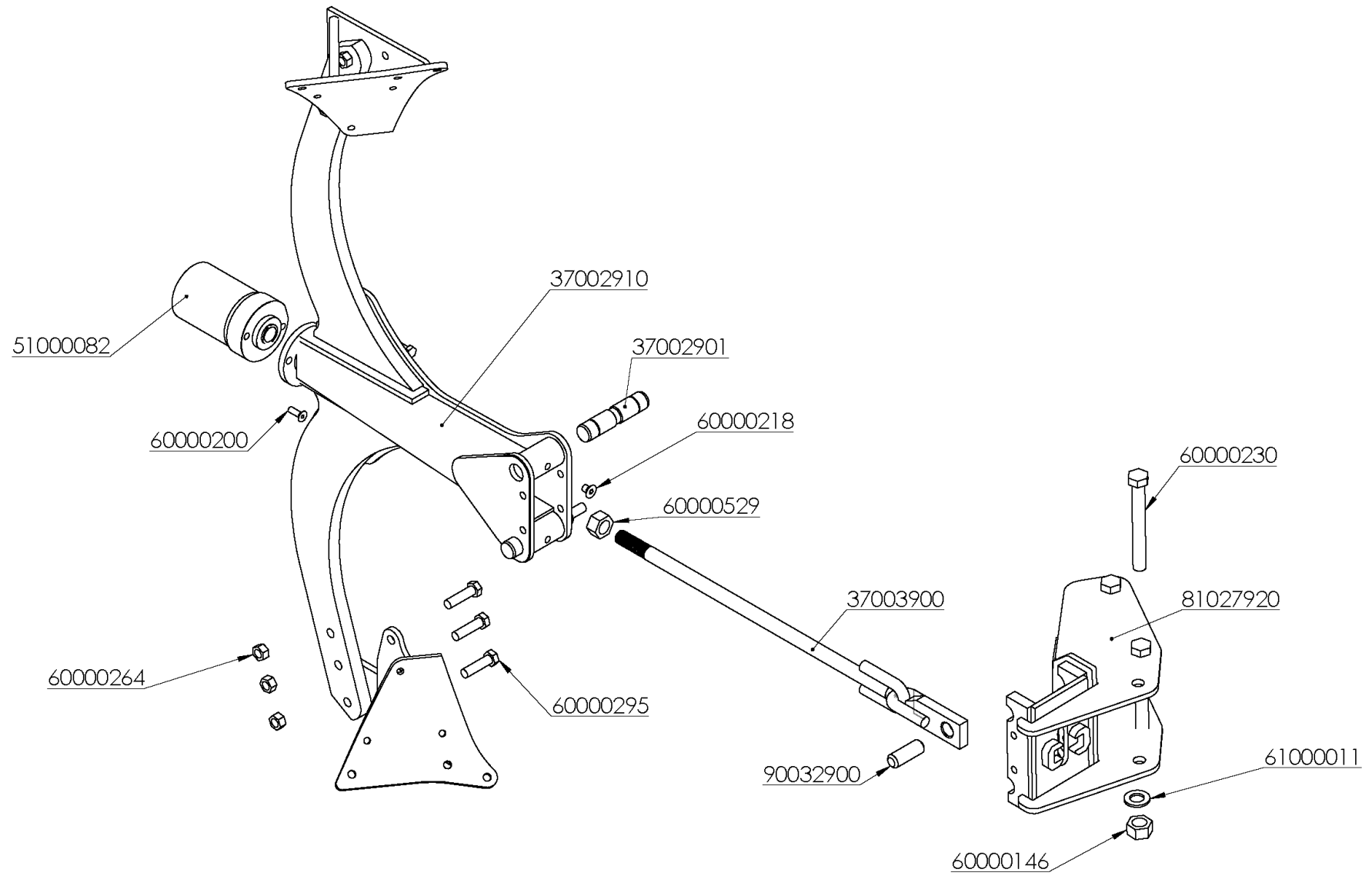


MODULE "V"

REFERENCIA	DESCRIPCIÓN
9000037	TAPON GOMA 150*100*10mm.
37111901	BAST.MODULO 1 NF-V (INTERM.)
37111911	BAST.MODULO 2 NF-V (FINAL)
37112901	BAST.MODULO 1 NH-V (INTERM.)
37112921	BAST.MODULO 2 NH-V (FINAL-CHAFLAN)
60000080	TORN.EXAG.DIN-931 16* 60 8.8 ZINC.
60000143	TUER.AUTO.DIN-980 16 8.8 ZINC.
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.
60000230	TORN.EXAG.C/LAR.20*200 12.9
61000011	ARAND.DIN-125 20 ZINC.
81027921	SOP.ARTIC.CAMBA NH-V
81027931	SOP.ARTIC.CAMBA NH-V ULTIMO CUERPO
94028982	SOP.ARTIC.CAMBA NF-V



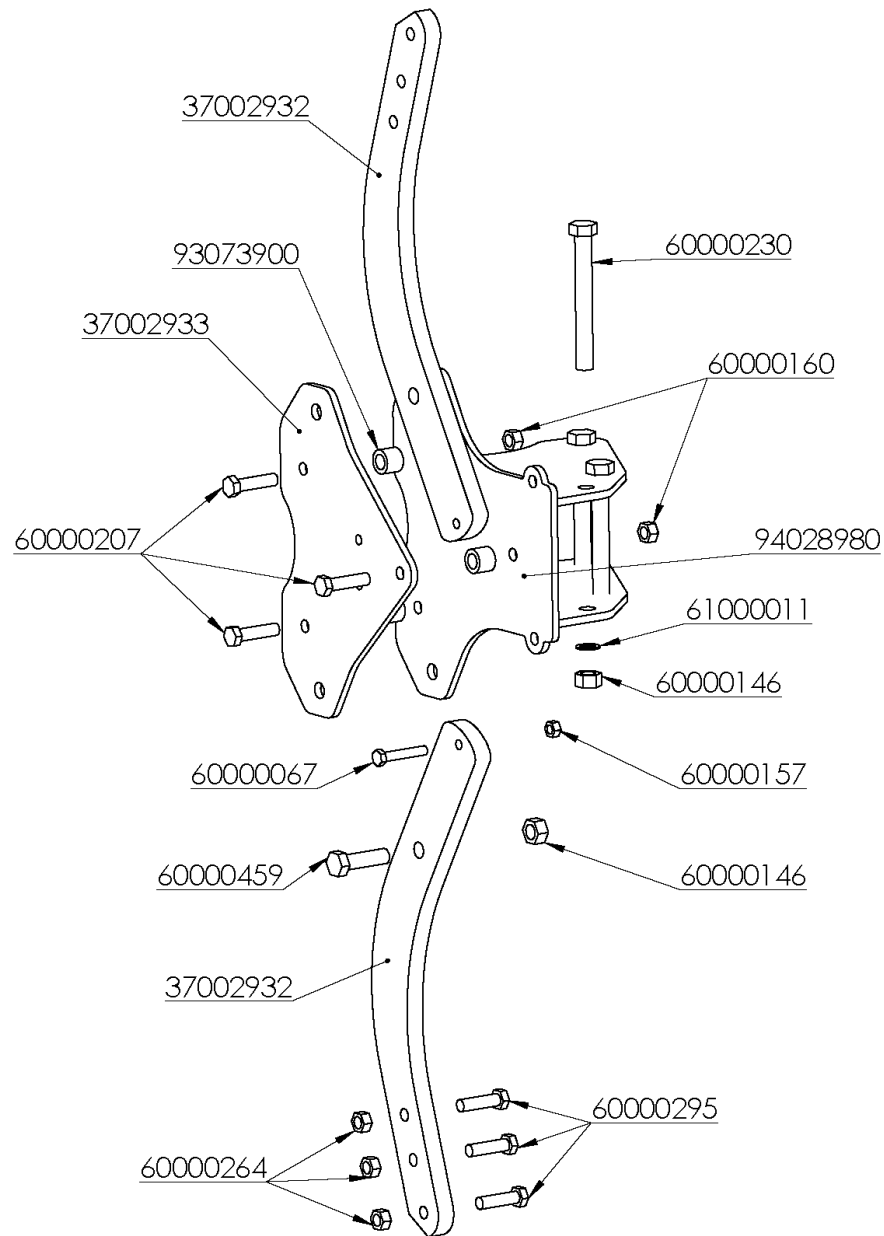
ARM



REFERENCIA	DESCRIPCIÓN
37002901	BULON APOYO ANCORA MR
37002910	BRAZO PORTACAMBA MMH
37003900	BARRA TENSORA MR
51000082	CILIND.TRACCION 90/36/60 AR
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.
60000200	TORN.ALLEN DIN-912 12* 25 8.8 ZINC.
60000218	TORN.ALLEN DIN-913 12* 16 12.9
60000230	TORN.EXAG.C/LAR.20*200 12.9
60000264	TUER.AUTO.DIN-980 16 10.9 ZINC.
60000295	TORN.EXAG.DIN-931 16* 60 12.9
60000529	TUER.AUTO.DIN-985 1" SAE 10.9
61000011	ARAND.DIN-125 20 ZINC.
81027920	SOP.ARTIC.CAMBA NH
90032900	BULON D=25* 70mm.TIRO BARRA TENSORA



BODY NF

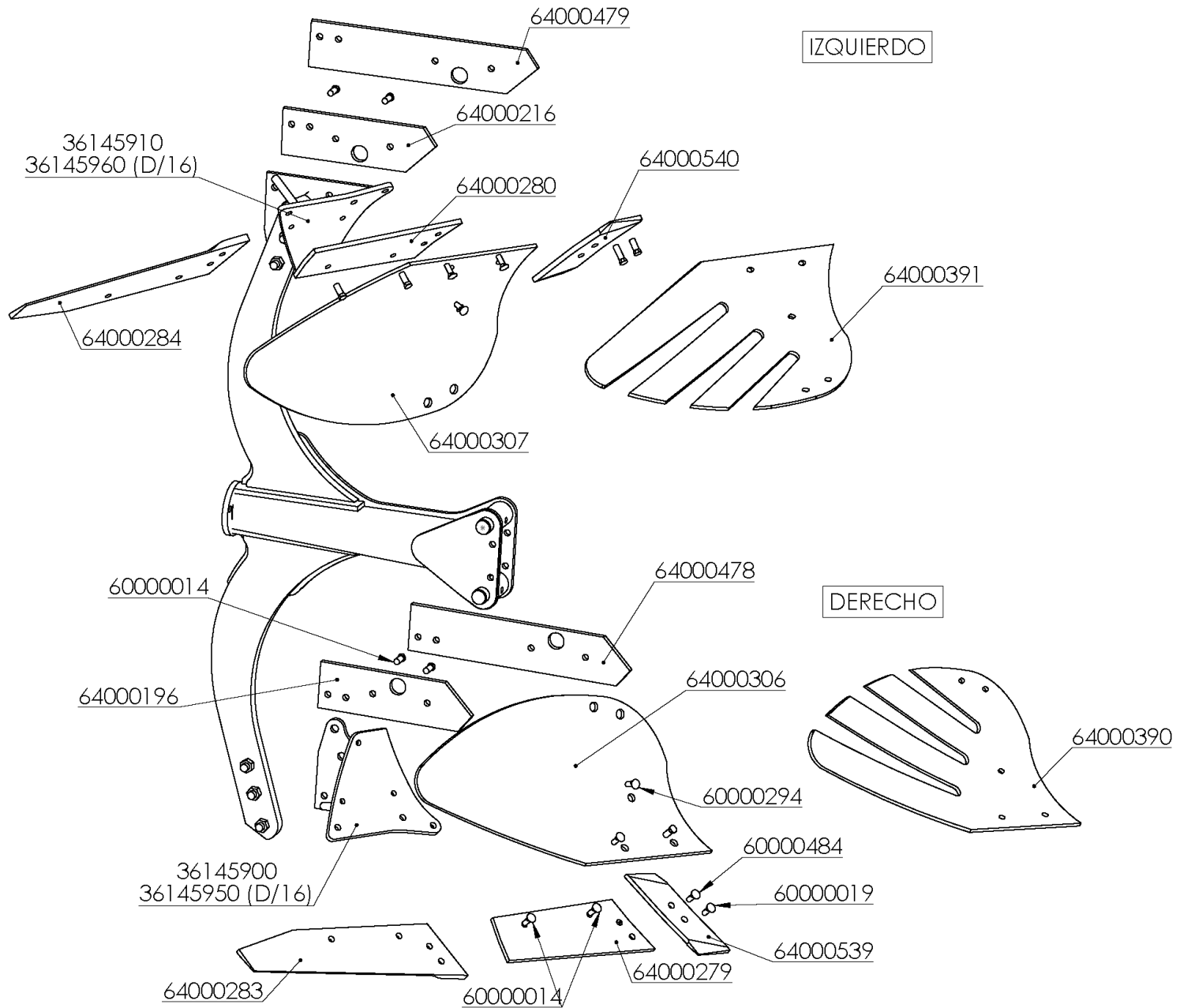


BODY NF

REFERENCIA	DESCRIPCIÓN
37002932	CAMBA NF 25mm.
37002933	PLACA PORTACAMBA EXT.NF
60000067	TORN.EXAG.DIN-931 12* 70 8.8 ZINC.
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.
60000157	TUER.EXAG.DIN-934 12 8.8 ZINC.
60000160	TUER.EXAG.DIN-934 16 8.8 ZINC.
60000207	TORN.EXAG.DIN-931 16* 65 8.8
60000230	TORN.EXAG.C/LAR.20*200 12.9
60000264	TUER.AUTO.DIN-980 16 10.9 ZINC.
60000295	TORN.EXAG.DIN-931 16* 60 12.9
60000459	TORN.EXAG.C/LAR. 20* 70 10.9
61000011	ARAND.DIN-125 20 ZINC.
93073900	SEP.B.P.32/20* 26mm.
94028980	SOP.ARTIC.CAMBA NF
94028982	SOP.ARTIC.CAMBA NF-V



LEFT AND RIGHT HAND BODIES

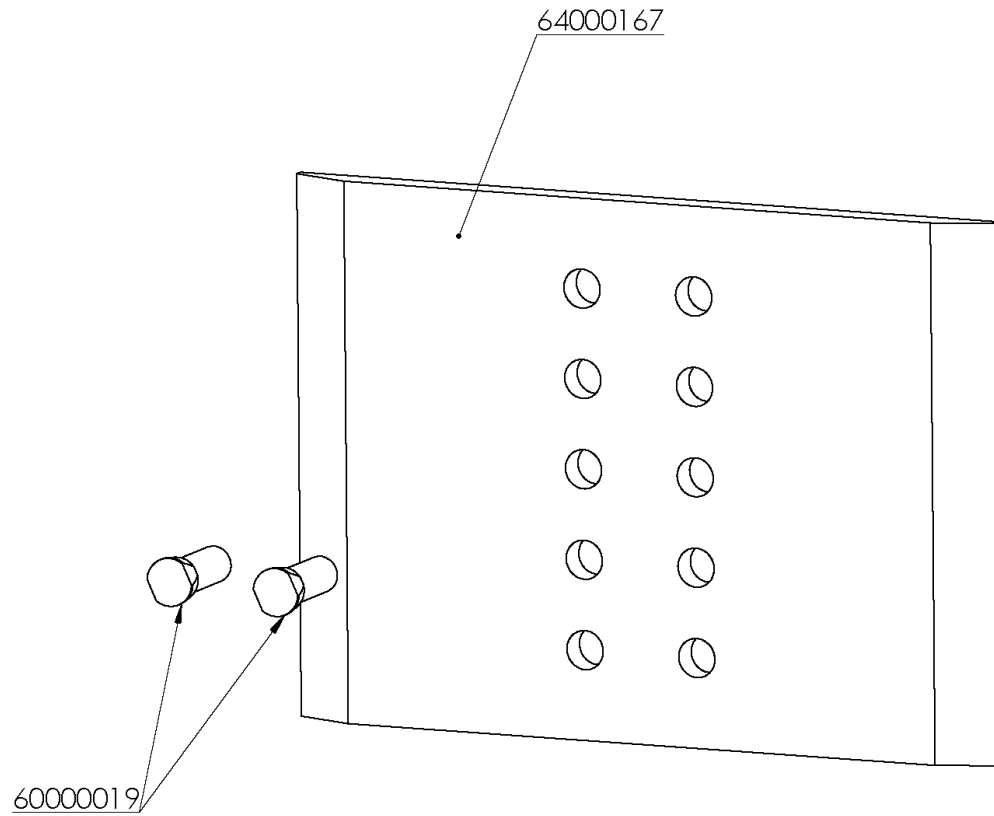


LEFT AND RIGHT HAND BODIES

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
36145900	PORTA-REJAS DCH.1701-A	64000225	VERTEDERA BORO 1701-I-CAVT
36145910	PORTA-REJAS IZQD.1701-A	64000279	REJA 1329C-11-D-CAV
36145950	PORTA-REJAS DCH. 1741	64000280	REJA 1329C-11-I-CAV
36145960	PORTA-REJAS IZQD.1741	64000283	REJA 1329B-11-D-CAV LARGA
60000014	TORN.ARADO C/OV/934 12*33 12.9	64000284	REJA 1329B-11-I-CAV LARGA
60000019	TORN.ARADO C/OV/934 12*36 12.9	64000306	VERTEDERA BORO 1741-D-CAV
60000023	TORN.ARADO C/OV/934 12*42 12.9	64000307	VERTEDERA BORO 1741-I-CAV
60000294	TORN.ARADO 2TET/934 10*30 10.9 ZINC.	64000390	VERTEDERA BORO 1741-D-CAVT
60000484	TORN.ARADO C/OV/934 12*45 12.9	64000391	VERTEDERA BORO 1741-I-CAVT
64000193	VERTEDERA BORO 1701-D-CAV	64000478	COSTANERA MINI LARGA-D
64000196	COSTANERA MINI 2368-D-CAV	64000479	COSTANERA MINI LARGA-I
64000211	VERTEDERA BORO 1701-I-CAV	64000539	PUNTA REJA MINI D (D/14)
64000216	COSTANERA MINI 2368-I-CAV	64000540	PUNTA REJA MINI I (D/14)
64000224	VERTEDERA BORO 1701-D-CAVT		



LANSLIDE EXTENSION

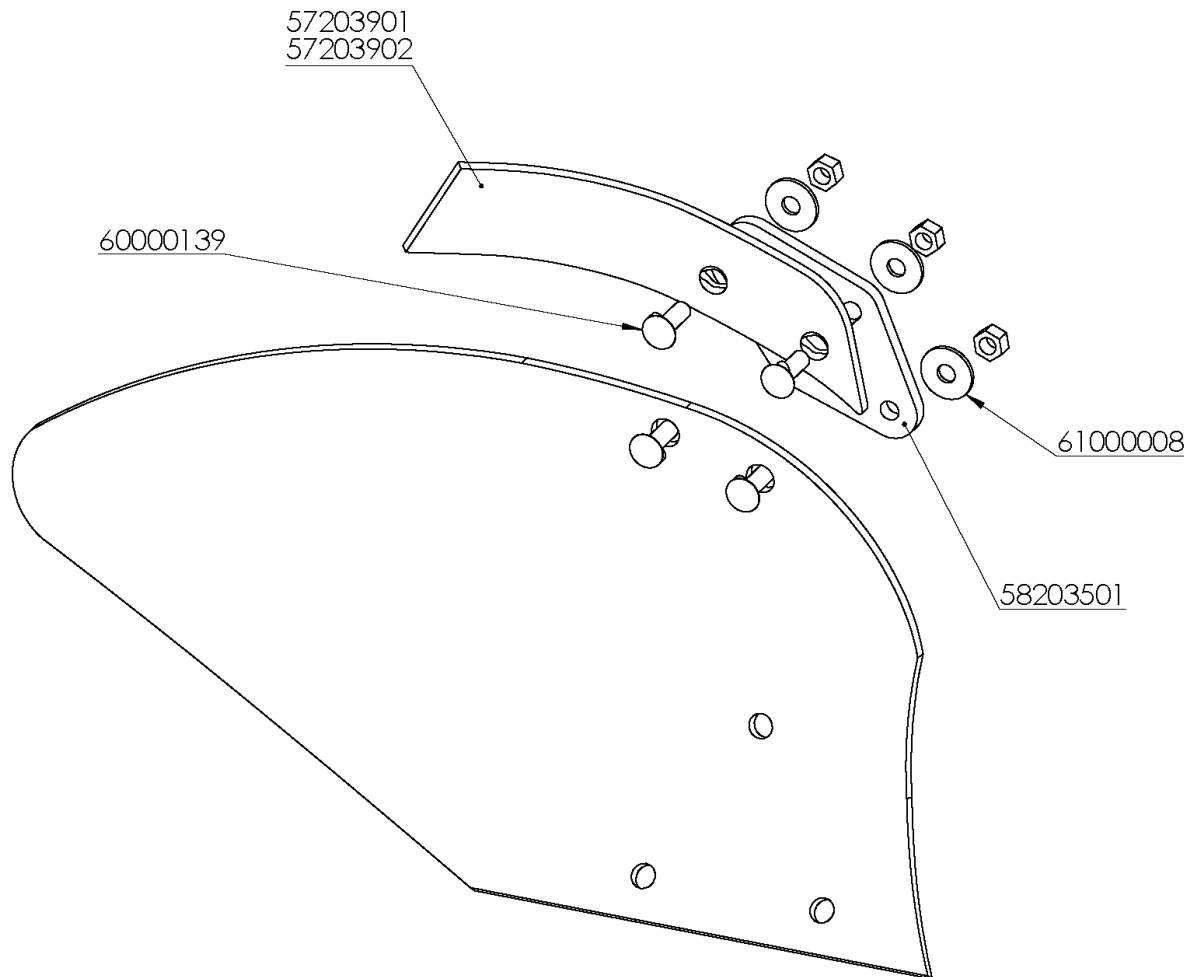


LANSLIDE EXTENSION

REFERENCIA	DESCRIPCIÓN
64000167	TALONERA 2357
60000019	TORN.ARADO C/OV/934 12*36 12.9



TRASHBOARDS

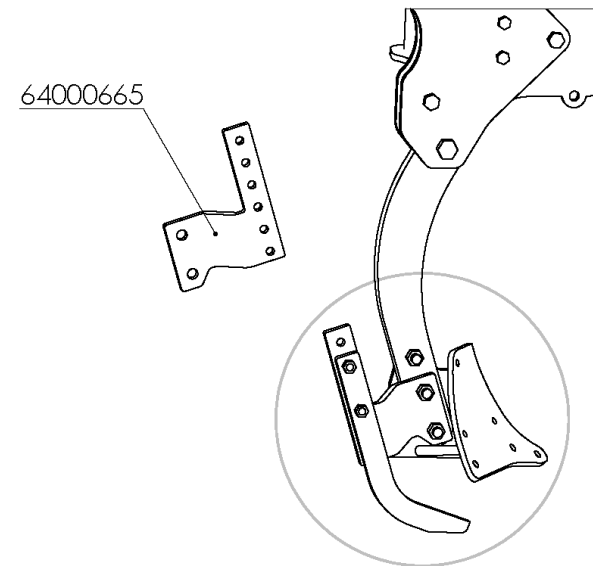
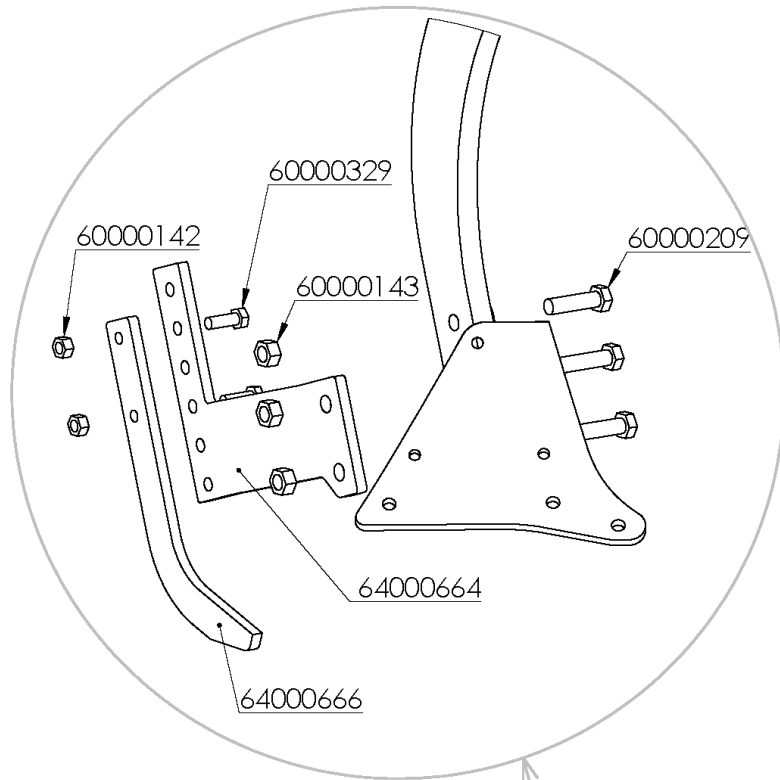


TRASHBOARDS

REFERENCIA	DESCRIPCIÓN
57203901	DEFLECTOR ECO-D
57203902	DEFLECTOR ECO-I
58203501	SOPORTE CUBRE RASTROJO 1741
60000139	TORN.ARADO 2TET/934 12*35 8.8 ZINC.
61000007	ARAND.DIN-9021 10 ZINC.
61000008	ARAND.DIN-125 12 ZINC.



PAN CRACKER TINES

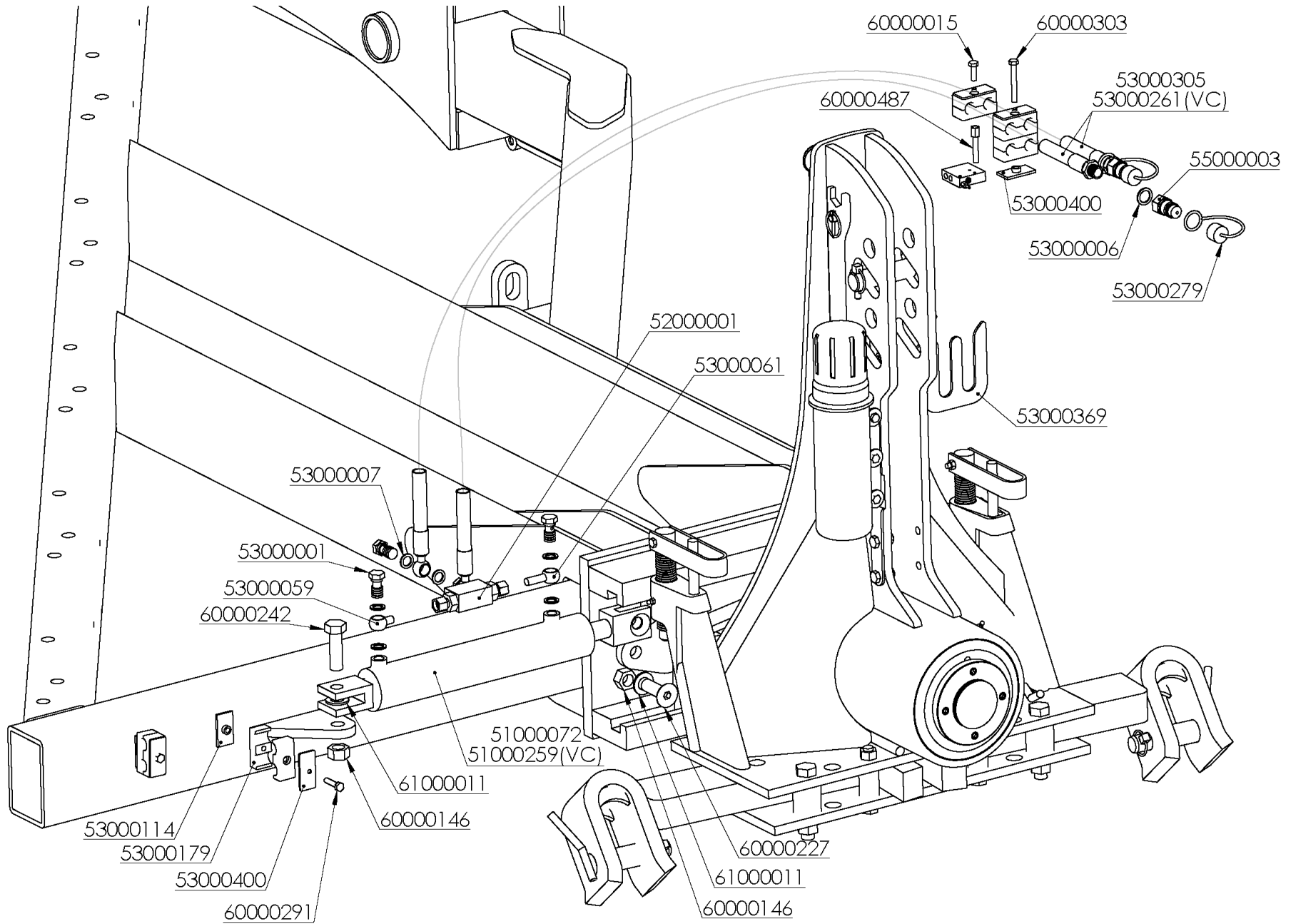


PAN CRACKER TINES

REFERENCIA	DESCRIPCIÓN
64000664	SOPORTE DCHO. FISURADOR MINI
64000665	SOPORTE IZQDO. FISURADOR MINI
64000666	BRAZO FISURADOR MINI
60000209	TORN.EXAG.C/LAR.16* 70 12.9 GEOMET
60000143	TUER.AUTO.DIN-980 16 8.8 ZINC.
60000329	TORN.EXAG.DIN-933 12* 35 10.9 ZINC.
60000142	TUER.AUTO.DIN-980 12 8.8 ZINC.



HYDRAULIC SHIFTING

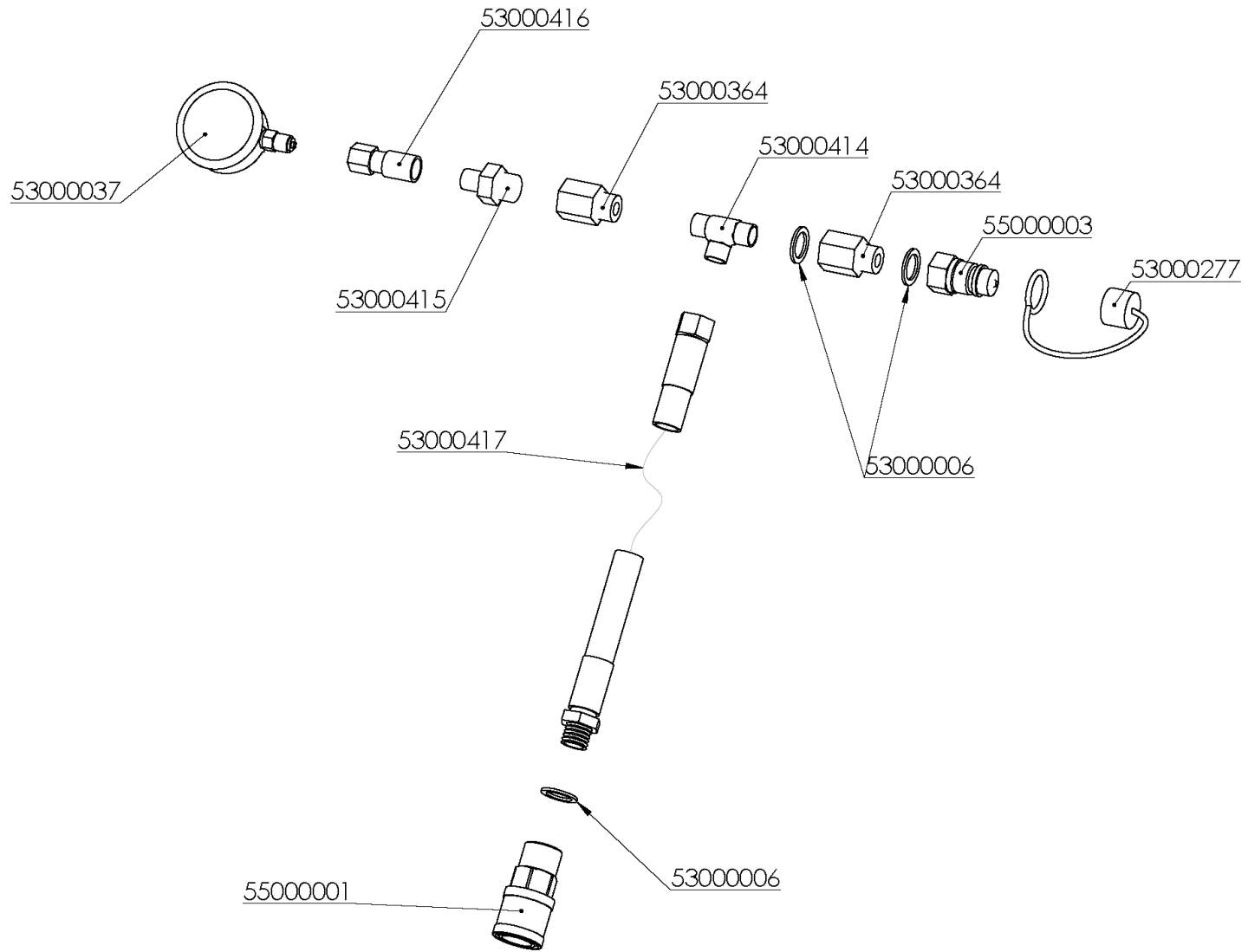


HYDRAULIC SHIFTING

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
51000259	CILIND.DESPL.C/HORQ.Ø20 40-60-490	53000400	PLACA RFZO.AB.DOBLE 15/18
51000072	CILIND.DESPL.C/HORQ.50/30/215	55000003	ADAPTADOR E.R.FASTER 1/2" 30410108
52000001	VALV.BLOQUEO ZINC.12 VBD38	60000015	TORN.EXAG.DIN-933 8* 25 8.8 ZINC.
53000001	TORNILLO SIMPLE 3/8 4022	60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.
53000006	JUNTA METAL/GOMA 1/2" 11603	60000201	TORN.EXAG.DIN-931 8* 45 8.8 ZINC.
53000007	JUNTA METAL/GOMA 3/8" 11602	60000227	TORN.ALLEN DIN-7991 20* 60 12.9
53000059	ESFERICO 3/8" TUBO 12mm.LG=40 4002E	60000242	TORN.EXAG.C/LAR.20* 65 8.8 ZINC.
53000061	ESFERICO 3/8" TUBO 12mm.LG=205 4002E-205	60000303	TORN.EXAG.DIN-931 8* 65 8.8 ZINC.
53000114	PLACA SOLDAR AB.DOBLE 19 SP3D	60000487	TORN.APILABLE SERIE D M-8x60 AF5D
53000179	ABRAZ.DOBLE D=15mm. 215-15PP	61000011	ARAND.DIN-125 20 ZINC.
53000279	PROTECTOR E.R.MACHO 1/2" VERDE 5029-4PG	53000261	LATIG.R2-1/4*4000mm.MF-1/2/OR-3/8
53000305	LATIG.R2-1/4*3800mm.MF-1/2/OR-3/8	60000291	TORN.EXAG.DIN-931/933 8* 40 8.8 ZINC.
53000369	SOPORTE LATIG.TORRETA 2 HUECOS ZINC.		



CHARGING HOSE



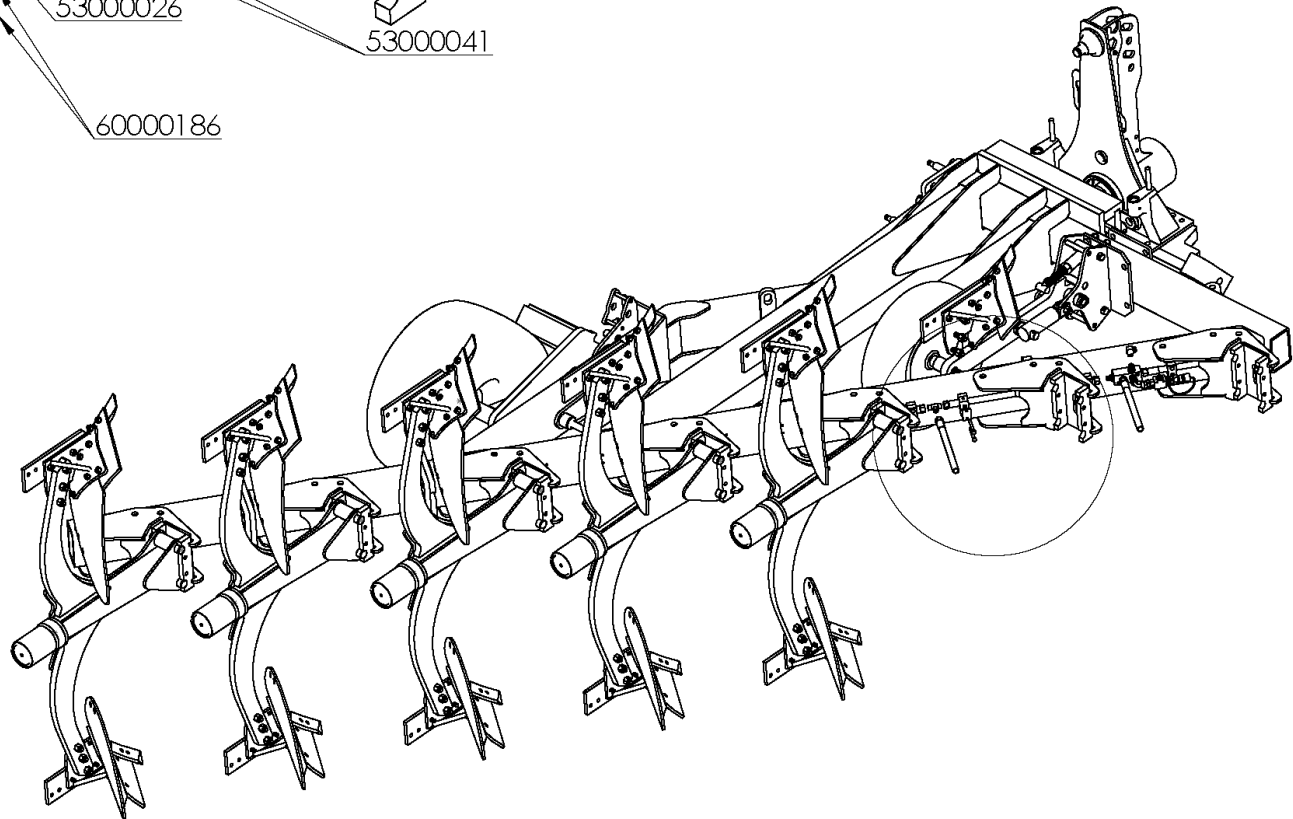
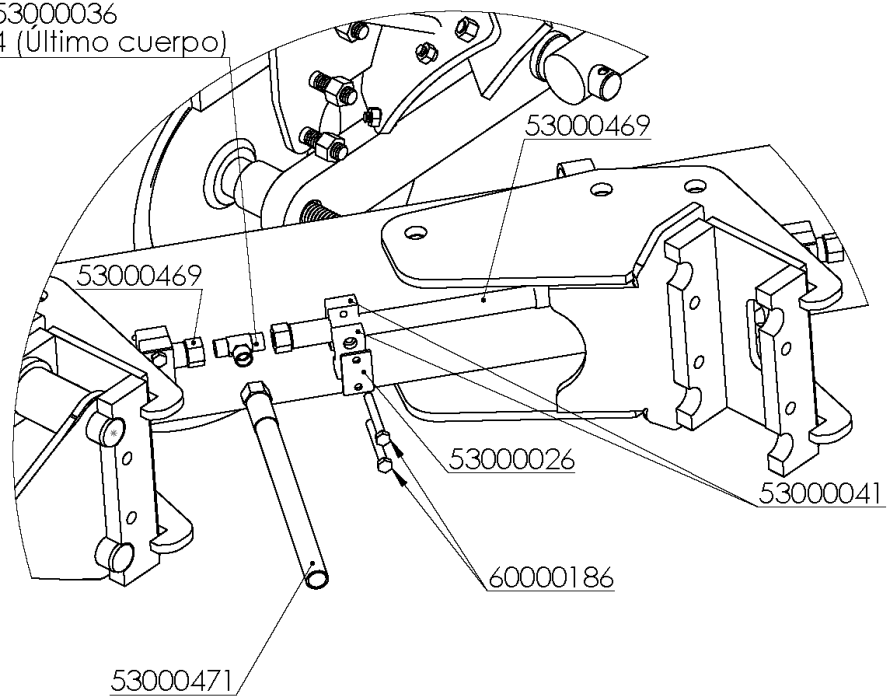
CHARGING HOSE

REFERENCIA	DESCRIPCIÓN
53000006	JUNTA METAL/GOMA 1/2" 11603
53000037	MANOM.GLIC.63 0-315 (MOD.OVLAC) 263R0-315
53000277	PROTECTOR E.R.MACHO 1/2" AZUL 5029-4PB
53000364	UNION MACHO/HEMBRA 1/2 GAS LEK-S-816-21-50
53000414	TE M/M 1/2 GAS (CUADRADO) LEK-S-955-21
53000415	TOMA PRESION 1/2 GAS GLI-MH191608
53000416	ADAP.MANOMETRO 16*200 1/4G GLI-MH181604
53000417	LATIG.R2-3/8*2300mm.MF-1/2/TL-1/2
55000001	CUERPO E.R.CETOP 1/2"
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108



HYDRAULIC SYSTEM "T"

53000036
53000024 (Último cuerpo)

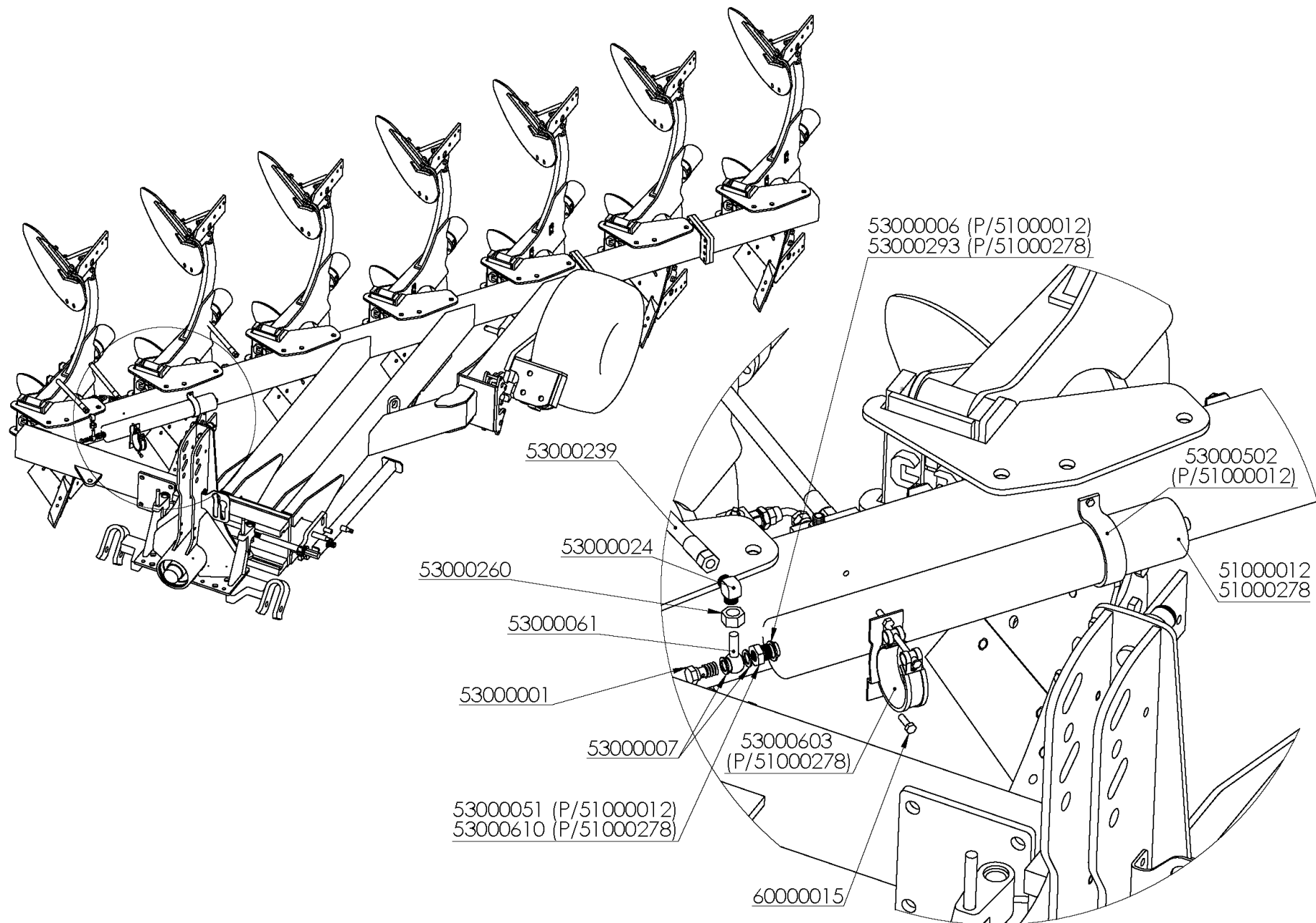


HYDRAULIC SYSTEM "T"

REFERENCIA	DESCRIPCIÓN
53000024	CODO TUBO/TUBO 12mm. W12-L
53000026	PLACA RFZO.AB.SIMPLE 20 DP3
53000036	TE UNION IGUAL 12 T12-L
53000041	ABRAZ.SIMPLE D=19mm. 319PP
53000469	LATIG.R2-3/8* 610mm.TL-18/TL-18
53000471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
60000186	TORN.EXAG.DIN-931 6* 50 8.8 ZINC.



HYDRAULIC SYSTEM ACCUMULATOR

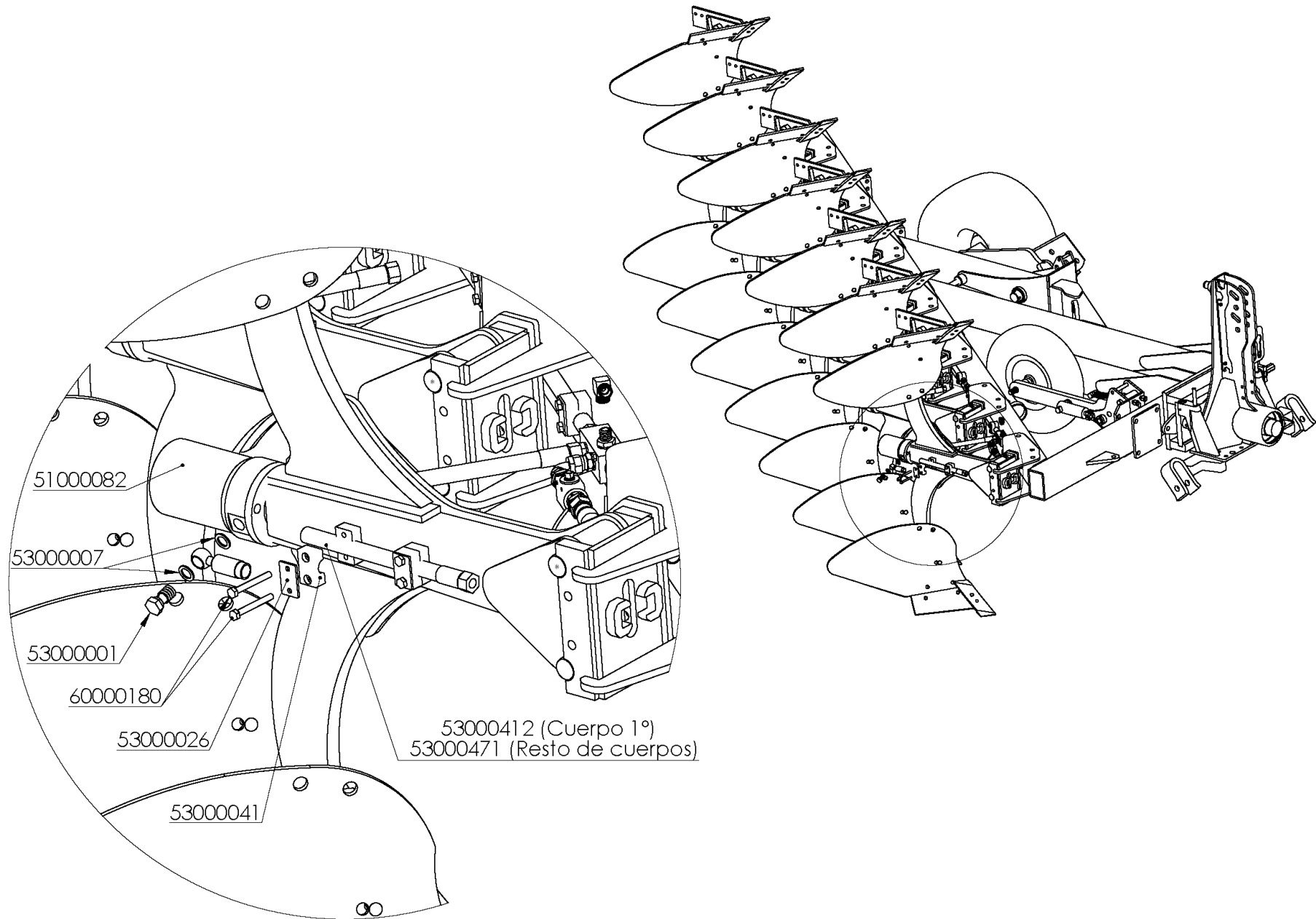


HYDRAULIC SYSTEM ACCUMULATOR

REFERENCIA	DESCRIPCIÓN
51000012	ACUMULADOR PISTON PO20A34N1-AC RAL-6029
51000278	ACUMULADOR 2 L. SK280-2/3218U-280AAE-VB-08-120 RAL 7047
53000001	TORNILLO SIMPLE 3/8 4022
53000006	JUNTA METAL/GOMA 1/2" 11603
53000007	JUNTA METAL/GOMA 3/8" 11602
53000024	CODO TUBO/TUBO 12mm. W12-L
53000051	REDUCTOR 1/2-3/8 4171
53000061	ESFERICO 3/8" TUBO 12mm.L=200
53000239	LATIG.R2-3/8* 420mm.TL-3/8/TL-18
53000260	TUERCA M18*1,5 C/BICONO D12L M12-L PSR12LX
53000293	JUNTA METAL/GOMA 3/4" 11604
53000502	ABRAZ.ACUMULADOR
53000603	ABRAZ.ACUM.SK280-3L. PISTON 80MM. HRGKSM 0 R 92-95/96 ST
53000610	REDUCCION MACHO-HEMBRA 3/4"-3/8" ROSCA BSP 4162
60000015	TORN.EXAG.DIN-933 8* 25 8.8 ZINC.



HYDRAULIC SYSTEM ARM

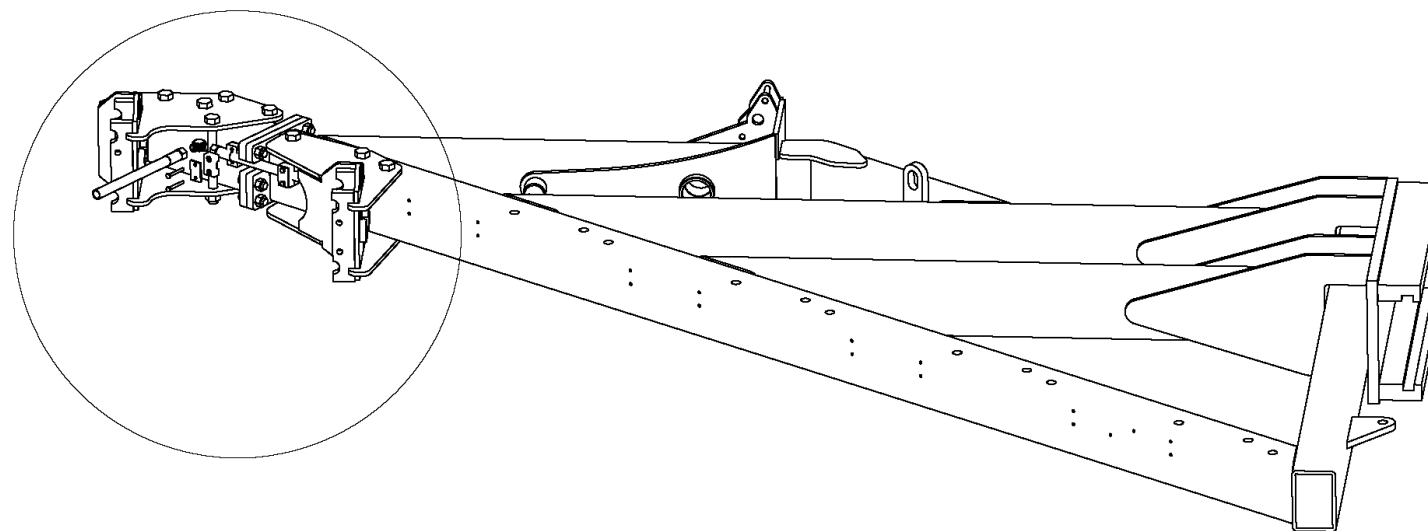
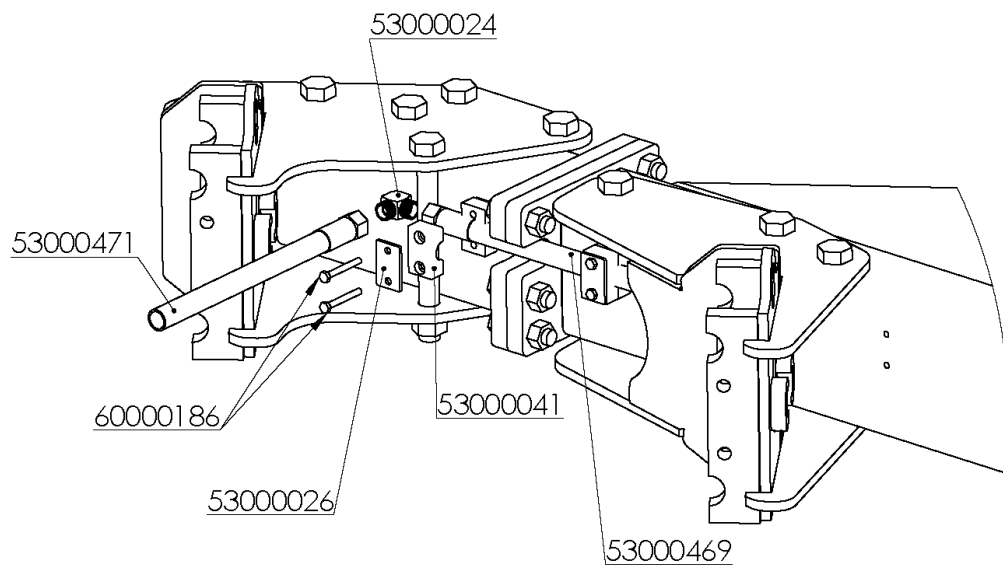


HYDRAULIC SYSTEM ARM

REFERENCIA	DESCRIPCIÓN
5100082	CILIND.TRACCION 90/36/60 AR
5300001	TORNILLO SIMPLE 3/8
5300007	JUNTA METAL/GOMA 3/8"
5300026	PLACA RFZO.AB.SIMPLE 20 DP3
5300041	ABRAZ.SIMPLE D=19mm. 319PP
5300412	LATIG.R2-3/8*1370mm.OR-3/8/TL-18
5300471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
6000180	TORN.EXAG.DIN-931 6* 40 8.8 ZINC.



HYDRAULIC SYSTEM MODULE

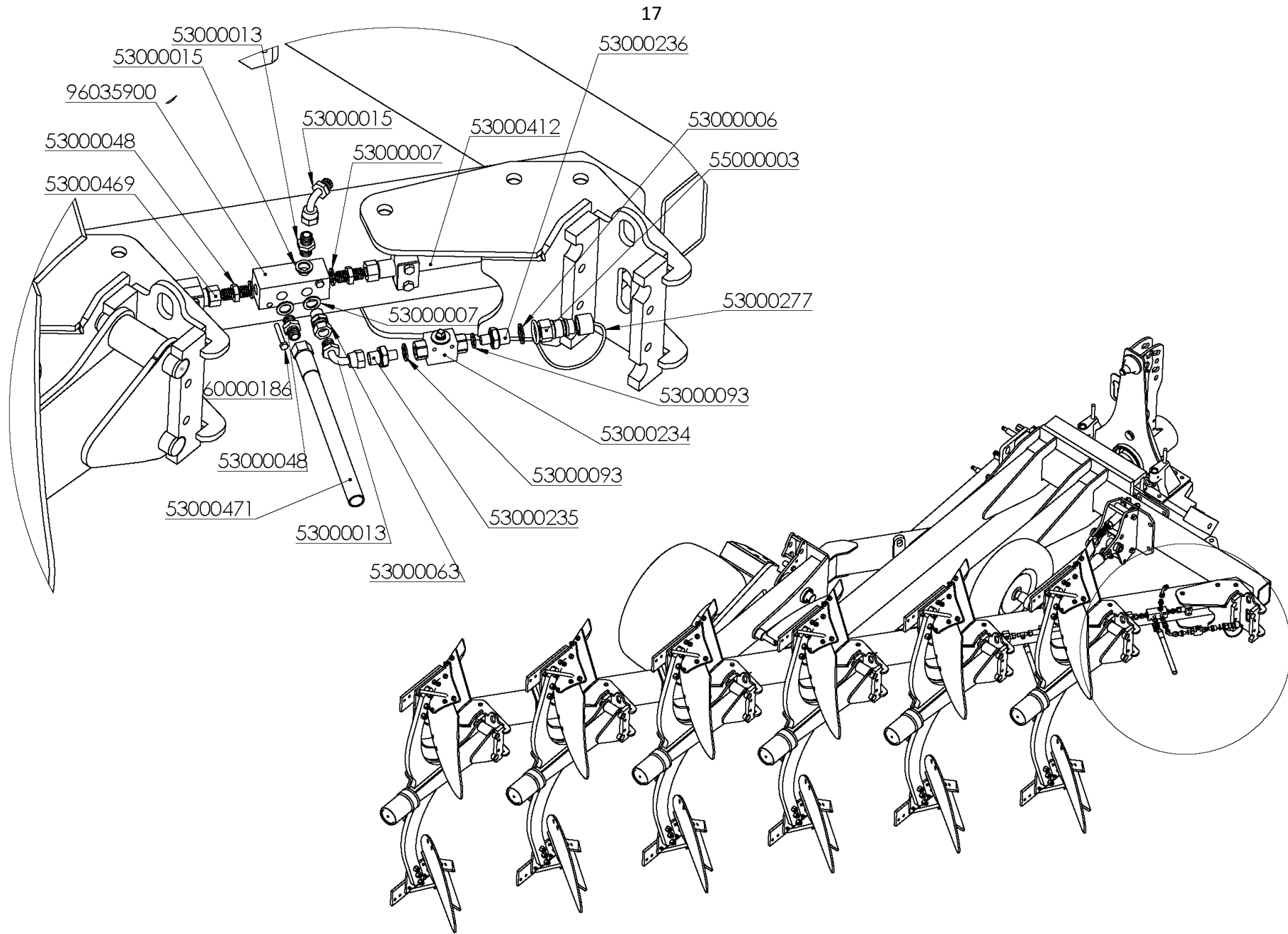


HYDRAULIC SYSTEM MODULE

REFERENCIA	DESCRIPCIÓN
53000024	CODO TUBO/TUBO 12mm. W12-L
53000026	PLACA RFZO.AB.SIMPLE 20 DP3
53000041	ABRAZ.SIMPLE D=19mm. 319PP
53000469	LATIG.R2-3/8* 610mm.TL-18/TL-18
53000471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
60000186	TORN.EXAG.DIN-931 6* 50 8.8 ZINC.



HYDRAULIC SYSTEM HYDRAULIC CONNECTION

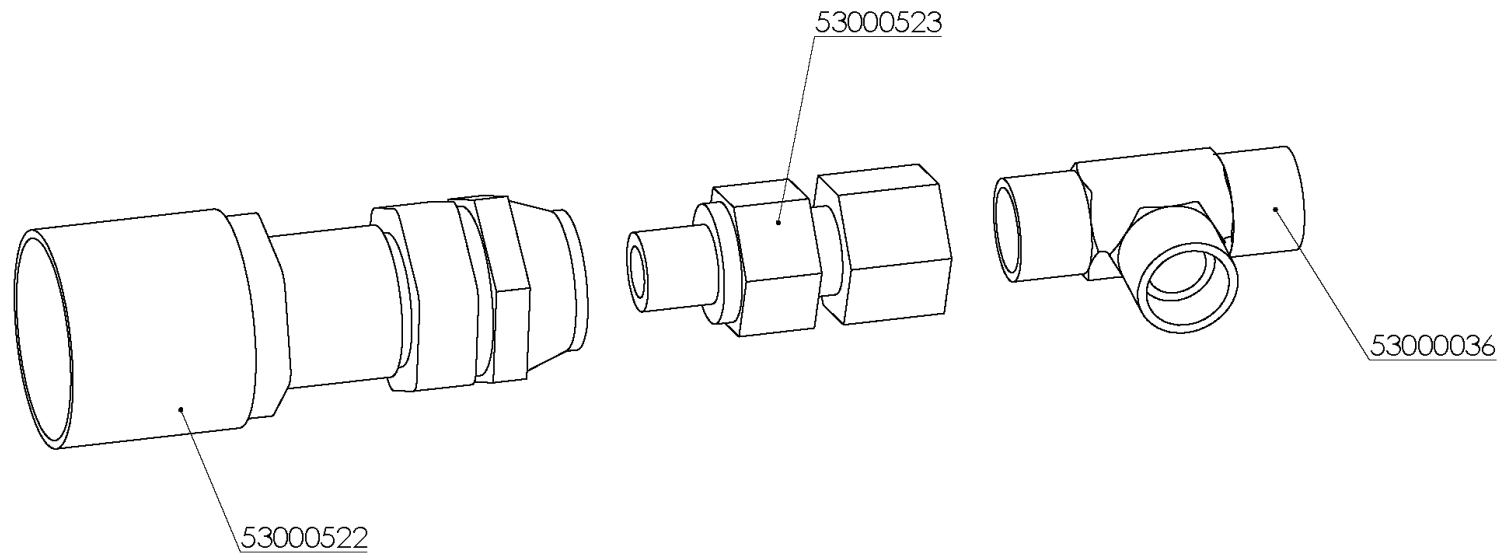


HYDRAULIC SYSTEM HYDRAULIC CONNECTION

REFERENCIA	DESCRIPCIÓN
53000006	JUNTA METAL/GOMA 1/2" 11603
53000007	JUNTA METAL/GOMA 3/8" 11602
53000013	CODO 90° M/H-3/8" 4292
53000015	UNION MACHO 3/8 4062
53000048	UNION MACHO BSP 3/8-12 GE12-L
53000063	ADAPTADOR M/H LOCA 3/8 4312
53000093	JUNTA METAL GOMA 1/4 11601
53000234	VALV.ESFERA 2/2 1/4 GE2 DN6
53000235	UNION REDUCCION 1/4-3/8 4071
53000236	UNION REDUCCION 1/4-1/2 4371
53000277	PROTECTOR E.R.MACHO 1/2" AZUL 5029-4PB
53000412	LATIG.R2-3/8*1370mm.OR-3/8/TL-18
53000469	LATIG.R2-3/8* 610mm.TL-18/TL-18
53000471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108
60000186	TORN.EXAG.DIN-931 6* 50 8.8 ZINC.
96035900	SOP.TOMAS HIDRAULICAS



QUICK COUPLING BASE NH

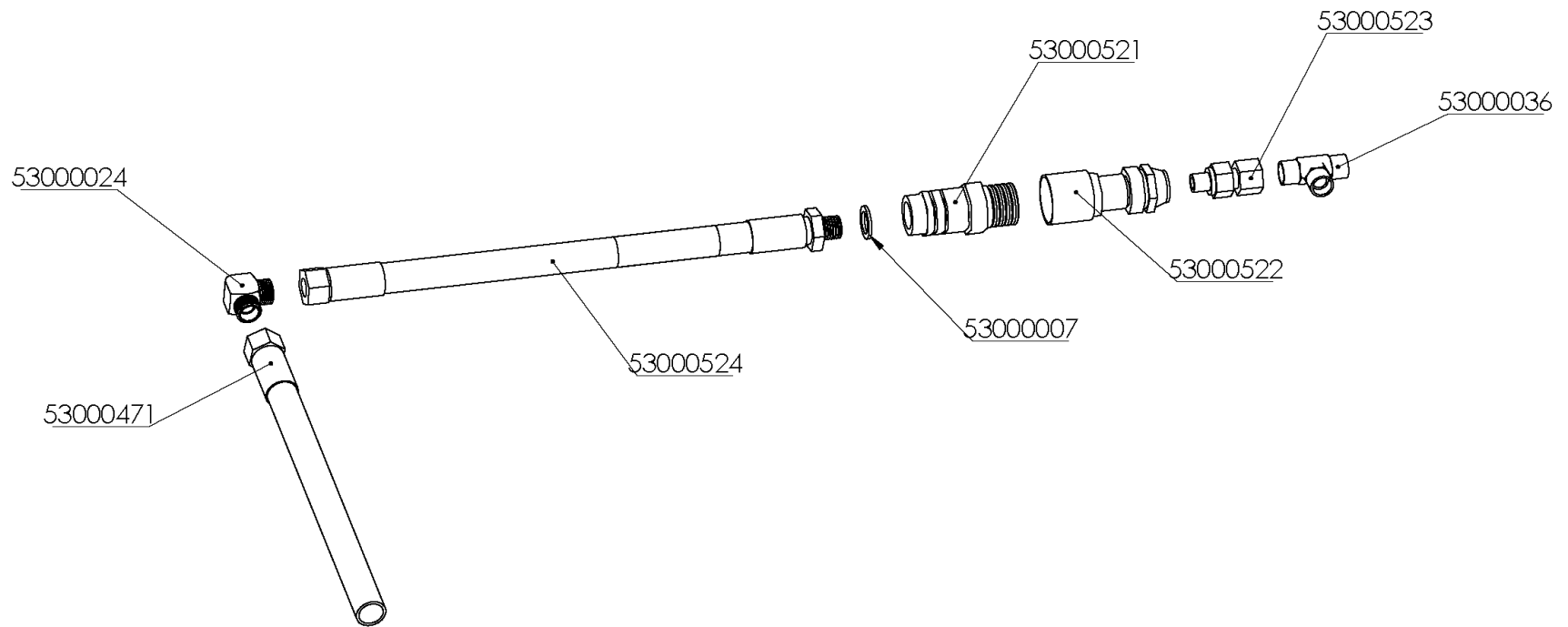


QUICK COUPLING BASE NH

REFERENCIA	DESCRIPCIÓN
53000036	TE UNION IGUAL 12 T12-L
53000522	CONECTOR ROSCADO 3/8 HEMBRA LEK-PVT4-3/8F
53000523	MACHO GAS 3/8 TUERCA LOCA 12 VG-TN126AGG12L



QUICK COUPLING END MODULE NH

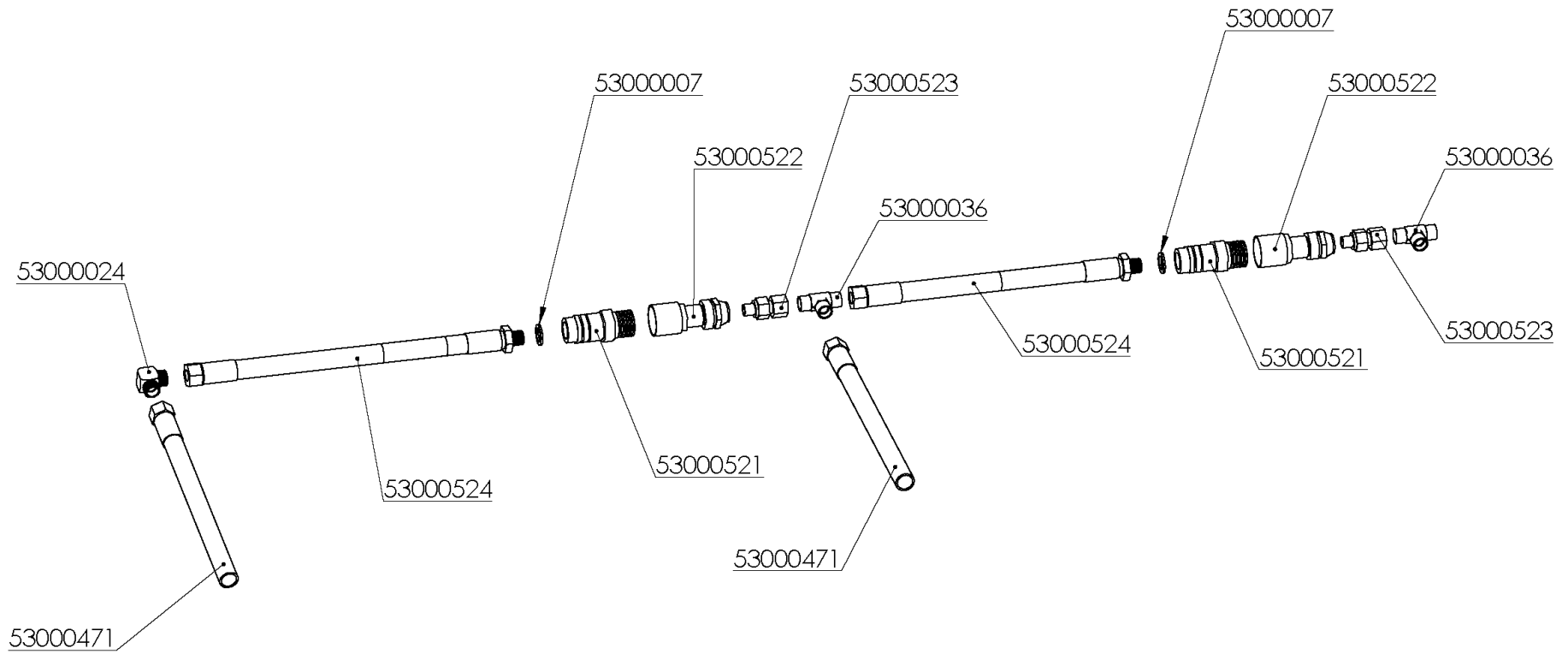


QUICK COUPLING END MODULE NH

REFERENCIA	DESCRIPCIÓN
53000007	JUNTA METAL/GOMA 3/8" 11602
53000024	CODO TUBO/TUBO 12mm. W12-L
53000036	TE UNION IGUAL 12 T12-L
53000471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
53000521	CONECTOR ROSCADO 3/8 MACHO LEK-PVT4-3/8M
53000522	CONECTOR ROSCADO 3/8 HEMBRA LEK-PVT4-3/8F
53000523	MACHO GAS 3/8 TUERCA LOCA 12 VG-TN126AGG12L
53000524	LATIG.R2-3/8* 480mm.MF-3/8/TL-18



QUICK COUPLING INTERMEDIATE AND FINAL MODULE NH

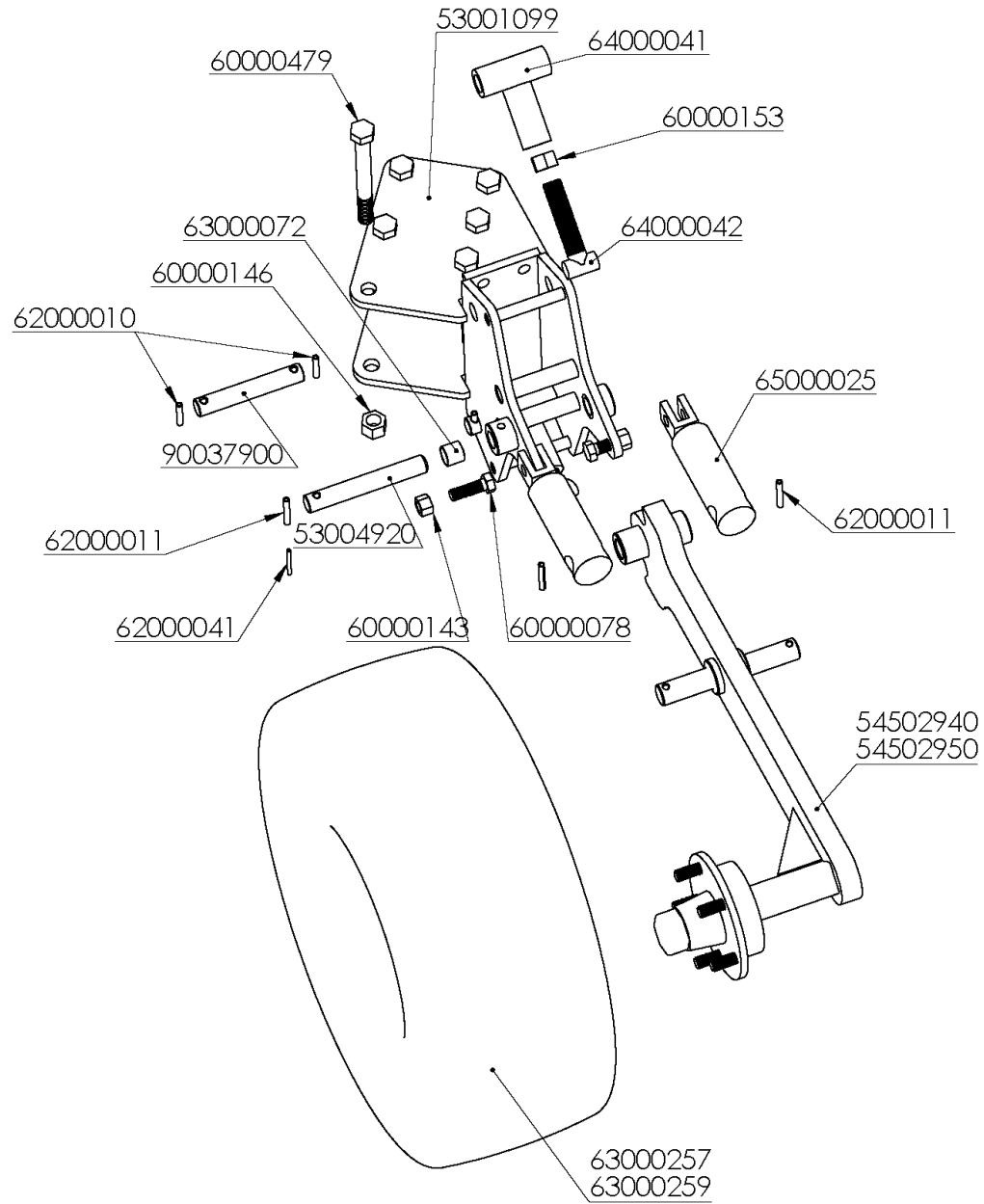


QUICK COUPLING INTERMEDIATE AND FINAL MODULE NH

REFERENCIA	DESCRIPCIÓN
53000007	JUNTA METAL/GOMA 3/8" 11602
53000024	CODO TUBO/TUBO 12mm. W12-L
53000036	TE UNION IGUAL 12 T12-L
53000471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
53000521	CONECTOR ROSCADO 3/8 MACHO LEK-PVT4-3/8M
53000522	CONECTOR ROSCADO 3/8 HEMBRA LEK-PVT4-3/8F
53000523	MACHO GAS 3/8 TUERCA LOCA 12 VG-TN126AGG12L
53000524	LATIG.R2-3/8* 480mm.MF-3/8/TL-18



INTERNAL CONTROL WHEEL NH

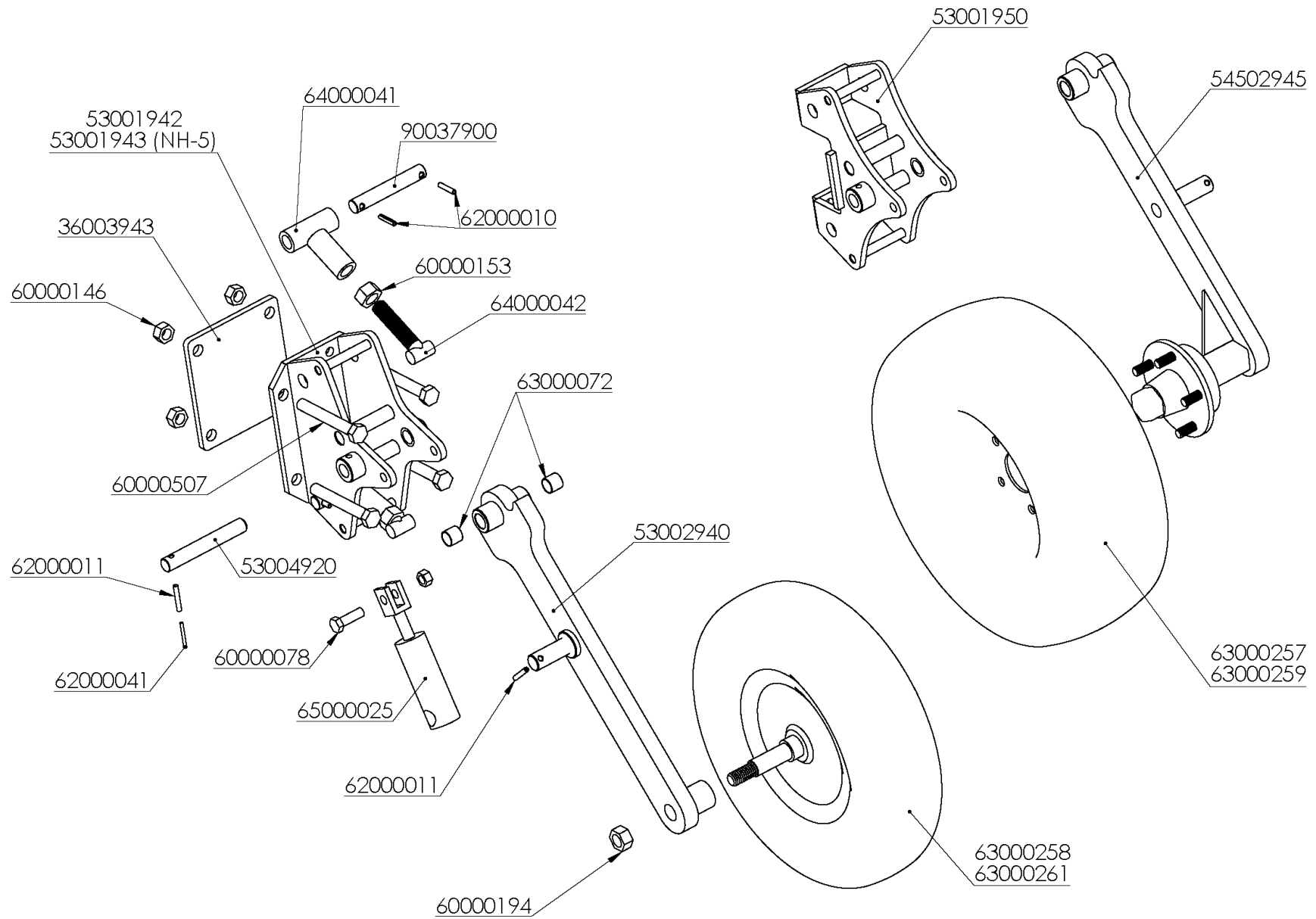


INTERNAL CONTROL WHEEL NH

REFERENCIA	DESCRIPCIÓN
65000025	AMORTIGUADOR C/HORQ. 20/50/ 39
54602950	BRAZO RDA.NEUM. ARADO 6 Y 7 REV.(D/04)
54502940	BRAZO RDA.NEUM.(608*205) REV.(D/04)
90037900	BULON D=25*154mm.TOPE RDA.
53004920	BULON D=25*175mm.BRAZO RDA.(D/03)
63000072	CASQ.FRICCION PAP 2525 P10
62000041	PASADOR ELAST.DIN-1481 5* 50
62000010	PASADOR ELAST.DIN-1481 8* 40 ZINC.
62000011	PASADOR ELAST.DIN-1481 8* 50 ZINC.
63000215	R.N.C/ATAQUE 320/60-12 132A8 421TT
53001999	SOP.RDA.CONTROL INTERNA NH
64000041	SOP.TOPE MOVIL ZINC.
64000042	TOPE MOVIL TRATADO + ZINC.
60000479	TORN.EXAG.DIN-931 20*200 8.8 ZINC.
60000078	TORN.EXAG.DIN-933 16* 50 8.8 ZINC.
60000143	TUER.AUTO.DIN-980 16 8.8 ZINC.
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.
60000153	TUER.EXAG.DIN-934 1"SAE 8.8 ZINC.
63000257	R.N.C/ATAQUE 200/60*14,5"-10PR
63000259	R.N.C/ATAQUE 250/65*14,5"-12PR RAL-7047



FRONT PNEUMATIC WHEEL NH

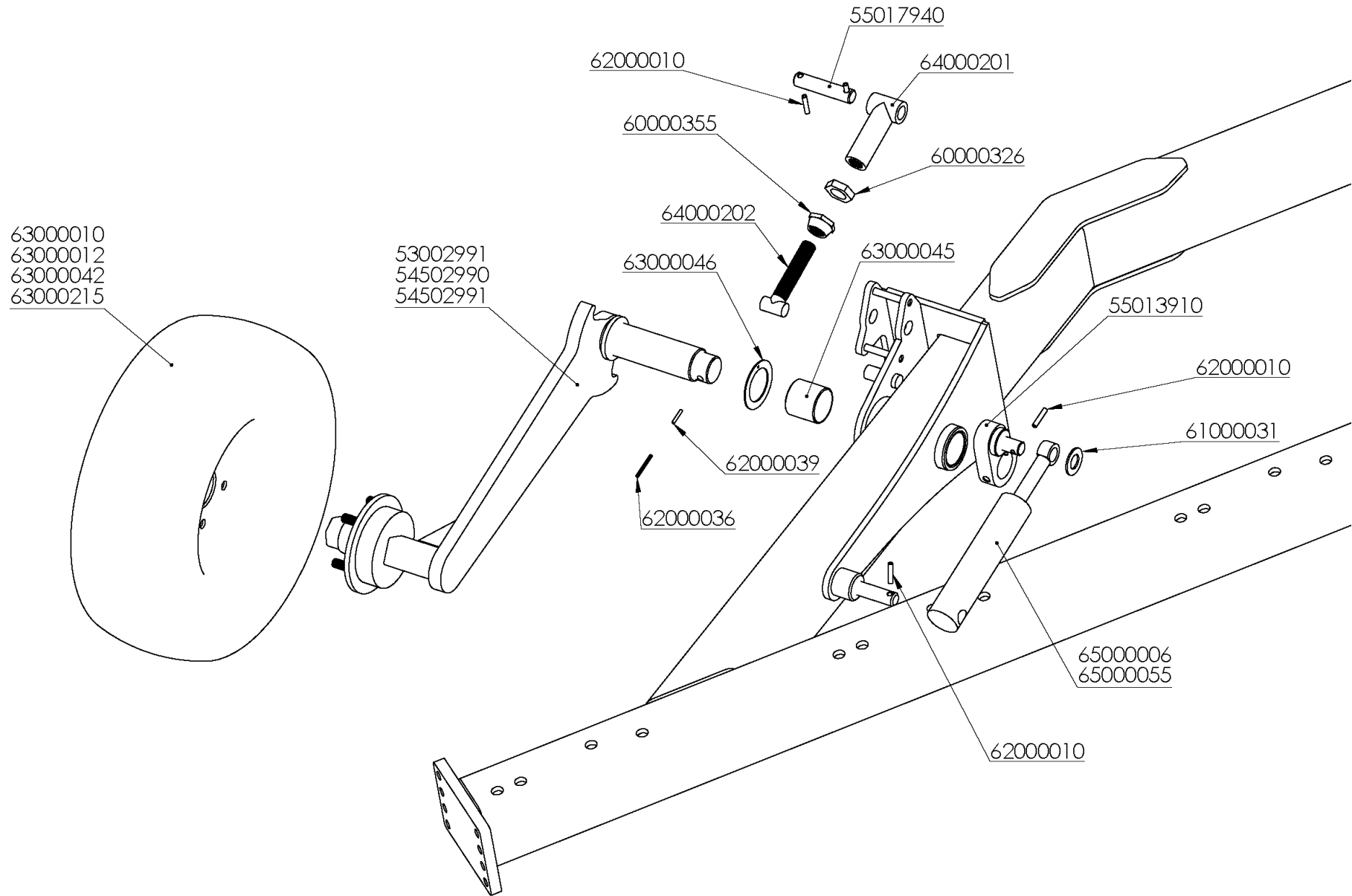


FRONT PNEUMATIC WHEEL NH

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
36003943	PLACA 200*221*12mm.AMARRE RDA.NH	60000507	TORN.EXAG.DIN-931 20*150 8.8 ZINC.
53001942	SOP.RDA.CONTROL DELANTERA NH	62000010	PASADOR ELAST.DIN-1481 8* 40 ZINC.
53001943	SOP.RDA.CONTROL DELANTERA NH-5	62000011	PASADOR ELAST.DIN-1481 8* 50 ZINC.
53001950	SOP.RDA.CONTROL DELANTERA NH (ADELANTADA) (608*205)	62000041	PASADOR ELAST.DIN-1481 5* 50
53002940	BRAZO RDA.NEUM.REV.(D/04)	63000072	CASQ.FRICCION PAP 2525 P10
53004920	BULON D=25*175mm.BRAZO RDA.(D/03)	63000257	R.N.C/ATAQUE 200/60*14,5"-10PR
54502945	BRAZO RDA.NEUM.(608*205) DELANTERA MINI-NH	63000258	R.N.C/EJE 6.00*9"-10PR V50 RAL-7047
60000076	TORN.EXAG.DIN-933 16* 40 8.8 ZINC.	63000259	R.N.C/ATAQUE 250/65*14,5"-12PR RAL-7047
60000078	TORN.EXAG.DIN-933 16* 50 8.8 ZINC.	63000261	R.N.C/EJE 6.90/6.00*9"-10PR PL801 RAL-7047
60000143	TUER.AUTO.DIN-980 16 8.8 ZINC.	64000041	SOP.TOPE MOVIL ZINC.
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.	64000042	TOPE MOVIL TRATADO + ZINC.
60000153	TUER.EXAG.DIN-934 1"SAE 8.8 ZINC.	65000025	AMORTIGUADOR C/HORQ. 20/50/ 39
60000160	TUER.EXAG.DIN-934 16 8.8 ZINC.	90037900	BULON D=25*154mm.TOPE RDA.
60000194	TUER.AUTO.DIN-985 24/200 8.8		



REAR PNEUMATIC WHEEL NH

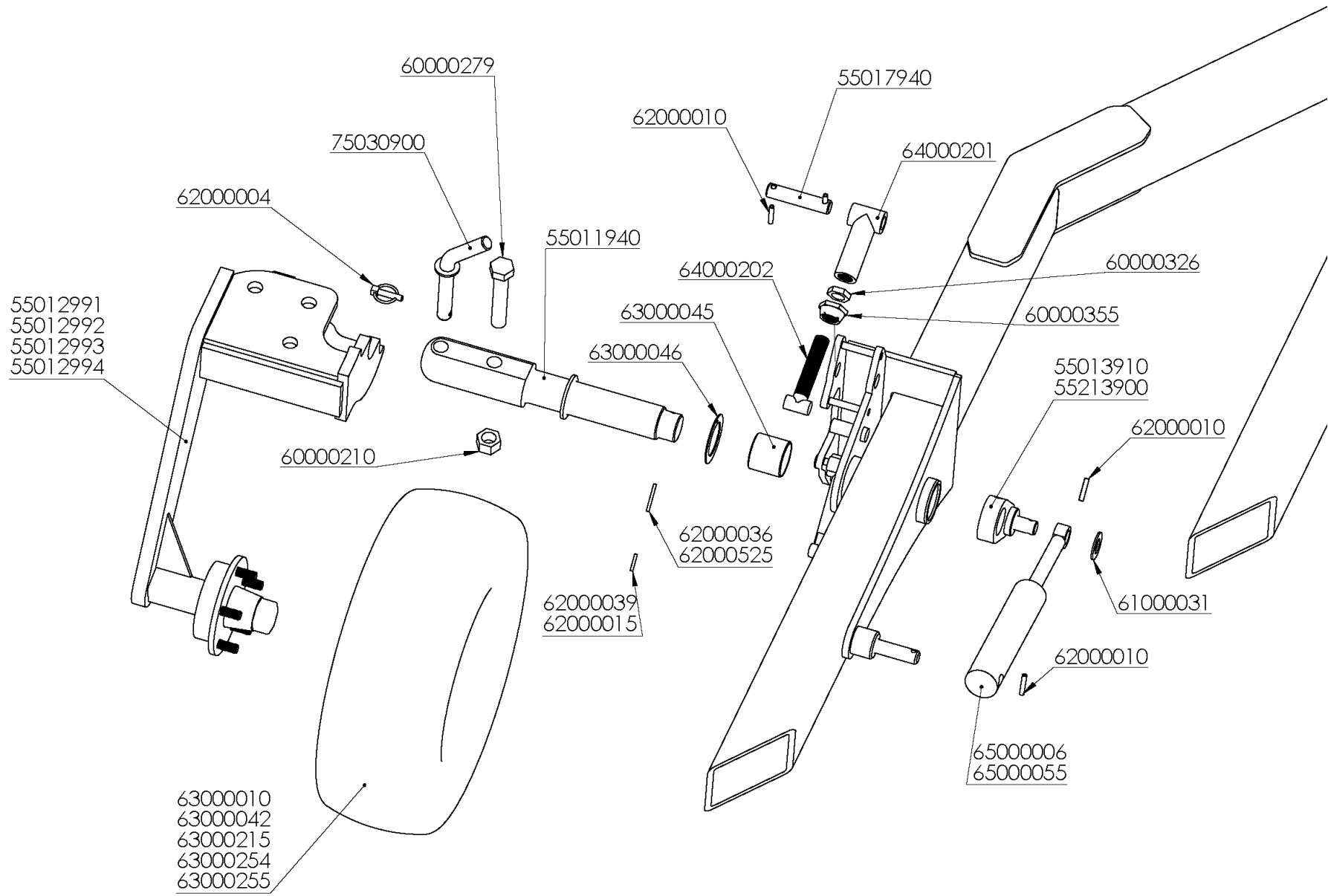


REAR PNEUMATIC WHEEL NH

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
53002991	BRAZO RDA.MET./NEUM.NH	63000010	R.N.C/ATAQUE 200/60*14,5"-10PR RAL-6029
54502990	BRAZO RDA.NEUM.(608*205/685*260/686*304) MR-8/NH	63000012	R.N.C/EJE 6.00*9"-10PR V50 RAL-6029
54502991	BRAZO RDA.NEUM.(608*205) NH	63000042	R.N.C/ATAQUE 250/65*14,5"-12PR RAL-6029
55013910	EXCENTRICA RDA.C/T (D/02)	63000045	CASQ.FRICCION PAP 6060 P10
55017940	BULON D=25*116mm.TOPE RDA.C/T	63000046	DISCO FRICCION PAW 62 P10
60000326	TUER.BAJA DIN-936 30/200 8.8 ZINC.	63000215	R.N.C/ATAQUE 320/60-12 132A8 421TT
60000355	TUER.TOPE VOLTEO 30/200 8.8 ZINC.	64000201	SOP.TOPE MOVIL RDA.C/T ZINC.
61000031	ARAND.STANDAR S/BISEL CL-26 ZINC.(50x27x3)	64000202	TOPE MOVIL RDA.C/T TRATADO + ZINC.
62000010	PASADOR ELAST.DIN-1481 8* 40 ZINC.	65000006	AMORTIGUADOR C/ROT. 25/50/145
62000036	PASADOR ELAST.DIN-1481 12* 80 ZINC.	65000055	AMORTIGUADOR C/ROT. 25/60/142
62000039	PASADOR ELAST.DIN-1481 7* 80 ZINC.		



REAR "C-T" CONTROL & TRANSPORT WHEEL NH

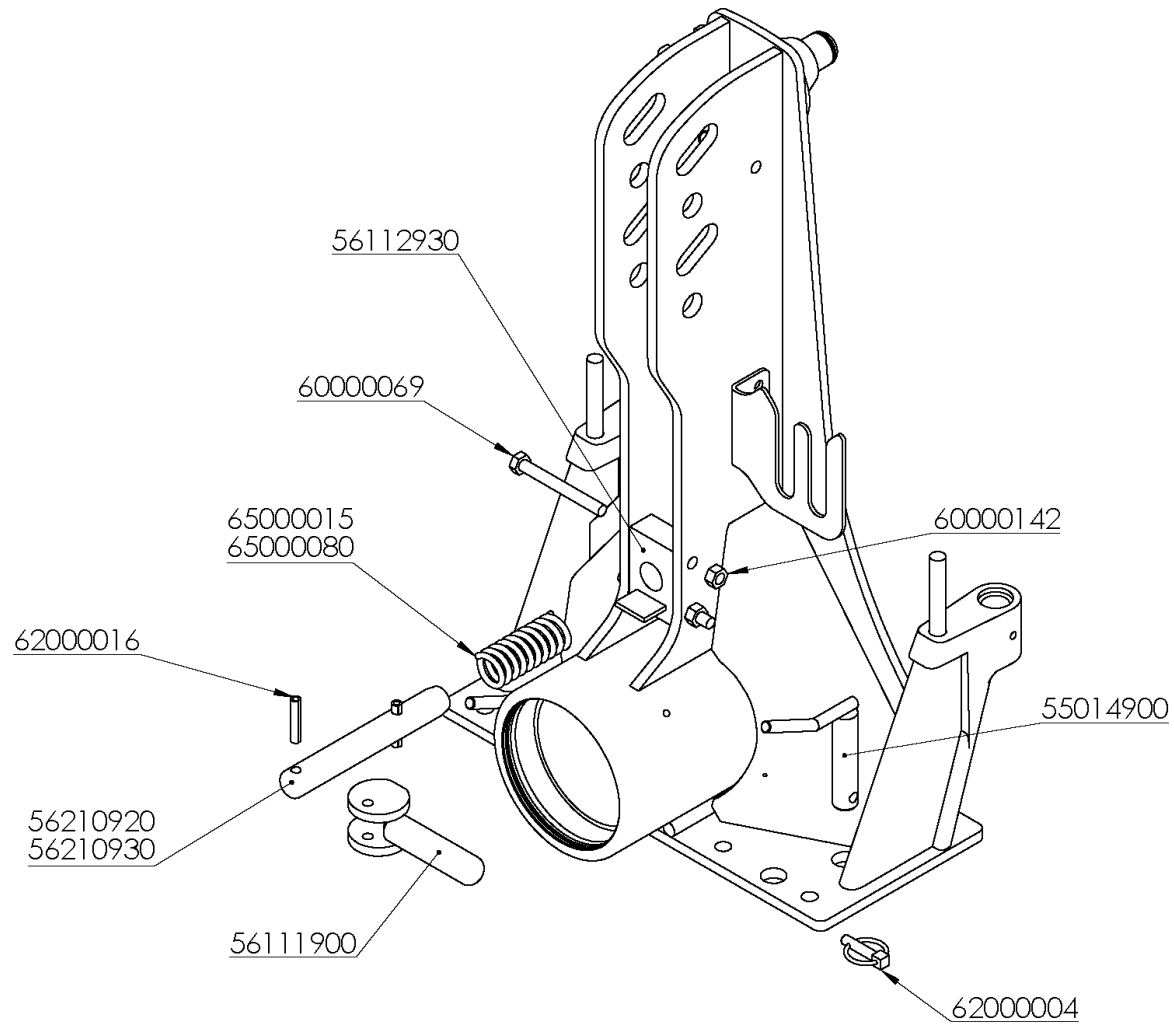


REAR "C-T" CONTROL & TRANSPORT WHEEL NH

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
55011940	EJE RDA.C/T (D/03)	62000036	PASADOR ELAST.DIN-1481 12* 80 ZINC.
55012991	BRAZO RDA.C/T NH(608*205)	62000039	PASADOR ELAST.DIN-1481 7* 80 ZINC.
55012992	BRAZO RDA.C/T(685*320) MR (NH-686)	62000525	PASADOR ELAST.DIN-1481 14* 80
55012993	BRAZO RDA.C/T NH-9 (777*340)	63000010	R.N.C/ATAQUE 200/60*14,5"-10PR RAL-6029
55012994	BRAZO RDA.C/T NH-8 (850*391)	63000042	R.N.C/ATAQUE 250/65*14,5"-12PR RAL-6029
55013910	EXCENTRICA RDA.C/T (D/02)	63000045	CASQ.FRICCION PAP 6060 P10
55017940	BULON D=25*116mm.TOPE RDA.C/T	63000046	DISCO FRICCION PAW 62 P10
55213900	EXCENTRICA RDA.C/T (D/16)	63000215	R.N.C/ATAQUE 320/60-12 132A8 421TT
60000210	TUER.AUTO.DIN-985 1" SAE 8.8	63000254	R.N.C/ATAQUE 13.0/55-16" TL 18PR AW702
60000279	TORN.EXAG.C/LAR.1"*135 SAE 12.9 ZINC.	63000255	R.N.C/ATAQUE 15.0/55-17" TL 14PR AW705
60000326	TUER.BAJA DIN-936 30/200 8.8 ZINC.	64000201	SOP.TOPE MOVIL RDA.C/T ZINC.
60000355	TUER.TOPE VOLTEO 30/200 8.8 ZINC.	64000202	TOPE MOVIL RDA.C/T TRATADO + ZINC.
61000031	ARAND.STANDAR S/BISEL CL-26 ZINC.(50x27x3)	65000006	AMORTIGUADOR C/ROT. 25/50/145
62000004	PASADOR ANILLA 10 ZINC.	65000055	AMORTIGUADOR C/ROT. 25/60/142
62000010	PASADOR ELAST.DIN-1481 8* 40 ZINC.	75030900	BULON D=25*255mm.RDA.C/T
62000015	PASADOR ELAST.DIN-1481 8* 80 ZINC.		



CONICAL HEADSTOCK LOCK

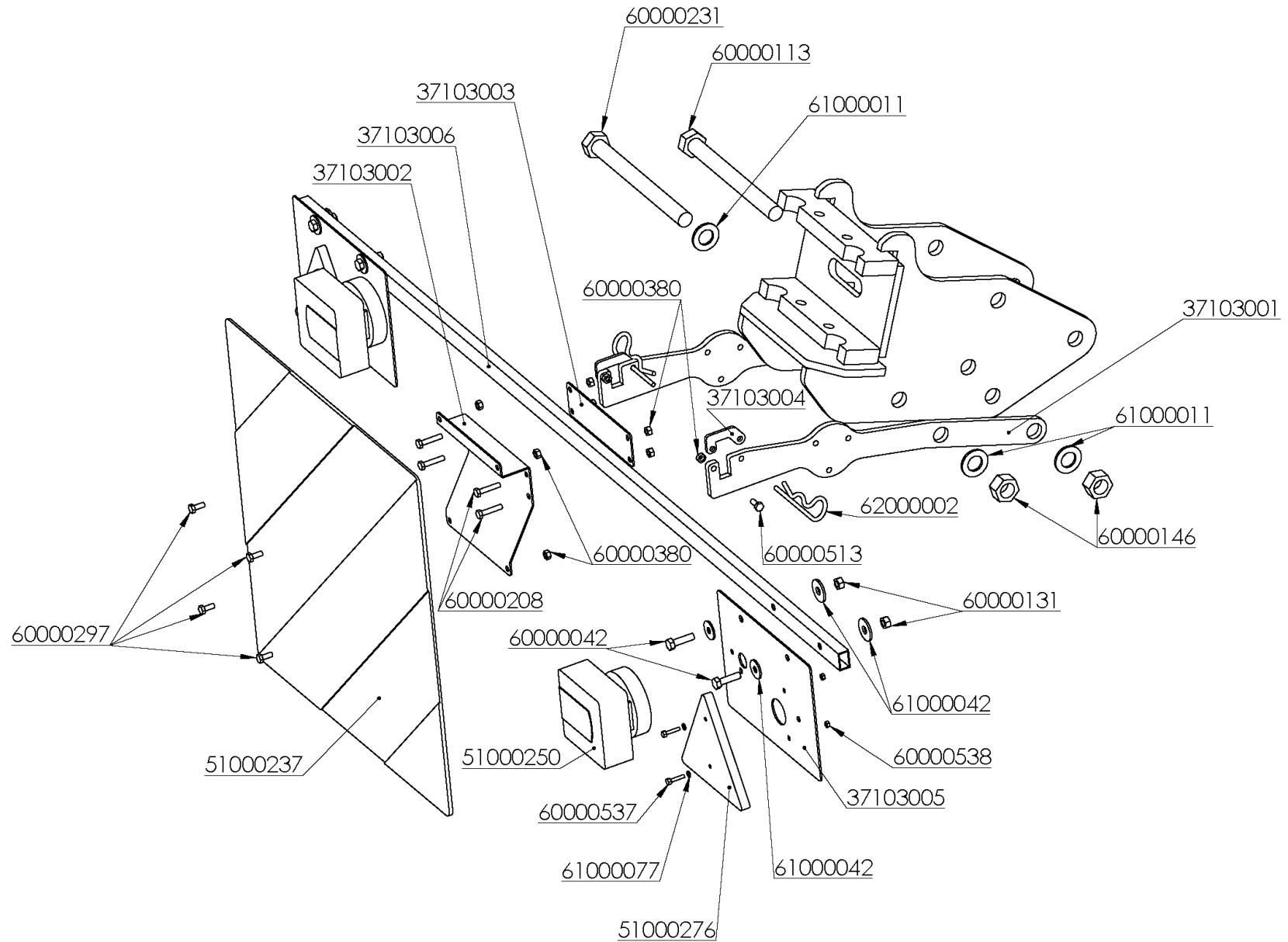


CONICAL HEADSTOCK LOCK

REFERENCIA	DESCRIPCIÓN
55014900	BULON D=25*110mm.BLOQUEO/BRAZO RODILLO
56111900	EXCENTRICA TRABADERO
56112930	SOP.TRABADERO (C-120/150)
56210920	BULON D=29,5*214mm.TRABADERO (D/03)
56210930	BULON D=29,8*216mm.TRABADERO (D/16)
60000069	TORN.EXAG.DIN-931 12*110 8.8 ZINC.
60000142	TUER.AUTO.DIN-980 12 8.8 ZINC.
62000004	PASADOR ANILLA 10 ZINC.
62000016	PASADOR ELAST.DIN-1481 10* 50 ZINC.
65000015	MUELLE COMPR.CILIND.110*40*5 ZINC.
65000080	MUELLE COMPR.CILIND.150*39*4 ZINC. (Paso 12)



LIGHT & ROAD SIGNS



LIGHT & ROAD SIGNS

REFERENCIA	DESCRIPCIÓN
37103001	SOPORTE SEÑALIZACION MINI
37103002	SOPORTE PLACA V-30 MINI
37103003	SOPORTE POST.PLACA V-30 MINI
37103004	GATILLO SEÑALIZACION MINI
37103005	SOPORTE LUCES MINI
37103006	ESTRUCTURAL SEÑALIZACION MINI
51000237	PANEL PLACA V-20 500x500
51000250	KIT LUCES MAGNETICAS LED INALAMBRICAS 1216802
51000276	TRIANGULO ROJO 04010
60000042	TORN.EXAG.DIN-933 8* 30 8.8 ZINC.
60000113	TORN.EXAG.DIN-931 20*210 8.8
60000131	TUER.AUTO.DIN-980 8 8.8 ZINC.
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.
60000208	TORN.EXAG.DIN-933 6* 30 8.8 ZINC.
60000230	TORN.EXAG.C/LAR.20*200 12.9
60000231	TORN.EXAG.C/LAR.20*225 12.9
60000297	TORN.EXAG.DIN-931 6* 10 8.8 ZINC.
60000380	TUER.AUTO.DIN-985 6 8.8 ZINC.
60000513	TORN.EXAG.DIN-933 6* 20 8.8 ZINC.
60000537	TORN.EXAG.DIN-933 4* 20 8.8 ZINC.
60000538	TUER.AUTO.DIN-985 4 8.8 ZINC.
61000011	ARAND.DIN-125 20 ZINC.
61000042	ARAND.DIN-9021 8 ZINC.
61000077	ARAND.DIN-125 4 ZINC.
62000002	PASADOR "R" 5 ZINC.





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