



ovlac



**OPERATING INSTRUCTIONS AND SPARE
PARTS** **CE**

MINI-S

OBSERVATIONS

This handbook describes the use, maintenance instructions and spare parts supplied for the indicated plough.

The farming implement known as “plough” is designed to work the soil, linked to a tractor with lift and universal 3-point coupling.

Regular and satisfactory operation together with economic and long lasting use of the implement depends on compliance with the instructions given in this handbook. It is, therefore, advisable to strictly comply with the following instructions in order to prevent faults which could jeopardise the correct and long-lasting operation of the implement.

Compliance with the instructions in this handbook is also important **since the Manufacturer declines all and every responsibility caused by negligence and failure to comply with these instructions.**

The Manufacturer shall, however, remain at the customer's disposal for immediate and thorough assistance together with anything else that may be required in order to ensure the correct operation and maximum efficiency of the implement. The Manufacturer reserves the right to make any modifications and improvements to the implement, as may be considered opportune, without being obliged to immediately inform the user.

CONTENTS

1. Safety provisions	3
2. Description and technical data.....	5
3. Protection systems	7
4. Set to work.....	8
4.1 Attaching the plought	8
4.2 Hydraulic connections	9
4.3 Moulboards	10
4.4 Front furrow width	10
4.5 Alignment.....	11
4.6 Setting on or off groove	11
4.7 Working depth	11
4.8 Dump	12
4.9 Other adjustments	12
5. Transport and parking	13
6. Maintenance	14
7. Optional equipment.....	16
8. Spare parts	17

1. SAFETY PROVISIONS

- 1.-** Comply with the instructions given by the danger signals exposed in this handbook (Fig.1) and affixed to the plough itself.
- 2.-** Operations and adjustments to the implement must always be carried out when the engine is off and the tractor braked.
- 3.-** It is absolutely forbidden to carry passengers or animals on the plough.
- 4.-** It is absolutely forbidden for persons without a driving license, inexperienced persons or those in precarious health conditions to drive the tractor with the plough mounted.
- 5.-** Strictly comply with all the recommended accident preventing measures described in this handbook.
- 6.-** Assembly of an implement on the tractor will shift the weights on the axles.
- 7.-** Before starting the tractor and plough, always check that all safety devices guarding transport and use are in perfect conditions.
- 8.-** The instructions labels affixed to the plough give useful advice on how to prevent accidents.
- 9.-** Always comply with the highway code in force in your country when travelling on public roads.
- 10.-** Comply with the maximum permissible weight on the axle of the tractor, the total adjustable weight, transport regulations and the highway code.
- 11.-** Always become familiar with the controls and their operation before starting work.
- 12.-** Take the utmost care during the plough coupling and release phases.
- 13.-** Never ever leave the driving seat whilst the tractor is moving.
- 14.-** Remember that the road holding, steering and breaking capacity may be notably influenced by the presence of a mounted implement.
- 15.-** It is absolutely forbidden to stand within the operative range of the plough.
- 16.-** Before leaving the tractor, lower the mounted plough coupled to the lift unit, stop the engine, engage the hand brake and remove the ignition key from the control panel.
- 17.-** The category of the implement coupling pins must correspond to that of the lift coupling.
- 18.-** Take care when working close to the lift links. This is a very dangerous area.
- 19.-** It is absolutely forbidden to stand between the tractor and the plough, to manoeuvre the outside lift control.
- 20.-** Set the control lever of the hydraulic lift to the locked position during road transport with the plough mounted.
- 21.-** The spare parts must correspond to the requirements established by the Manufacturer. Use only genuine spare parts.
- 22.-** The safety transfers must always be perfectly visible. They must be kept clean and should be replaced if they become illegible. Replacements are available on request from your local dealer.
- 23.-** The instruction manual must be kept for as long as the machine lasts.

(Fig.1) WARNING

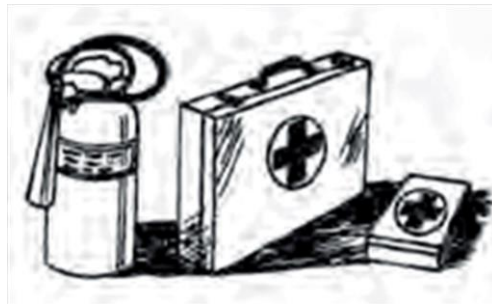
Thoroughly read the manual before starting to work

DANGER

Do not handle the plough when lifted, danger of flattening. Keep safety distance.

DANGER

Damage can be caused by the rotation of the plough. Keep safety distance.



Be prepared in case of emergency

Have near a first aid kit and an extinguisher. Write down the telephone numbers of doctors, ambulances and firemen and keep them near the telephone.

Use suitable clothes

Avoid loose clothes and use suitable equipment of security according to the type of works. The safe handling of the machine requires all the attention of the operator.

Don't put on auricular to listen to the radio during the work with the machine.

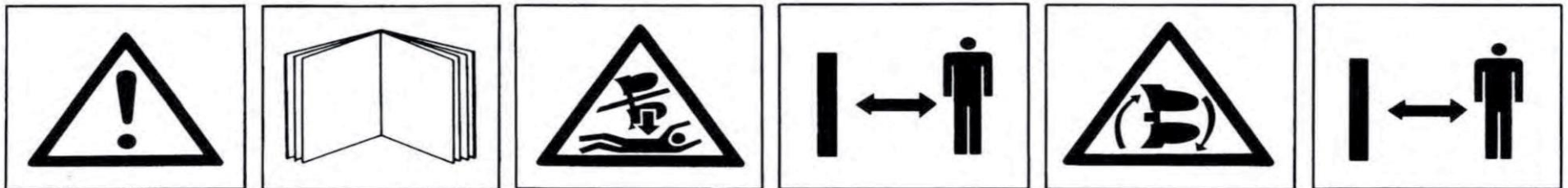


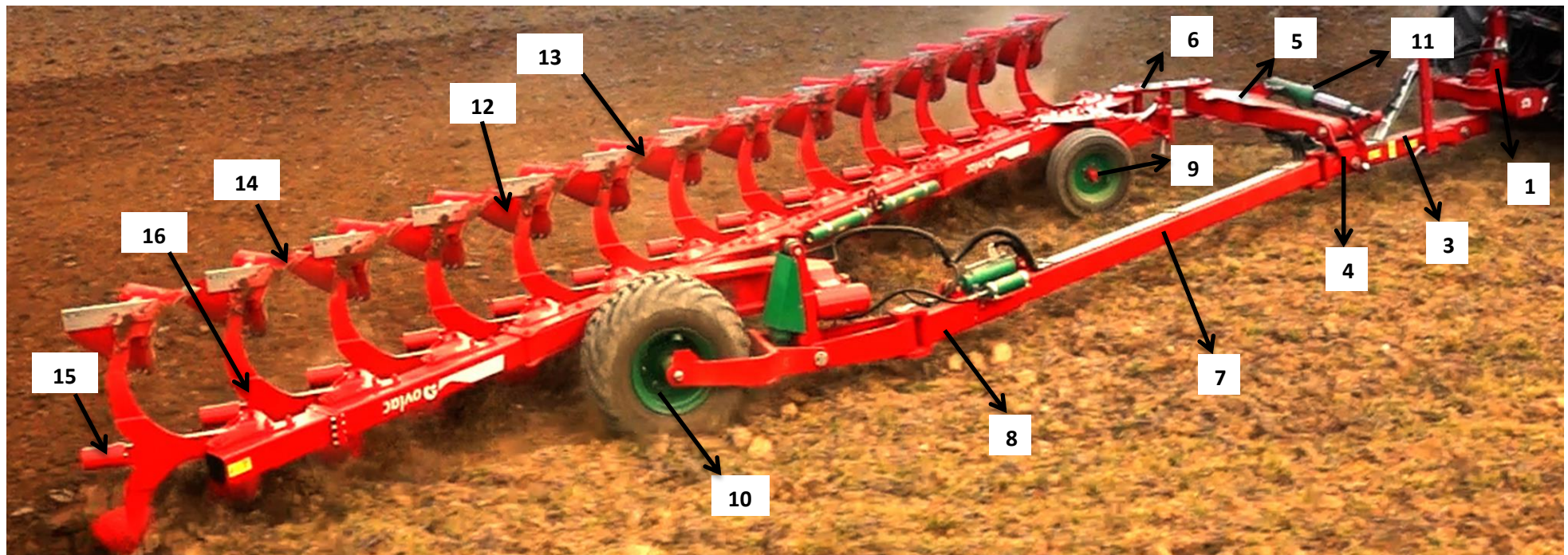
Fig.1

2. DESCRIPTION AND TECHNICAL DATA

1. HEADSTOCK
2. IDENTIFICATION PLATE
3. DRAW FRAME
4. EYE PIECE
5. TURNOVER CONECTION
6. FORK
7. FRAME
8. TELESCOPIC FRAME
9. FRONT WHEEL
10. REAR WHEEL
11. TURN CILINDER
12. MOULBOARD
13. SHARE POINT
14. SHARE
15. HYDRAULIC SYSTEM
16. BEAM SUPPORT

IDENTIFICATION PLATE (2)

REMARK: The construction number that is engraved in the identification plate must be coincident with the number engraved on the headstock support.



TECHNICAL DATA MINI-S

SH	12	12+1
Working width (cm)	462	500
Transport width (m)	160	160
Power (CV)	200-250	220-270

SF	12	12+1
Working width (cm)	462	500
Transport width (m)	160	160
Power (CV)	200-250	220-270

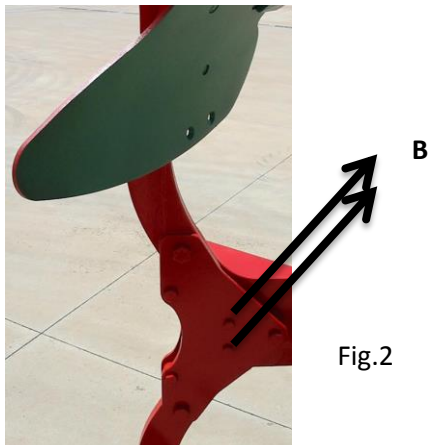
3. PROTECTION SYSTEMS

Shear bolt Protection: In **the SF models**, protection is achieved by means of shear bolts (Fig.2). When the share point meets an obstacle, the shear bolt breaks and permits the beam to pivot back around its bedding. To continue work, swing back the beam to its original position and replace the shear bolt B.

The Auto Reset protection systems (leaf spring or hydraulic) work automatically. When the share meets an obstacle the beam trips up thus overcoming the obstacle and returns back to its original position afterwards with no need to stop the tractor.

This way all the impacts produced by an uneven field are absorbed by the protection system thus protecting all the elements of the plough and of the tractor too.

For the same reason, the Auto Reset protection decreases the traction effort by not making the tractor overcome every eventual obstacle.



Hydraulic models SH, in order to adapt the plough to soil conditions, in the hydraulic models the release pressure can be adjusted by means of injecting (heavy conditions) or removing (light conditions) oil from the system (Fig. 4).

Note: The Auto Reset systems from OVLAC are set at the factory for average conditions. In order to minimize impacts on both the tractor and the plough, we recommend to work at the lowest possible pressure. The maximum working pressure for the hydraulic protection is **140 bar**.



4. SET TO WORK

4.1 ATTACHING THE PLOUGH

Before attaching the plough check the following points:

- The lift rods of the tractor must be set to the same length and height.
- The wheels of the tractor must have the same pressure and it must be set according to manufacturer's instructions.
- The lower links must be fixed in a centered position allowing for a little freedom to prevent side pull.

To attach the plough proceed as follows:

- Attach lower links to the draw bar.
- Attach the top link so that the shaft E (Fig.5) remains vertical while working. Attach the top link in the position of the headstock that allows the maximum verticality when lifting the front.
- Place the stay P (Fig.6) in its working position P1.
- Connect hydraulic hoses to the tractor hydraulic system.

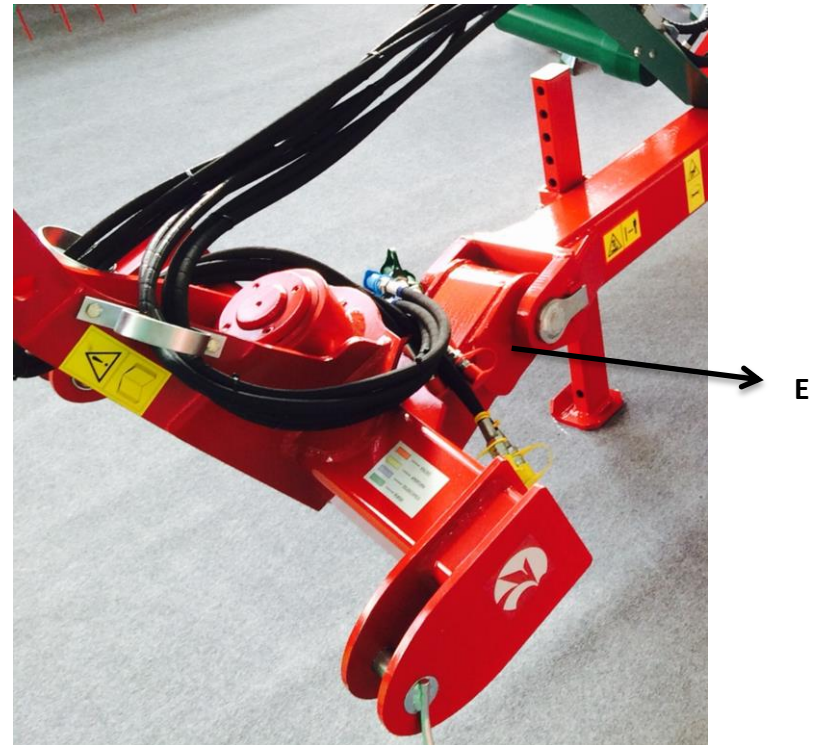


Fig.5



Fig.6

To detach proceed as follows:

- Lower the front part of the plough and act on the Wheel so the tractor is lowered with the drawing bar in a horizontal position. In this way detaching as well as the next attaching will be much easier.
- Relieve pressure from the spool valves.
- Remove hydraulic hoses from the tractor
- Set the stay in its stand position P (Fig.7).
- Remove top link and lower links.

4.2 HYDRAULIC CONNECTIONS

In this types of models four double acting spool valves are needed to operate:

- The turnover device.
- Working depth adjustment.
- First furrow width adjustment.
- Inside or outside Groove adjustment.



Fig.7

4.3 MOULDBOARDS

Before starting work, the paint on the mouldboards should be removed to avoid that the soil remains adhered.



4.4 FIRST FURROW WIDTH ADJUSTMENT

The first furrow width is adjusted hydraulically by means of the cylinder A (Fig.10). The longer the ram, the wider the first furrow.



4.5 ALIGNMENT

During work, the plough must run straight and parallel to the working direction. It is recommended that the inside width between the rear wheels of the tractor is in the range of 130 – 150 cm. To avoid the lateral pull of the plough it is recommended to allow for a certain lateral freedom in the three point linkage. This freedom must be adjusted equally on both sides.

4.6 INSIDE OR OUTSIDE GROOVE

Working the work with this type of plows allows this feature can work inside or outside the groove, with a single operation acting on the cylinder B (Fig.9). This cylinder is connected sequentially with the cylinder opening of the back, so that when one is stretched the other is collected.

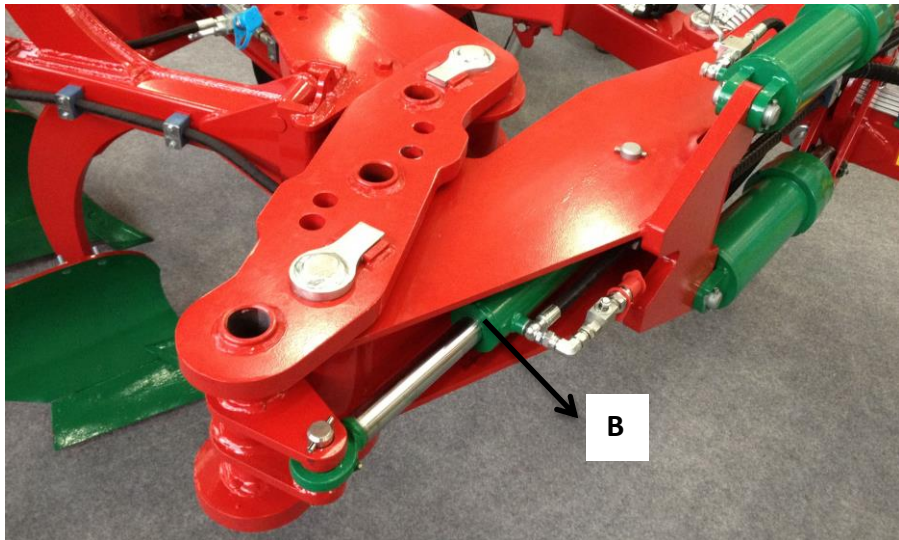


Fig.9

4.7 WORKING DEPTH

The working depth is adjusted hydraulically by means of the cylinder B (Fig.11). The maximum working depth is adjusted by means of nut C on the ram of this cylinder. In order to achieve a proper turn of the soil it is always advisable that the working width be greater than the working depth.

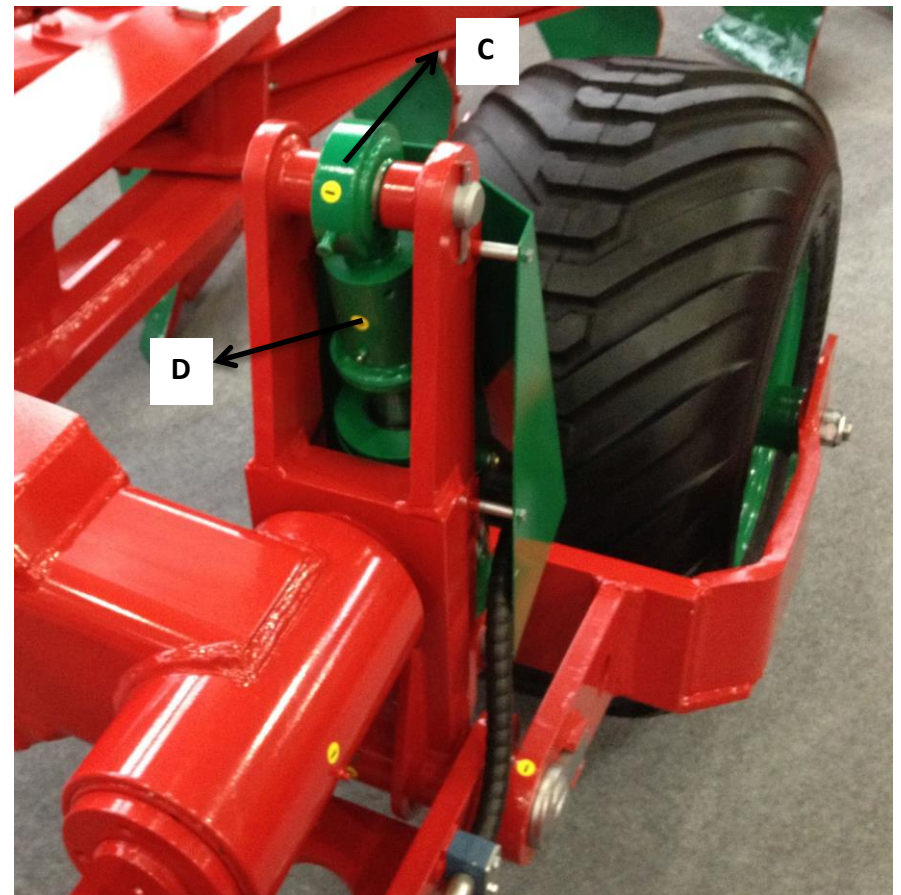


Fig.10

4.8 THE TURNOVER DEVICE

The turning of the plow is achieved by acting on the telescopic hydraulic cylinders E (Fig.11).

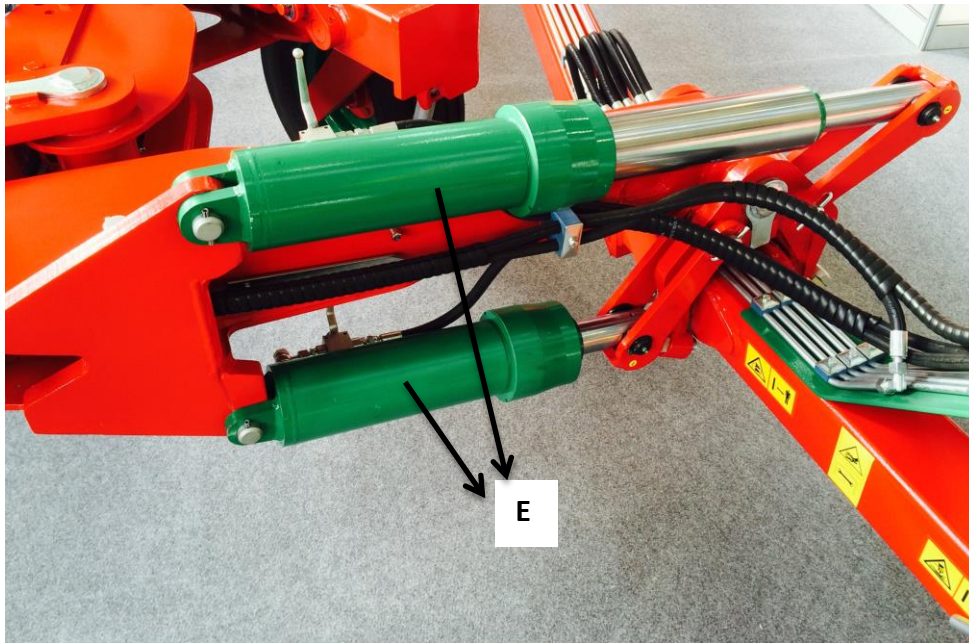


Fig.11

4.9 OTHER ADJUSTMENTS

Check that the beams work vertically with respect to the field. To achieve this, make sure that the lifting arms of the tractor are set at the same length and act on the stop bolts A below the turn over rams (Fig.12)



Fig.12

5. TRANSPORT AND PARKING

This plough is transported in “butterfly position”. The valves V must be closed so that the turn over mechanism is locked (Fig.13).

For transport, the front part of the plough must be lifted until there is enough clearance between the draw bar and the ground. The rear part must also be lifted by means of the wheel ram and then lowered a bit always maintaining an appropriate clearance to the ground.

Remember the wheel of the plough during transport is rolling just in between the tractor wheels. Be aware of obstacles on having circulated along the ways.



Fig.13

The stand P (Fig.14) guarantees a steady position when the plough is parked. When parking the plough make sure that the locking pin of the stand is placed in the right hole so that the draw bar is horizontal. When ploughing the stand must be in the position marked as P1.



Fig.14



6. MAINTENANCE

Retighten all bolts and nuts after the first 8 hours of work, specially the ones of mouldboards, shares and points. Henceforth, check every 100 hours of work. When putting the plough away, clean and grease thoroughly the mouldboards to prevent from rusting.

Lubrication: grease the greaser.

Safe maintenance

Be used to the maintenance procedures before carrying out the works. The working zone must be clean and dry. Don't carry out any work of lubrication, repair or adjust with the motor enabled. Keep the hands, feet and clothes always far from movable components. Turn all the controls off, to alleviate the pressure. All the components must be in good state and correctly installed. Repair damages immediately. Change any worn away or broken pieces. Maintain all the components of the machine clean of fat, oil and accumulated dirt. Because of being dragged equipment, disconnect the cable groups of the tractor before making works of weld in the machine.



Take care of the leaks of high pressure

The fluids that escape of the system can have as much force that they can penetrate the skin, causing serious injuries. Therefore, it is essential to leave the system without pressure before relaxing or disconnecting any pipe and make sure that all the connections and the hydraulic parts they are well tight before applying pressure to the system. In order to locate a hydraulic oil leak, use a piece of cardboard that is put on the connections. Do not approach the hands and the body to a leak of high pressure. If, in spite of this precaution, it happens an accident, go immediately to a doctor who should eliminate surgically the fluid within few hours to avoid gangrene. The doctors who do not have experience in dealing with these type injuries can go to a specialized medical centre.

Storage of the hydraulic sleeves.

IMPORTANT: maintain the plugs clean. The abrasive particles, like the sand or the metallic shaving, can damage the oil seals, shirts and cylinders, causing internal leaks. Once disconnected of the tractor, make sure that they are not in contact with the ground



MAINTENANCE PLAN

The points marked in Fig 15 must be greased with the following periodicity:

- 1- every 10 working hours**
- 2- every 50 working hours**
- 3- every 100 working hours**

As a general rule, all of these points should be greased before and after every season.

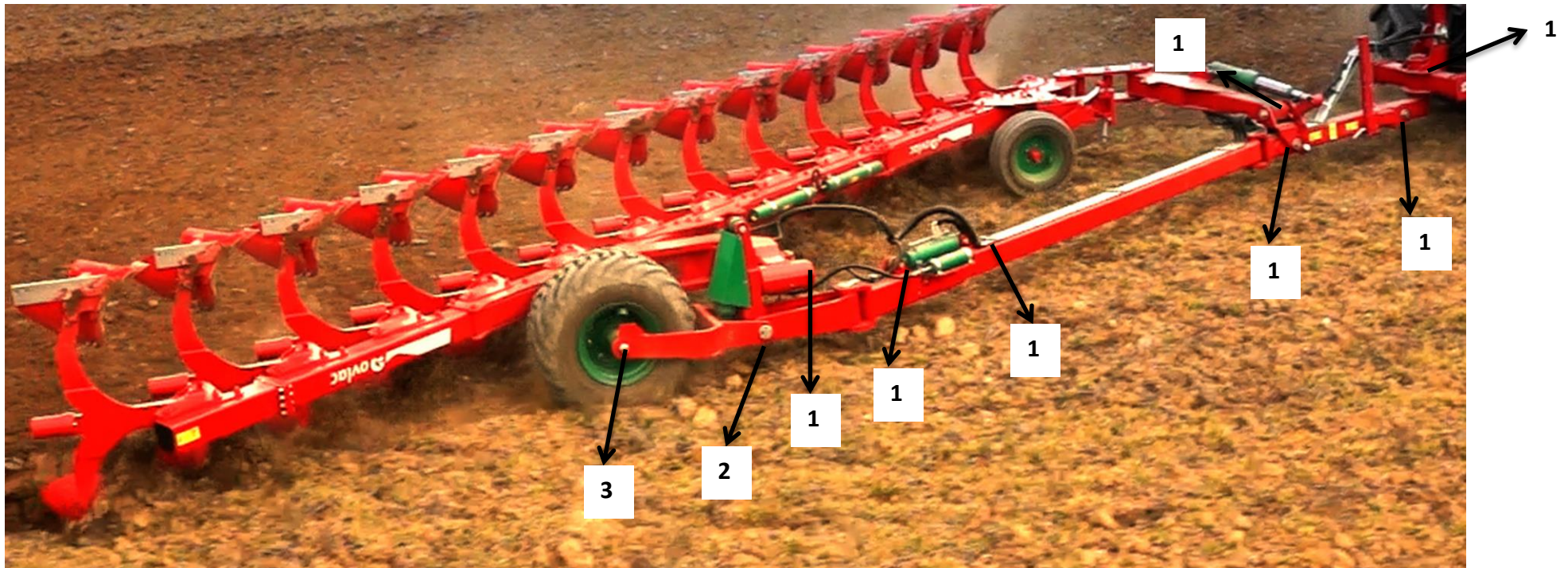


Fig.15

7. OPTIONAL EQUIPMENT

The Ovlac Mini-S ploughs can be equipped with::

- 7.1 Trash Boards (Fig.16).
- 7.2 Slatted Moulboards (Fig.17).
- 7.3 Landslide extension (Fig.18)



Fig.16



Fig.17



Fig.18

8. SPARE PARTS

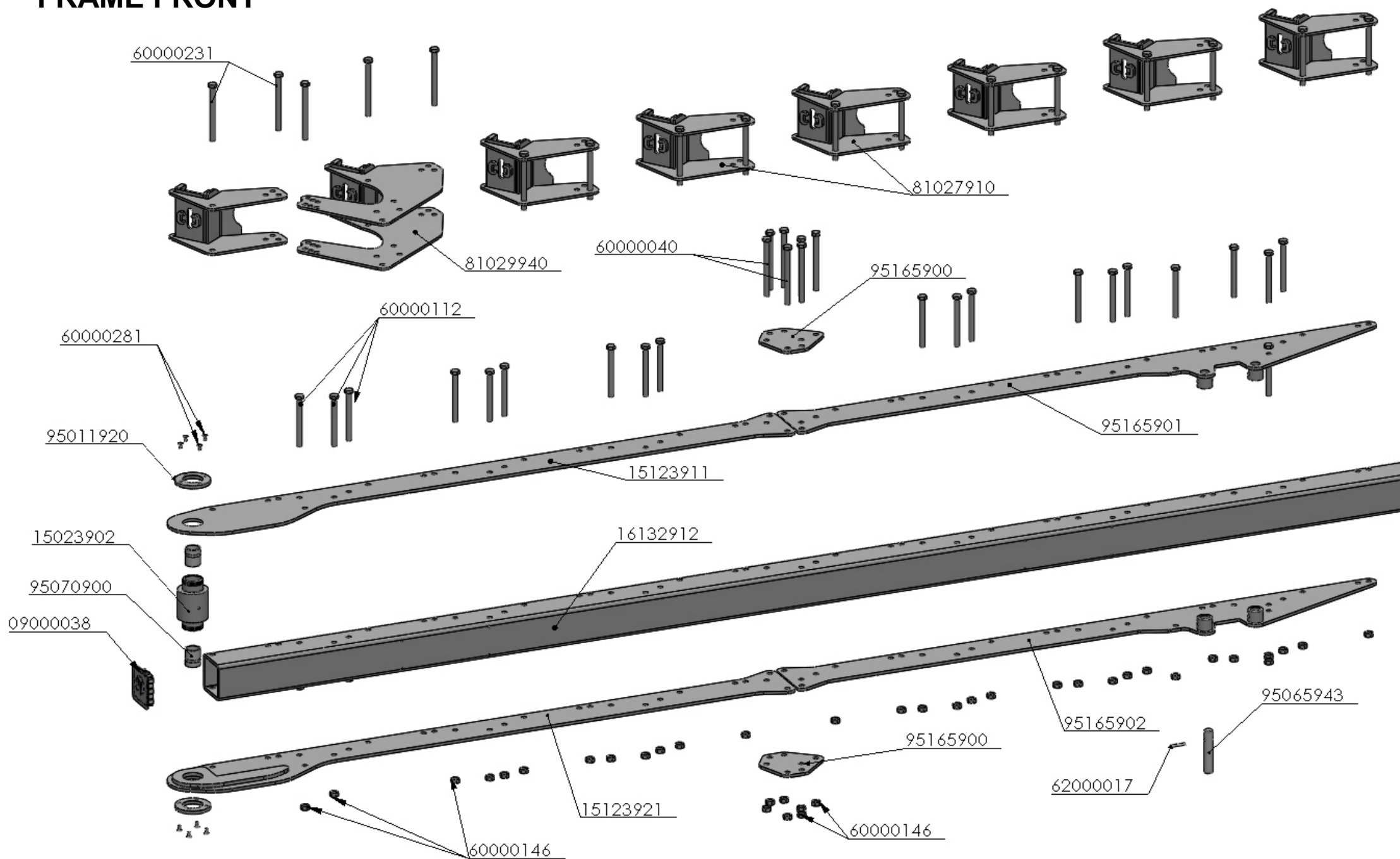
Spare parts should always be ordered from your dealer and should always include the following indications:

- **Type, model and serial number of the plough.** These data are punched on the identification plate with which every plough is equipped.
- **Code number of the required spare part.** This will be found in the attached spare parts list.
- **Description of the part and required quantity.**
- **Means of delivery.** Transport expenses shall always be at the consignor's charge.
- **NOTE:** The terms **Right** and **Left** indicated on the descriptions, refer to the plough when viewed from the rear. The spare parts components of waste equipment, as shares, mouldboards, etc., are considered right if they are mounted on a body which spills the soil to the right side.
- **Note about the warranty:** The orders of spare parts in warranty should always be clearly specified. **The Manufacturer will always sentence if the spare parts are warranted in their replacement.**
- **Moreover, the warranty is suppressed if:**
 - The plough is repaired without authorisation from the Manufacturer, or spurious spare parts, and inadequate bolts are mounted.
 - The plough has been used beyond the specified power limit, or anomalous manoeuvres and operations have been made.

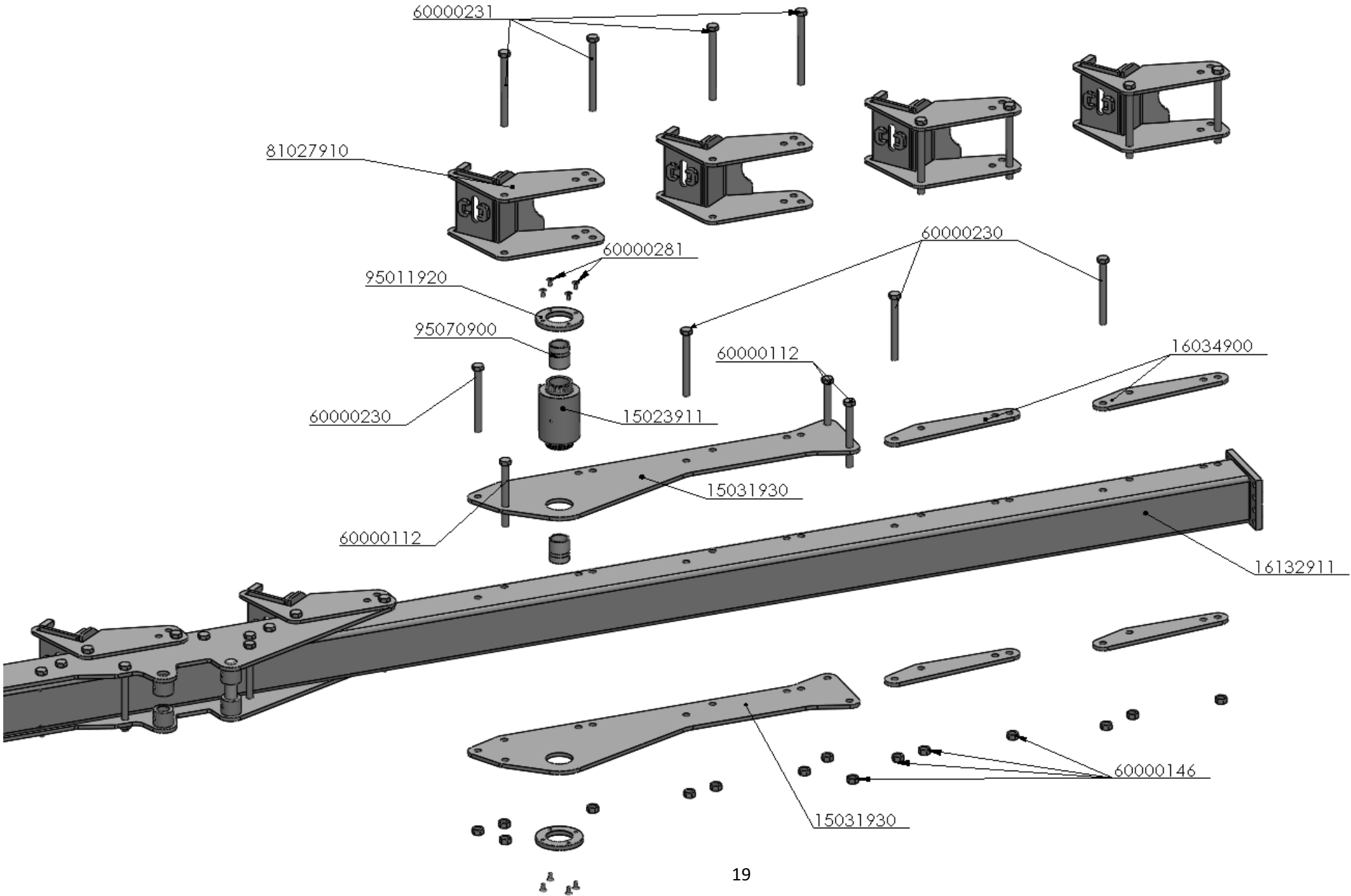
CONTENT

FRAME	18
ADDITIONAL BODY	21
HEADSTOCK.....	22
TURNOVER CONNECTION	24
FORK.....	26
TELESCOPIC FRAME.....	28
PNEUMATIC WHEEL	30
ADVANCED CONTROL WHEEL.....	32
BEAM SUPPORT.....	35
BODY SET.....	36
TRASH BOARDS.....	38
SKIM BOARDS.....	39
LANDSLIDE EXTENSION	41
HYDRAULIC SYSTEM BEAM SUPPORT	42
TAKE HYDRAULIC SYSTEM	44
HYDRAULIC SYSTEM ACUMULATOR	46
HYDRAULIC SYSTEM ADDITIONAL BODY.....	50
HYDRAULIC TUBE OF LOAD.....	51
HYDRAULIC ROLLOVER SYSTEM	52
HYDRAULIC SYSTEM FOLK	53
TELESCOPIC FRAME HYDRAULIC SYSTEM.....	57
HYDRAULIC SYSTEM WHEEL	59
HYDRAULIC SYSTEM ACUMULATOR WHELL.....	61
SUPPORT HOSE.....	63

FRAME FRONT



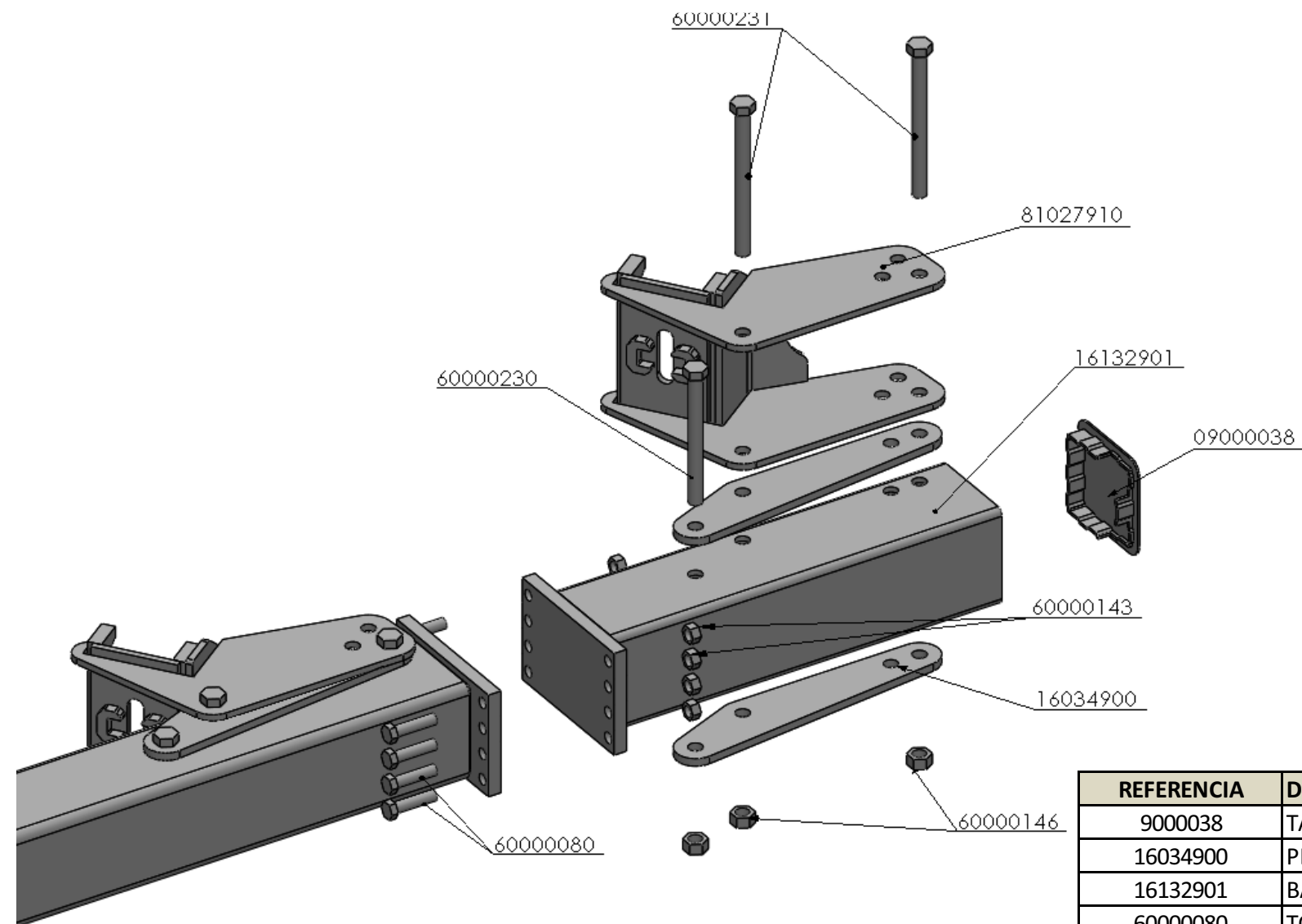
FRAME BACK



FRAME

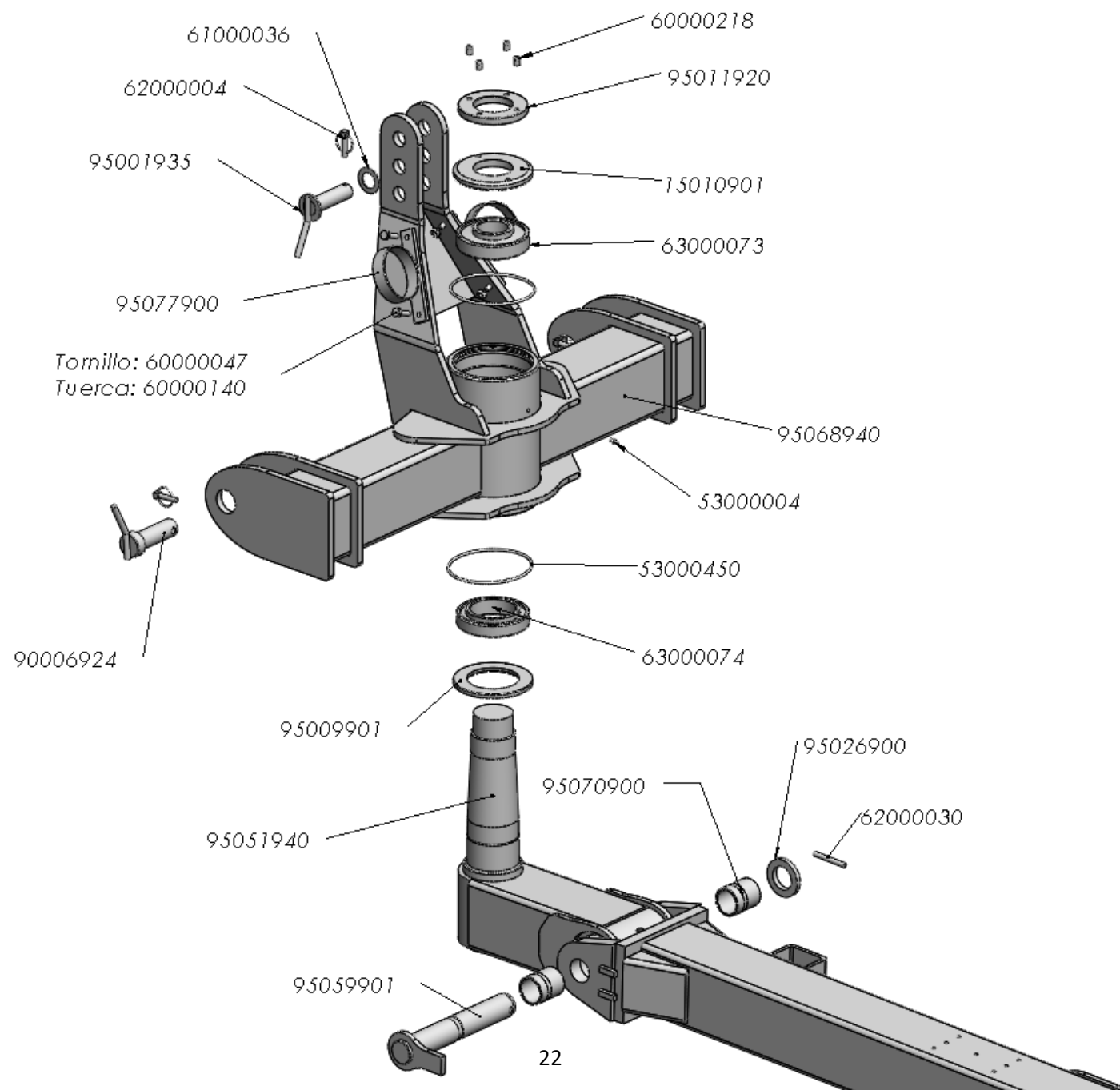
REFERENCIA	DESCRIPCIÓN
9000038	TAPON GOMA 150*150*10mm.
15023902	CASQ.GIRO BAST.SN-150
15023911	CASQ.GIRO BAST.SN-120 C/VARILLAS
15031930	PLACA SOP.GIRO RDA.SH
15123911	PLACA SUP.SOP.GIRO BAST.MR-SS
15123921	PLACA INF.SOP.GIRO BAST.MR-SS
16034900	PLACA ASIENTO SOPORTES L
16132912	BAST.MINI SH-12-66-AMP.
60000040	TORN.EXAG.DIN-931 20*230 8.8
60000112	TORN.EXAG.DIN-931 20*200 8.8
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.
60000230	TORN.EXAG.C/LAR.20*200 12.9
60000231	TORN.EXAG.C/LAR.20*225 12.9
60000281	TORN.ALLEN DIN-913 12* 14 12.9
62000017	PASADOR ELAST.DIN-1481 10* 60 ZINC.
81027910	SOP.ARTIC.CAMBA MH
81027910	SOP.ARTIC.CAMBA MH
81029940	SOP.ARTIC.CAMBA/RDA.AVZD.MH (D/13)
95011920	CONTRATUERCA EJE CABEZAL 110 (D-07)/120/150
95065943	BULON D=34,8*180mm.CILIND.APERT.SSN
95070900	CASQ.D= 60/50*70mm.CEM.ARTIC.SS/GIRO BAST.
95165900	PLACA UNION SOP.SIST.APERT.MR-SS
95165901	PLACA SUP.SOP.SIST.APERT.MR-SS
95165902	PLACA INF.SOP.SIST.APERT.MR-SS

ADDITIONAL BODY



REFERENCIA	DESCRIPCIÓN
9000038	TAPON GOMA 150*150*10mm.
16034900	PLACA ASIENTO SOPORTES L
16132901	BAST.MINI SH-1-66
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
60000231	TORN.EXAG.C/LAR.20*225 12.9
81027910	SOP.ARTIC.CAMBA MH

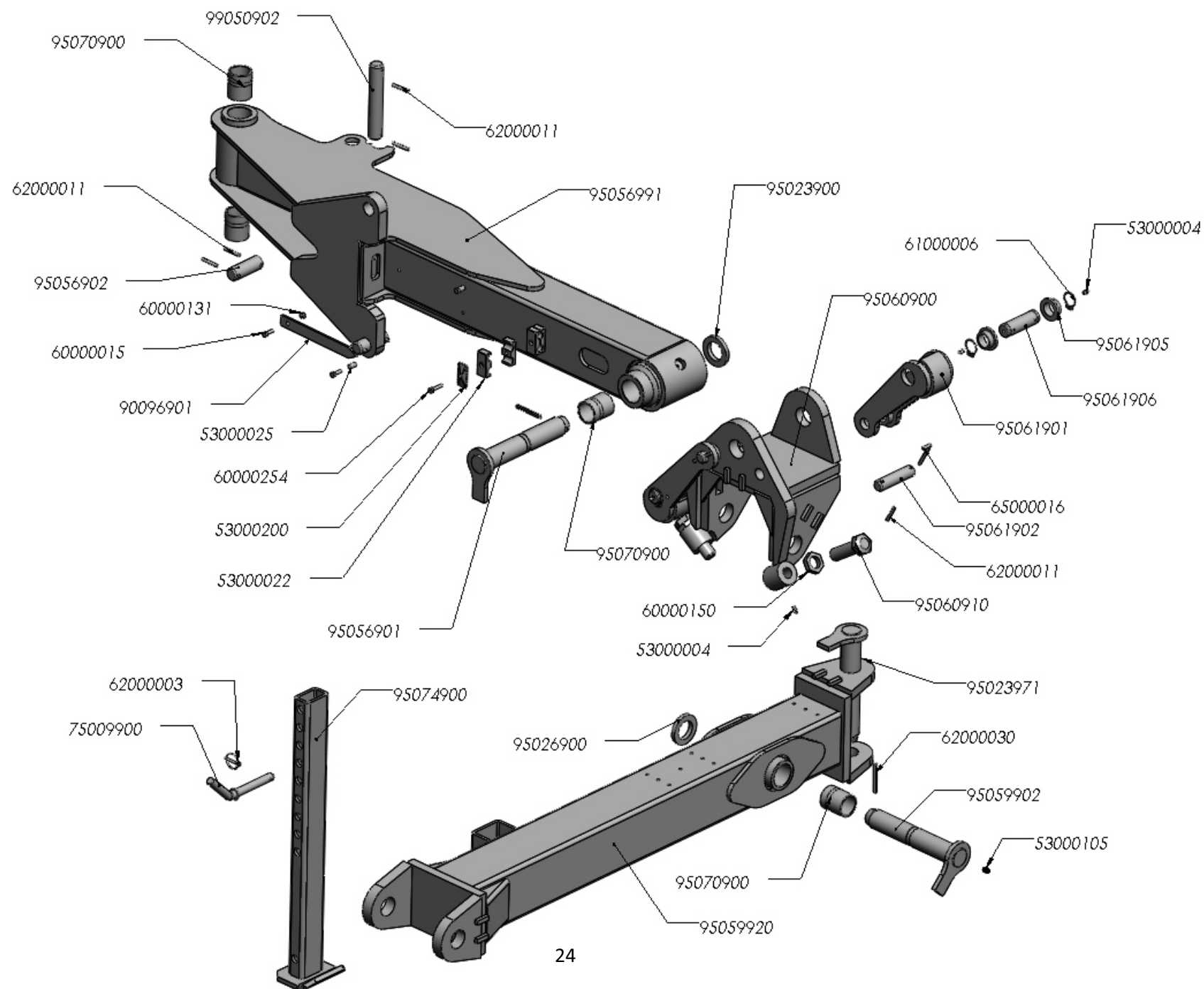
HEADSTOCK



HEADSTOCK

REFERENCIA	DESCRIPCIÓN
15010901	TUERCA EJE CABEZAL 120 (D/06)
53000004	ENGRASADOR AC° DIN-71412 8*125
53000450	JUNTA TORICA 160-3
60000047	TORN.EXAG.DIN-933 10* 35 8.8 ZINC.
60000140	TUER.AUTO.DIN-980 10 8.8 ZINC.
60000218	TORN.ALLEN DIN-913 12* 16 12.9
61000036	ARAND.ESTANDAR-A 32 ZINC.
62000004	PASADOR ANILLA 10 ZINC.
62000030	PASADOR ELAST.DIN-1481 10* 80 ZINC.
63000073	RODAM.ANTER.30218 F (C-120/D-03)
63000074	RODAM.POST.32021 XF (C-120/D-03)
90006924	BULON D=50/36*130mm.ENGANCHE SS CAT-III
95001935	BULON D=31,2*115mm.3er.PTO.PENT.CAT.III (D/02)
95009901	ARAND.POST.120 (D/03)
95011920	CONTRATUERCA EJE CABEZAL 110 (D-07)/120/150
95026900	ARAND.P/BULON GIRO BASTIDOR
95051940	ARTIC.TIRO SS.(D/14)
95059901	BULON D=50*324mm.LANZA TIRO SS
95068940	CABEZAL SS (D/14)
95070900	CASQ.D= 60/50*70mm.CEM.ARTIC.SS/GIRO BAST.
95077900	GUIA LATIG.CABEZAL SS

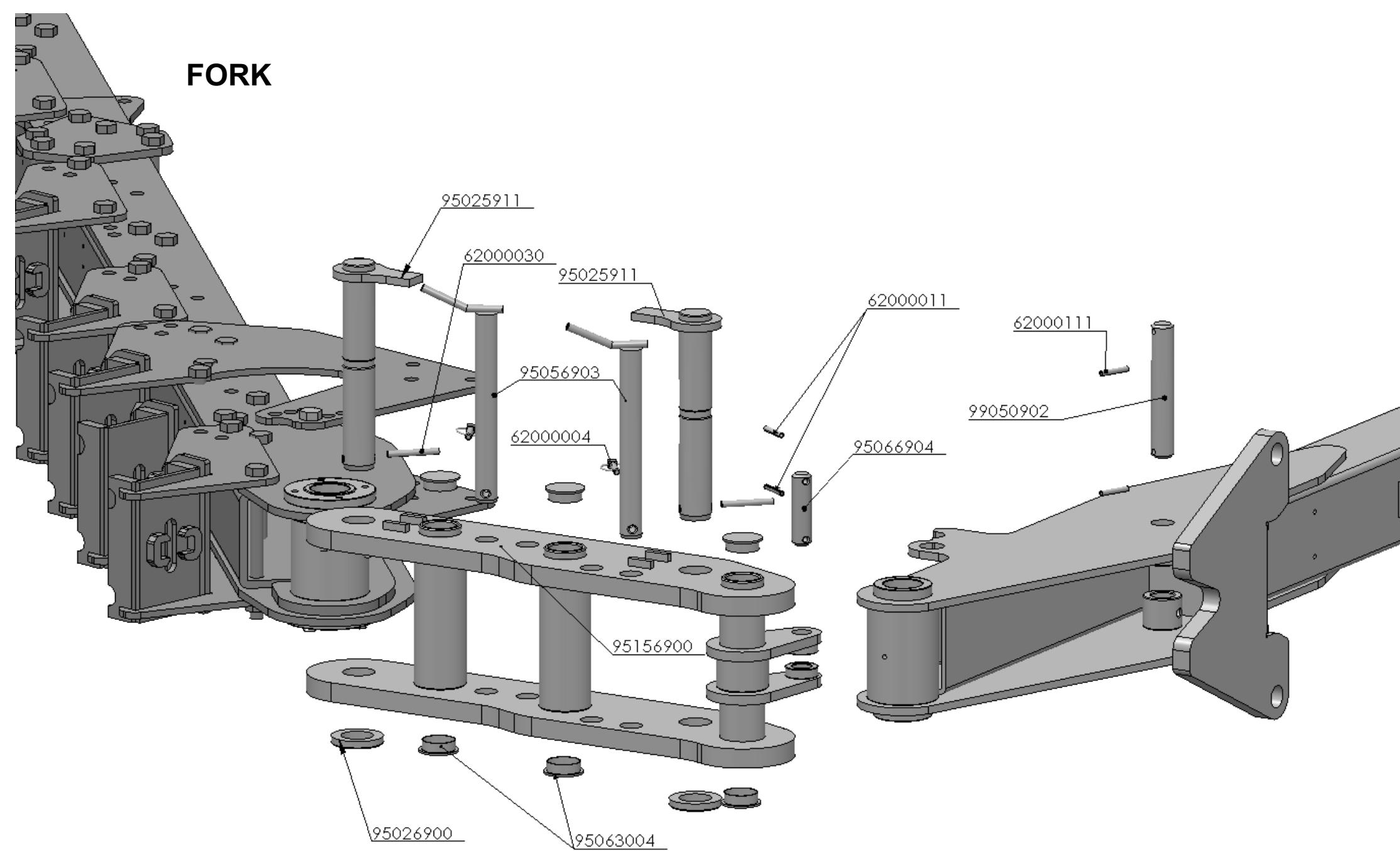
TURNOVER CONNECTION



TURNOVER CONNECTION

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
53000004	ENGRASADOR AC° DIN-71412 8*125	95023972	BULON D=50*307mm.SOP.GIRO BAST.SSN
53000022	ABRAZ.DOBLE D=19mm. 1D19PP	95026900	ARAND.P/BULON GIRO BASTIDOR
53000025	M.TUBO ACERO D=12*9mm.ZINC.	95056901	BULON D=50*319mm.CONEX.VOLTEO SS
53000105	ENGRASADOR MT-503 10*150	95056902	BULON D=34,8*100mm.CILIND.VOLTEO SS + DACROMET
53000200	PLACA RFZO.AB.DOBLE 19 GD3D	95059902	BULON D=50*307mm.LANZA TIRO SS
60000015	TORN.EXAG.DIN-933 8* 25 8.8 ZINC.	95059920	LANZA TIRO SS(D/02)
60000131	TUER.AUTO.DIN-980 8 8.8 ZINC.	95059991	CONEX.VOLTEO SSN FS (D/15)
60000150	TUER.BAJA DIN-936 1"1/4 W 10.9 ZINC.	95060900	ROTULA SS
60000254	TORN.EXAG.DIN-931 8*100 8.8 ZINC.	95060910	TOPE VOLTEO SS
61000006	ANILLO ELASTICO DIN-471 35	95061900	OREJA DCH.VOLTEO SS
62000003	PASADOR ANILLA 6 ZINC.	95061901	OREJA IZQD.VOLTEO SS
62000011	PASADOR ELAST.DIN-1481 8* 50 ZINC.	95061902	BULON D=29,7*123mm.OREJA VOLTEO SS
62000030	PASADOR ELAST.DIN-1481 10* 80 ZINC.	95061905	CASQ.D= 59/44,9/35*20,5mm.CEM.OREJA VOLTEO SS
65000016	PASADOR FIJACION D= 7,5mm.	95061906	BULON D=34,7*113mm.RANURADO OREJA VOLTEO SS
75009900	BULON D=20*255mm.REG.RDA.CH ZINC.	95070900	CASQ.D= 60/50*70mm.CEM.ARTIC.SS/GIRO BAST.
90096901	MARCADOR VERTICAL SS	95074900	PEON SS
95023971	BULON D=50*307mm.SOP.GIRO BAST.SS	99050902	BULON D=34,8*208mm.CILIND.RDA.SFB + DACROMET

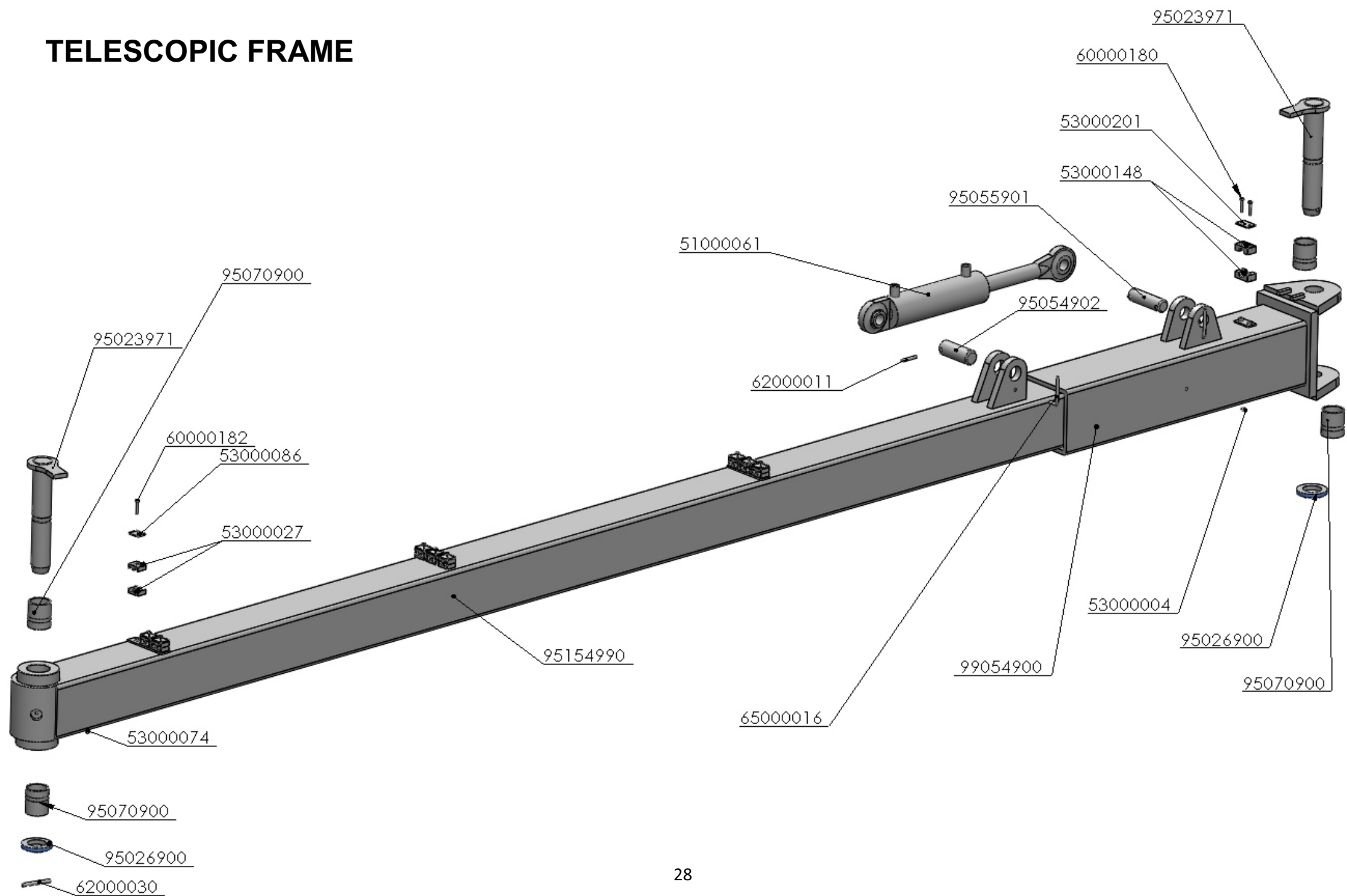
FORK



FORK

REFERENCIA	DESCRIPCIÓN
62000004	PASADOR ANILLA 10 ZINC.
62000011	PASADOR ELAST.DIN-1481 8* 50 ZINC.
62000030	PASADOR ELAST.DIN-1481 10* 80 ZINC.
95025911	BULON D=50*322mm.GIRO BAST.SS FS
95026900	ARAND.P/BULON GIRO BASTIDOR
95056903	BULON D=34,8*295mm.HORQUILLA SS FS
95063004	TAPON HORQ.SS
95066904	BULON D=29,7*112mm.CILIND.APERT SS
95156900	HORQUILLA SSN FS
99050902	BULON D=34,8*208mm.CILIND.RDA.SFB + DACROMET

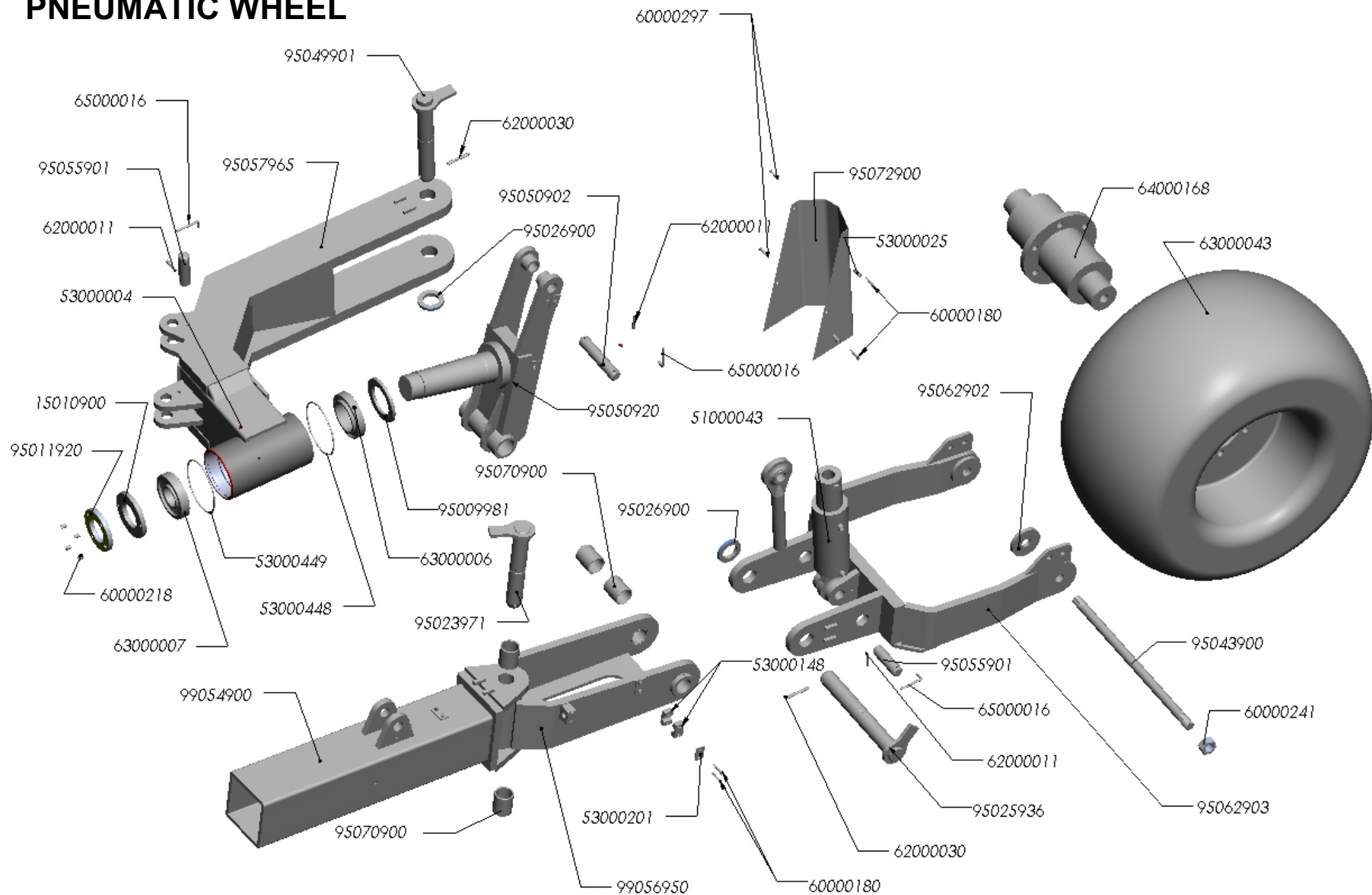
TELESCOPIC FRAME



TELESCOPIC FRAME

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
51000061	CILIND.VOLTEO 40/95/300 ROT.D=40/35	65000016	PASADOR FIJACION D= 7,5mm.
53000004	ENGRASADOR AC° DIN-71412 8*125	95023971	BULON D=50*307mm.SOP.GIRO BAST.SS
53000027	ABRAZ.DOBLE D=12mm. 1D12PP	95026900	ARAND.P/BULON GIRO BASTIDOR
53000074	ENGRASADOR MT-506 45° 8*125	95054902	BULON D=39,8*110mm.CILIND.BAST.PPAL.SSN
53000086	PLACA RFZO.AB.DOBLE 12 GD1D	95154990	BAST.PPAL.SSN FS (D/14) - 4290mm.
53000148	ABRAZ.SIMPLE D=18mm. 218PP	60000180	TORN.EXAG.DIN-931 6* 40 8.8 ZINC.
53000201	PLACA RFZO.AB.SIMPLE 18 DP2	95055901	BULON D=34,8*122mm.CIL.BAST.TELESC.SS + DACROMET
60000182	TORN.EXAG.DIN-931 6* 35 8.8 ZINC.	95070900	CASQ.D= 60/50*70mm.CEM.ARTIC.SS/GIRO BAST.
62000011	PASADOR ELAST.DIN-1481 8* 50 ZINC.	95154940	BAST.PPAL.SSN-6 (D/14) - 2710mm.
62000030	PASADOR ELAST.DIN-1481 10* 80 ZINC.	99054900	BAST.TELESC.SFB

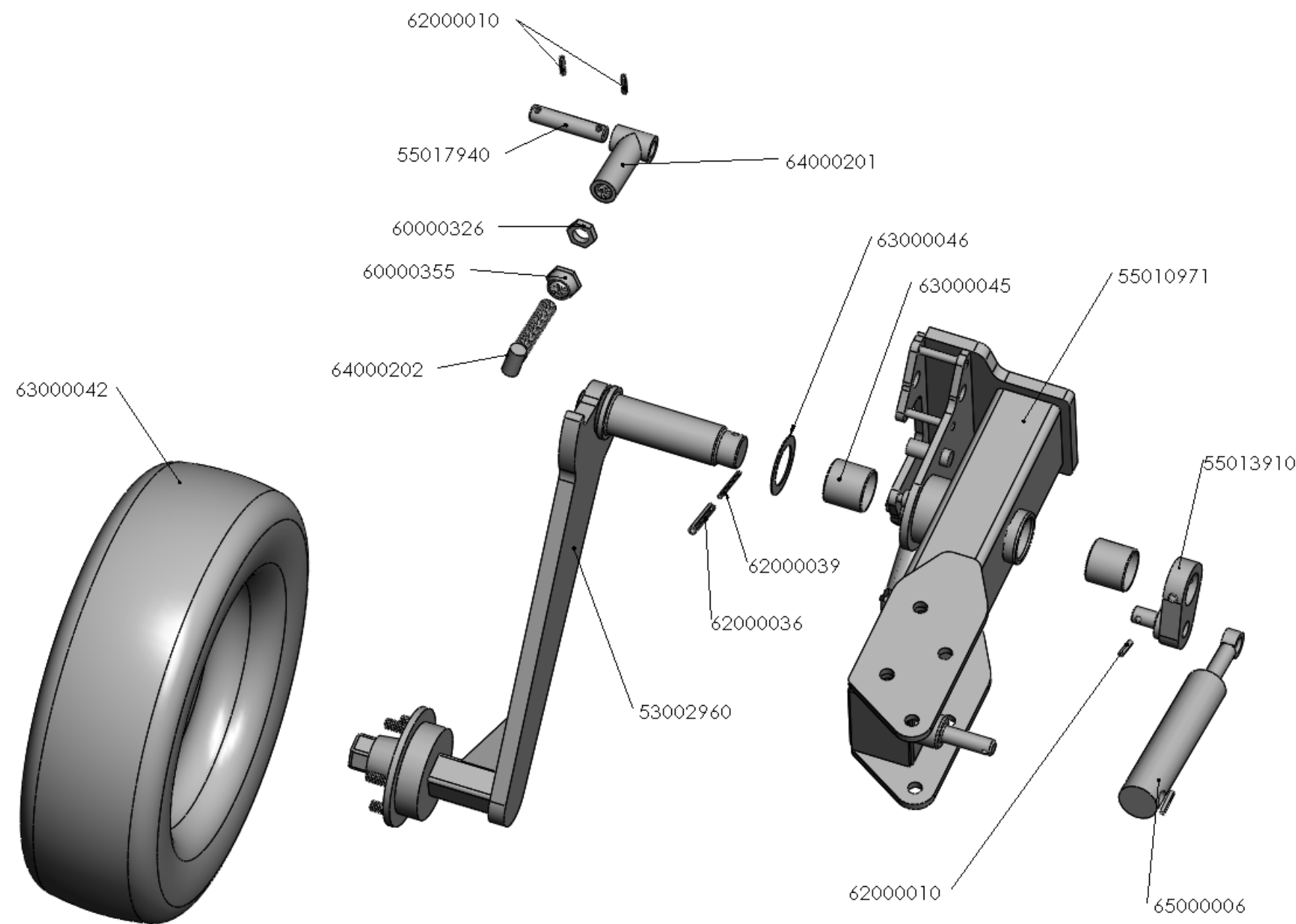
PNEUMATIC WHEEL



PNEUMATIC WHEEL

REFERENCIA	DESCRIPCIÓN	REFERENCIA	DESCRIPCIÓN
15010900	TUERCA EJE CABEZAL 110 (D/07)	95009981	ARAND.POST.110 (D/07)
51000043	CILIND.ELEV.RDA.C/TCA.50/110/150 SS	95011920	CONTRATUERCA EJE CABEZAL 110 (D-07)/120/150
53000004	ENGRASADOR AC° DIN-71412 8*125	95023971	BULON D=50*307mm.SOP.GIRO BAST.SS
53000025	M.TUBO ACERO D=12*9mm.ZINC..	95025936	BULON D=50*402mm.HORQUILLA SS (D/14)
53000148	ABRAZ.SIMPLE D=18mm. 218PP	95026900	ARAND.P/BULON GIRO BASTIDOR
53000201	PLACA RFZO.AB.SIMPLE 18 DP2	95043900	EJE RDA.SS
53000448	JUNTA TORICA 144-3	95049901	BULON D=50*334mm.SOP.GIRO RDA.SS
53000449	JUNTA TORICA 150-3	95050901	BULON D=50*367mm.EJE ARTIC.RDA.SS
60000180	TORN.EXAG.DIN-931 6* 40 8.8 ZINC.	95050902	BULON D=34,8*188mm.CILIND.RDA.SS + DACROMET
60000180	TORN.EXAG.DIN-931 6* 40 8.8 ZINC.	95050920	CONJ.EJE ARTIC.RDA.SS (D/07)
60000218	TORN.ALLEN DIN-913 12* 16 12.9	95050920	CONJ.EJE ARTIC.RDA.SS (D/07)
60000241	TUER.AUTO.DIN-985 30/200 8.8 ZINC.	95055901	BULON D=34,8*122mm.CIL.BAST.TELESC.SS + DACROMET
60000297	TORN.EXAG.DIN-931 6* 10 8.8 ZINC.	95057965	CONEX.RDA.MR-SS
62000011	PASADOR ELAST.DIN-1481 8* 50 ZINC.	95062902	ARAND.SUPL.BUJE RDA.SS
62000030	PASADOR ELAST.DIN-1481 10* 80 ZINC.	95062903	HORQUILLA RDA.MR-SS (D/14) 500/50-17
63000006	RODAM.POST.32019 (C-110-D/07)	95070900	CASQ.D= 60/50*70mm.CEM.ARTIC.SS/GIRO BAST.
63000007	RODAM.ANTER.30217 (C-110-D/07)	95072900	CHAPA PROTEC.CILIND.RDA.SS. 600*400*2mm.
63000060	R.N.C/ATAQUE 500/45*22,5"-16PR	99054900	BAST.TELESC.SFB
64000168	CABEZA TRAILLA D/220 L-500	99056950	UNION HORQ.SFB (D/14)
65000016	PASADOR FIJACION D= 7,5mm.		

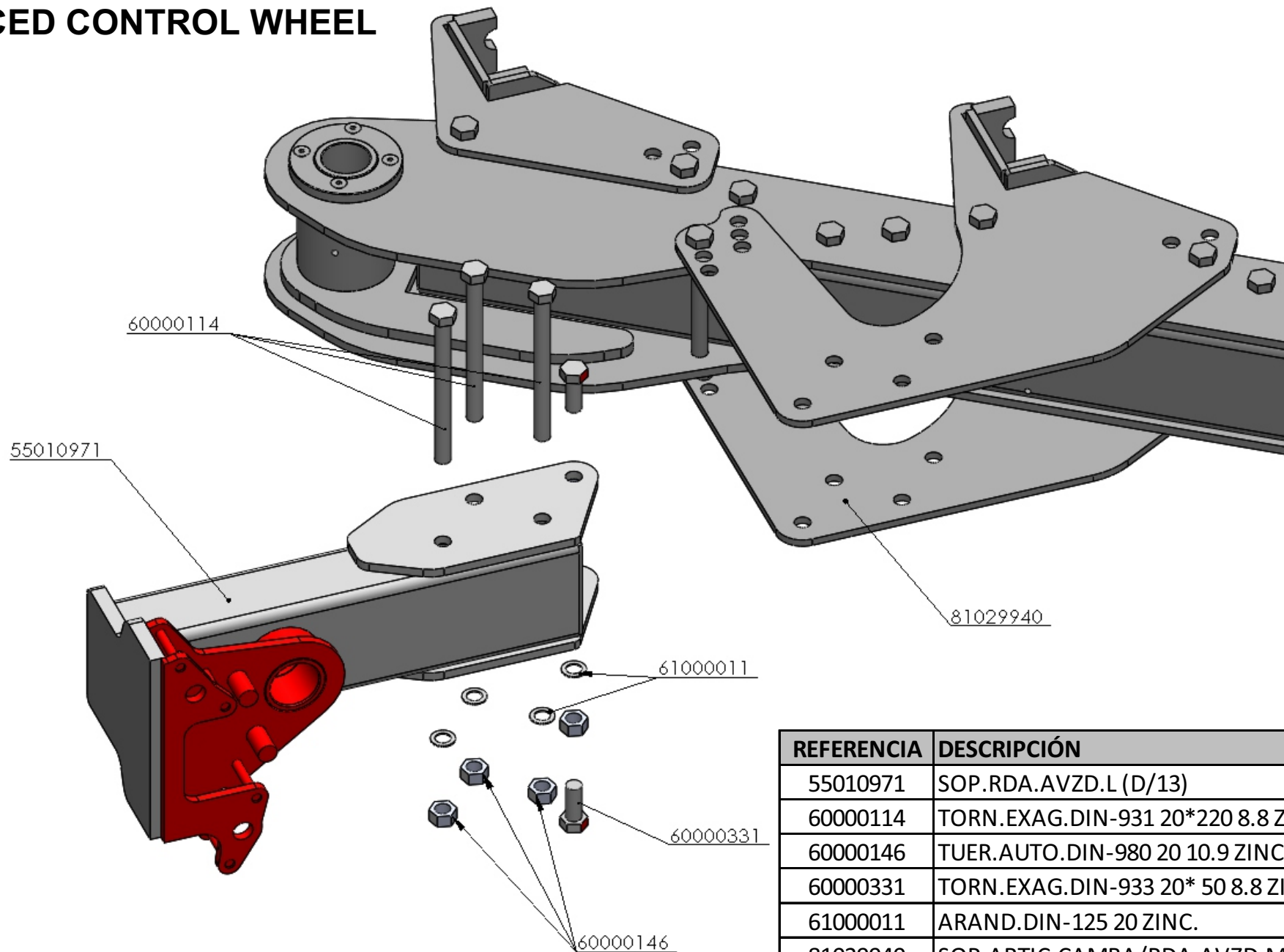
ADVANCED CONTROL WHEEL



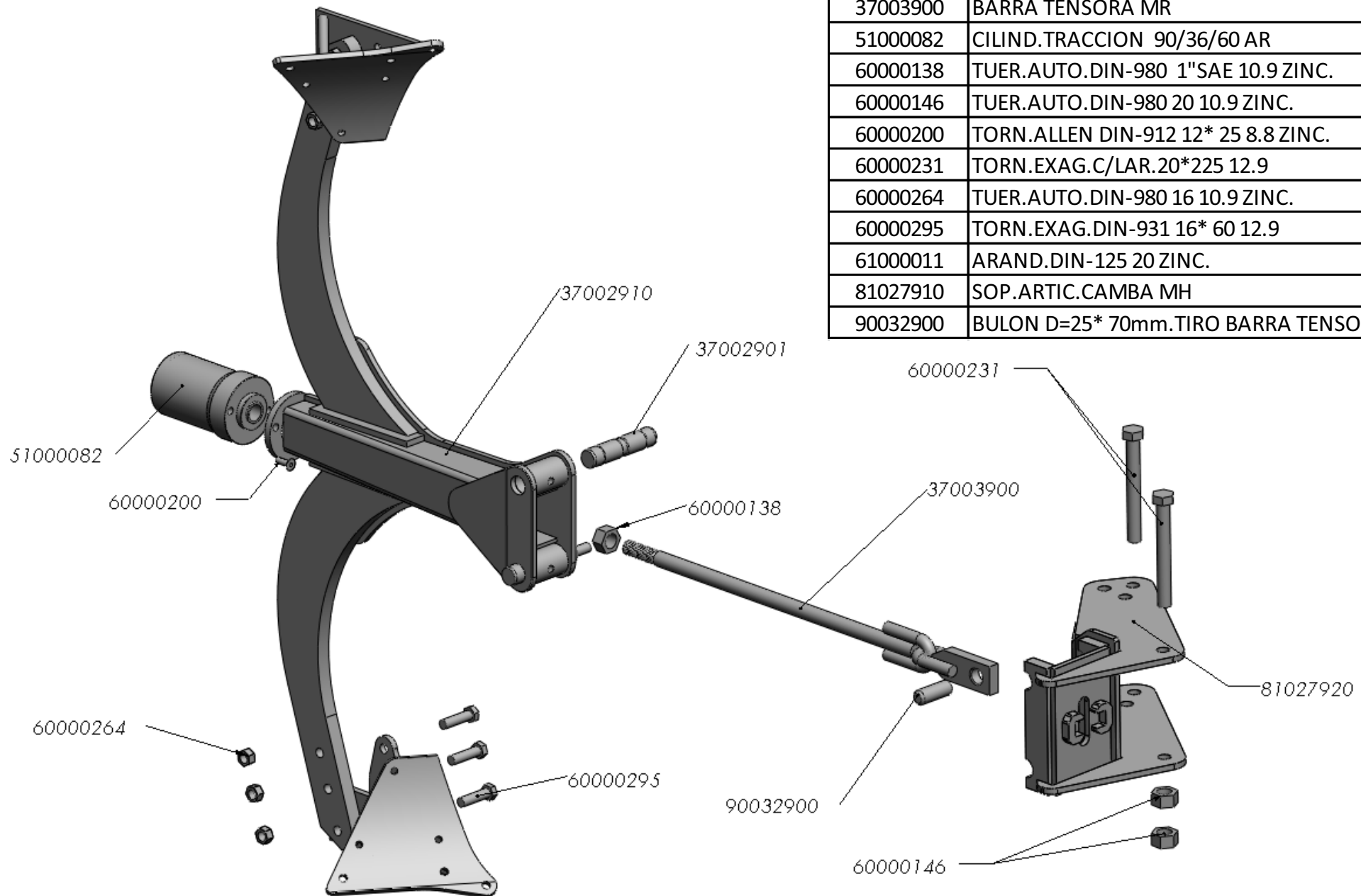
ADVANCED CONTROL WHEEL

REFERENCIA	DESCRIPCIÓN
53002960	BRAZO RDA.NEUM(608*205/685*260) AVZD.
55010971	SOP.RDA.AVZD.L (D/13)
55013910	EXCENTRICA RDA.C/T (D/02)
55017940	BULON D=25*116mm.TOPE RDA.C/T
60000326	TUER.BAJA DIN-936 30/200 8.8 ZINC.
60000355	TUER.TOPE VOLTEO 30/200 8.8 ZINC.
61000031	ARAND.STANDAR S/BISEL CL-26 ZINC.(50x27x3)
62000010	PASADOR ELAST.DIN-1481 8* 40 ZINC.
62000036	PASADOR ELAST.DIN-1481 12* 80 ZINC.
62000039	PASADOR ELAST.DIN-1481 7* 80 ZINC.
63000042	R.N.C/ATAQUE 250/65*14,5"-12PR RAL-6029
63000045	CASQ.FRICCION PAP 6060 P10
63000046	DISCO FRICCION PAW 62 P10
64000201	SOP.TOPE MOVIL RDA.C/T ZINC.
64000202	TOPE MOVIL RDA.C/T TRATADO + ZINC.
65000006	AMORTIGUADOR C/ROT. 25/50/145

ADVANCED CONTROL WHEEL



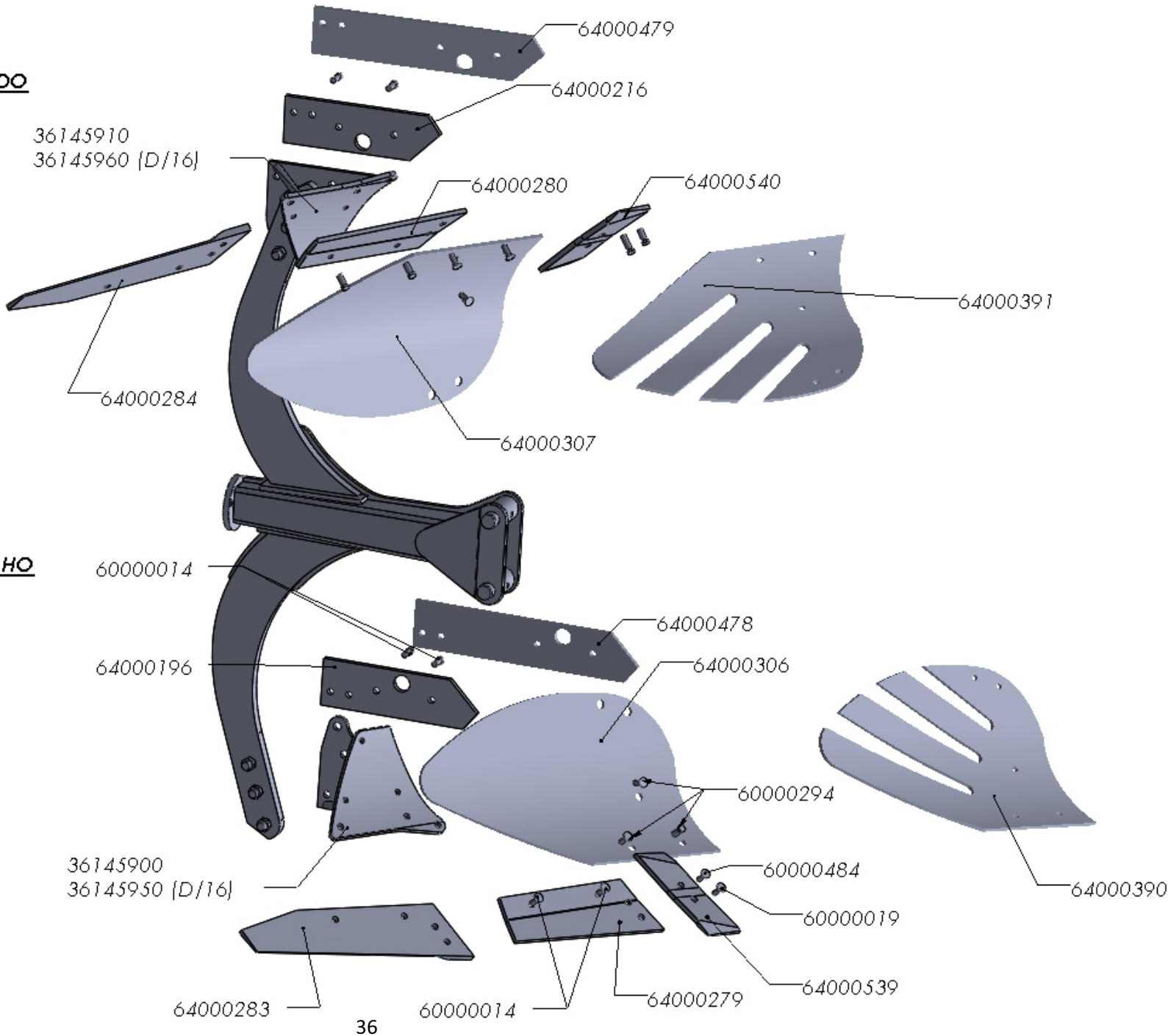
BEAM SUPPORT



REFERENCIA	DESCRIPCIÓN
37002901	BULON APOYO ANCORA MR
37002910	BRAZO PORTACAMBA MMH
37003900	BARRA TENSORA MR
51000082	CILIND.TRACCION 90/36/60 AR
60000138	TUER.AUTO.DIN-980 1"SAE 10.9 ZINC.
60000146	TUER.AUTO.DIN-980 20 10.9 ZINC.
60000200	TORN.ALLEN DIN-912 12* 25 8.8 ZINC.
60000231	TORN.EXAG.C/LAR.20*225 12.9
60000264	TUER.AUTO.DIN-980 16 10.9 ZINC.
60000295	TORN.EXAG.DIN-931 16* 60 12.9
61000011	ARAND.DIN-125 20 ZINC.
81027910	SOP.ARTIC.CAMBA MH
90032900	BULON D=25* 70mm.TIRO BARRA TENSORA

BODY SET

IZQUIERDO

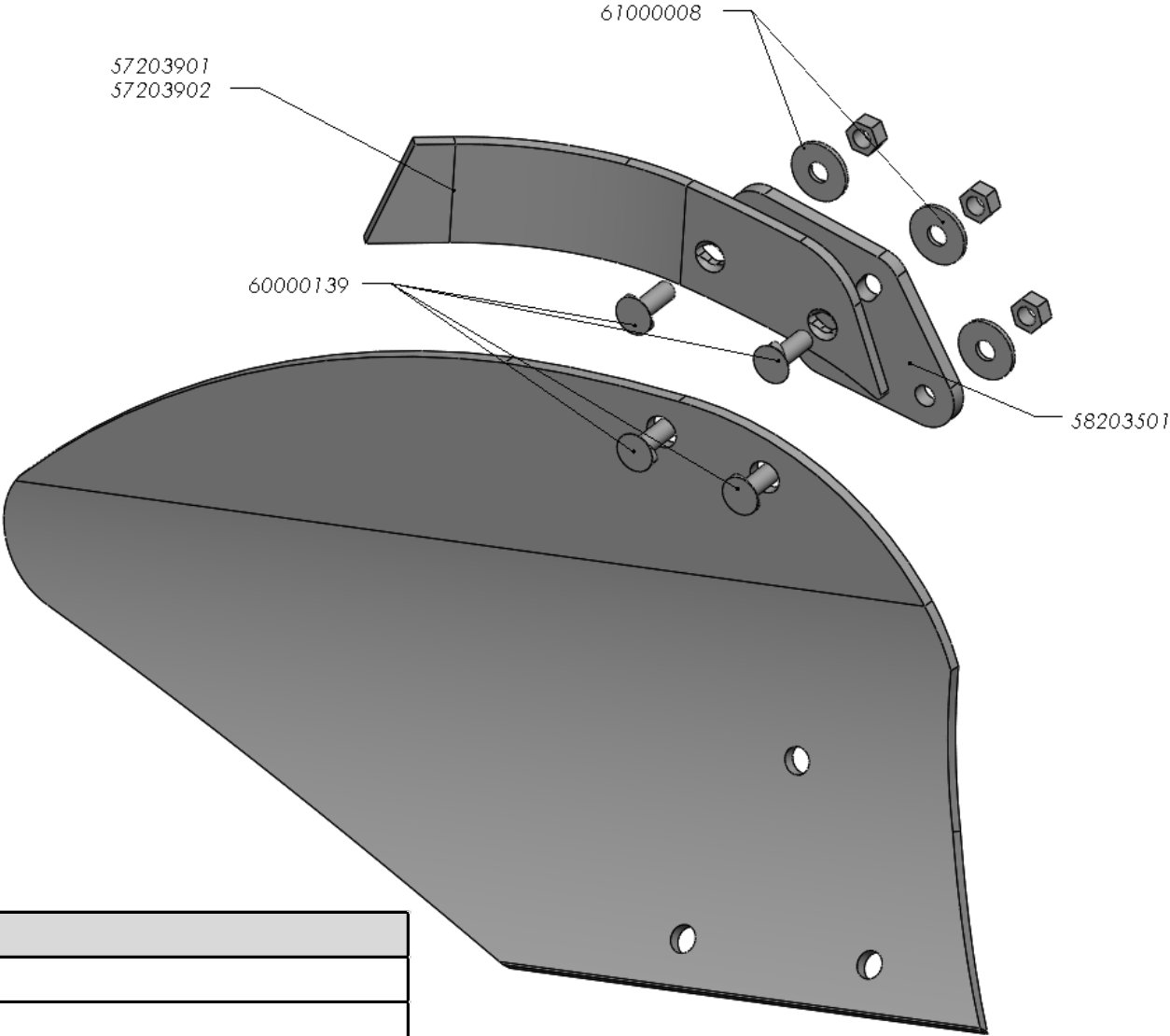


BODY SET

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		

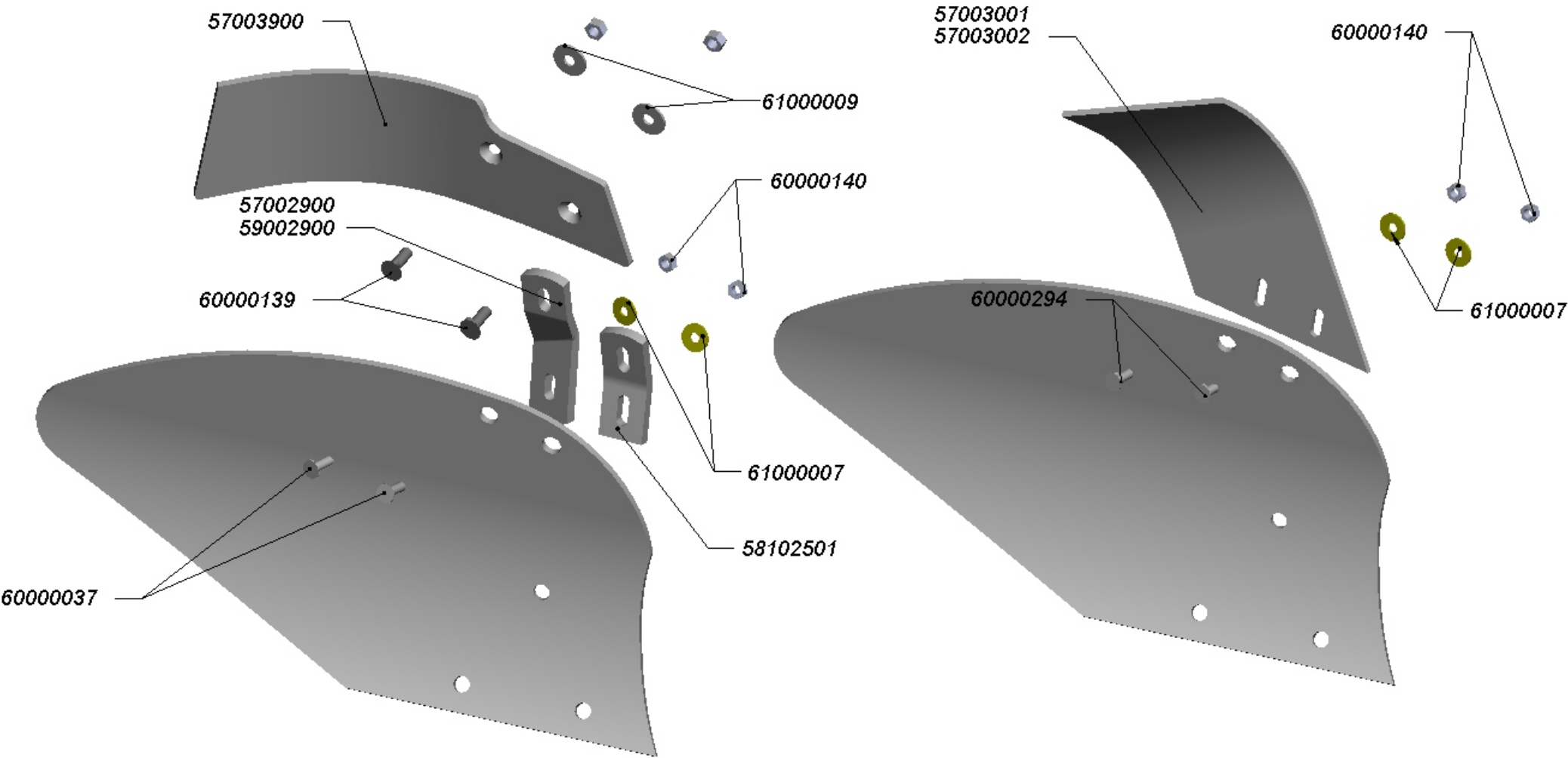
TRASH BOARDS

CONJ.1741



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.
61000008	ARAND.DIN-125 12 ZINC.

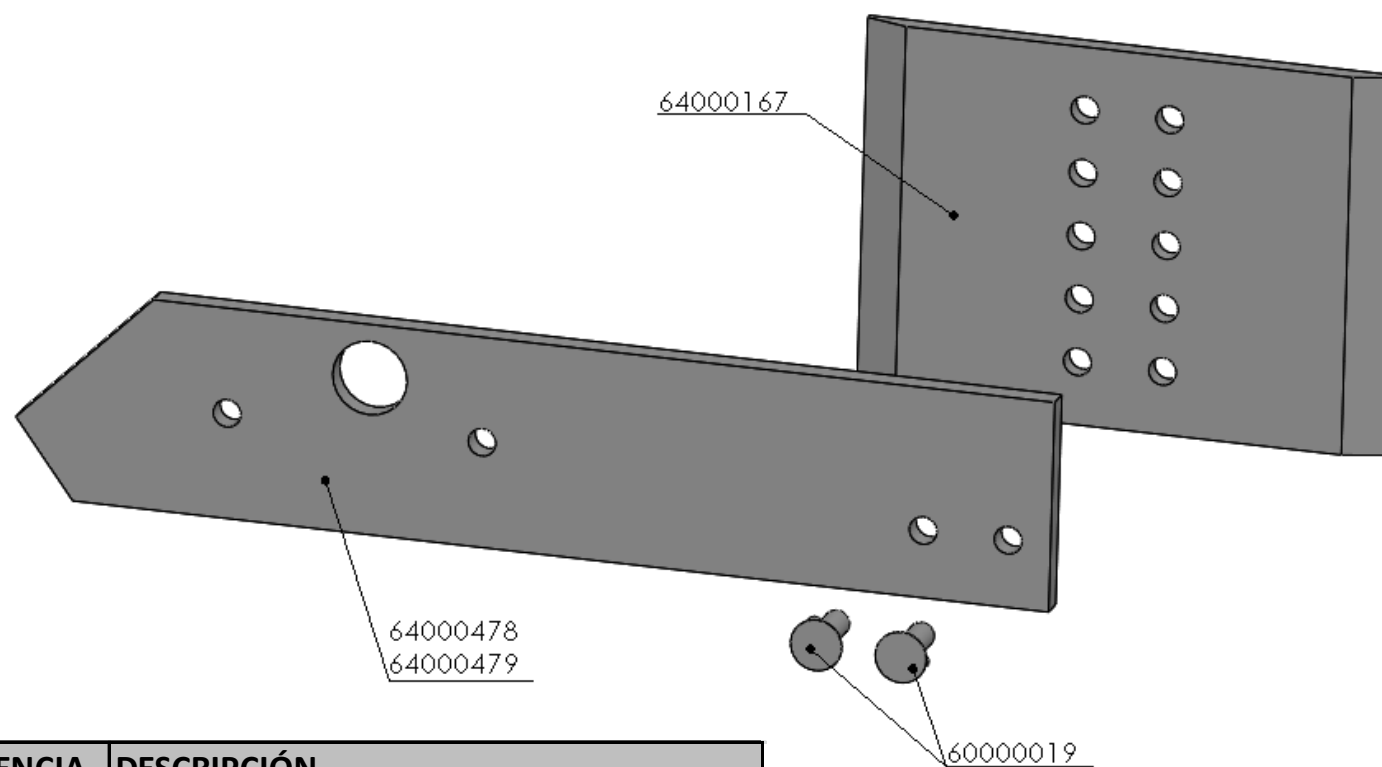
SKIM BOARDS



SKIM BOARDS

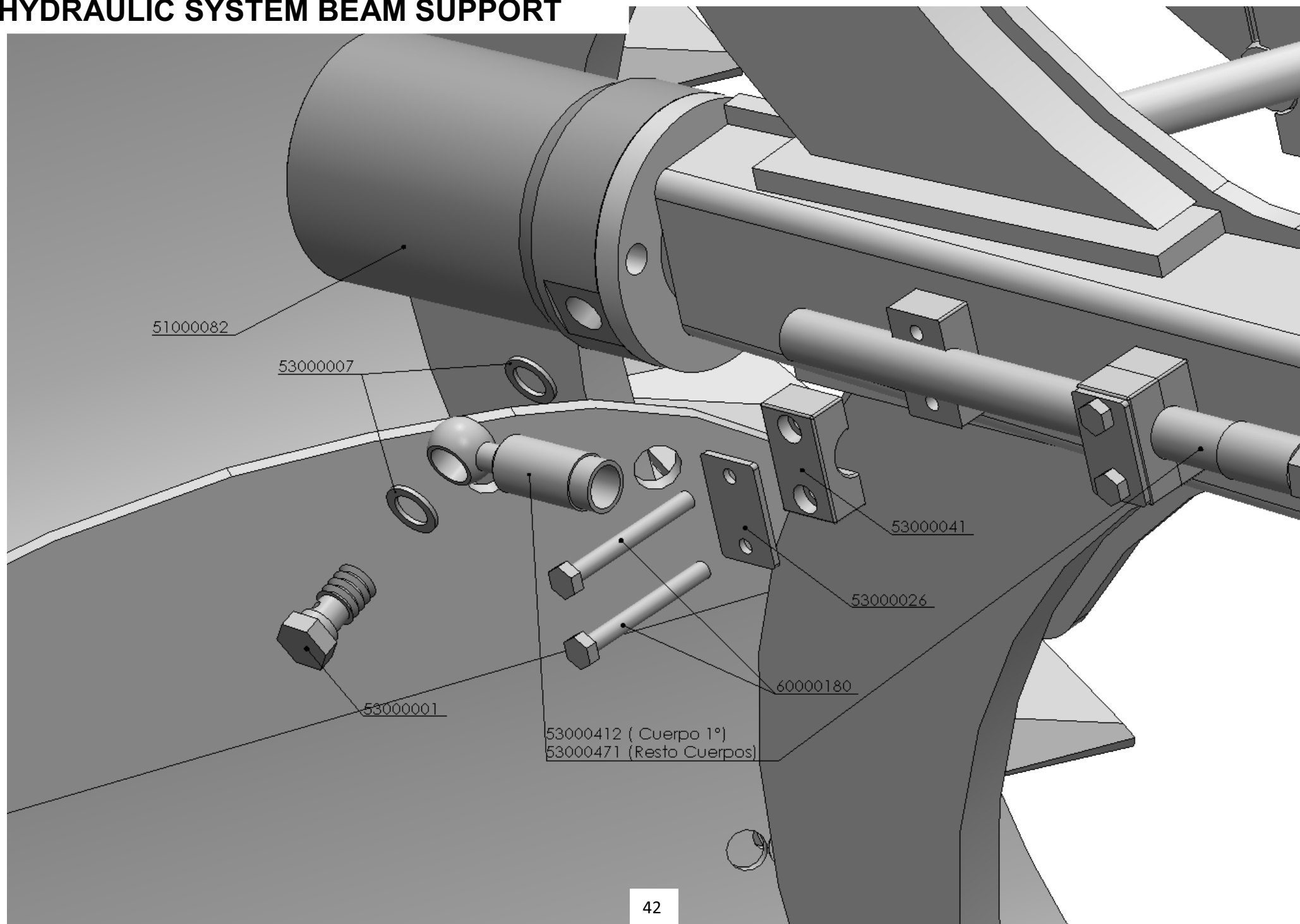
REFERENCIA	DESCRIPCIÓN
57002900	SOP.ANTER.DCH.C.R.1840/POST.DCH.1701
57003001	DEFLECTOR MINI-D
57003002	DEFLECTOR MINI-I
57003900	DEFLECTOR BORO 1856-D-CAV
58203501	SOPORTE CUBRE RASTROJO 1741
59002900	SOP.ANTER.IZQD.C.R.1840/POST.IZQD.1701
60000037	TORN.ARADO 2TET/934 10*35 10.9 ZINC.
60000139	TORN.ARADO 2TET/934 12*35 8.8 ZINC.
60000140	TUER.AUTO.DIN-980 10 8.8 ZINC.
60000294	TORN.ARADO 2TET/934 10*30 10.9 ZINC.
61000007	ARAND.DIN-9021 10 ZINC.
61000009	ARAND.DIN-9021 12 ZINC.

LANSLIDE EXTENSION



REFERENCIA	DESCRIPCIÓN
60000019	TORN.ARADO C/OV/934 12*36 12.9
64000167	TALONERA 2357
64000478	COSTANERA MINI LARGA-D
64000479	COSTANERA MINI LARGA-I

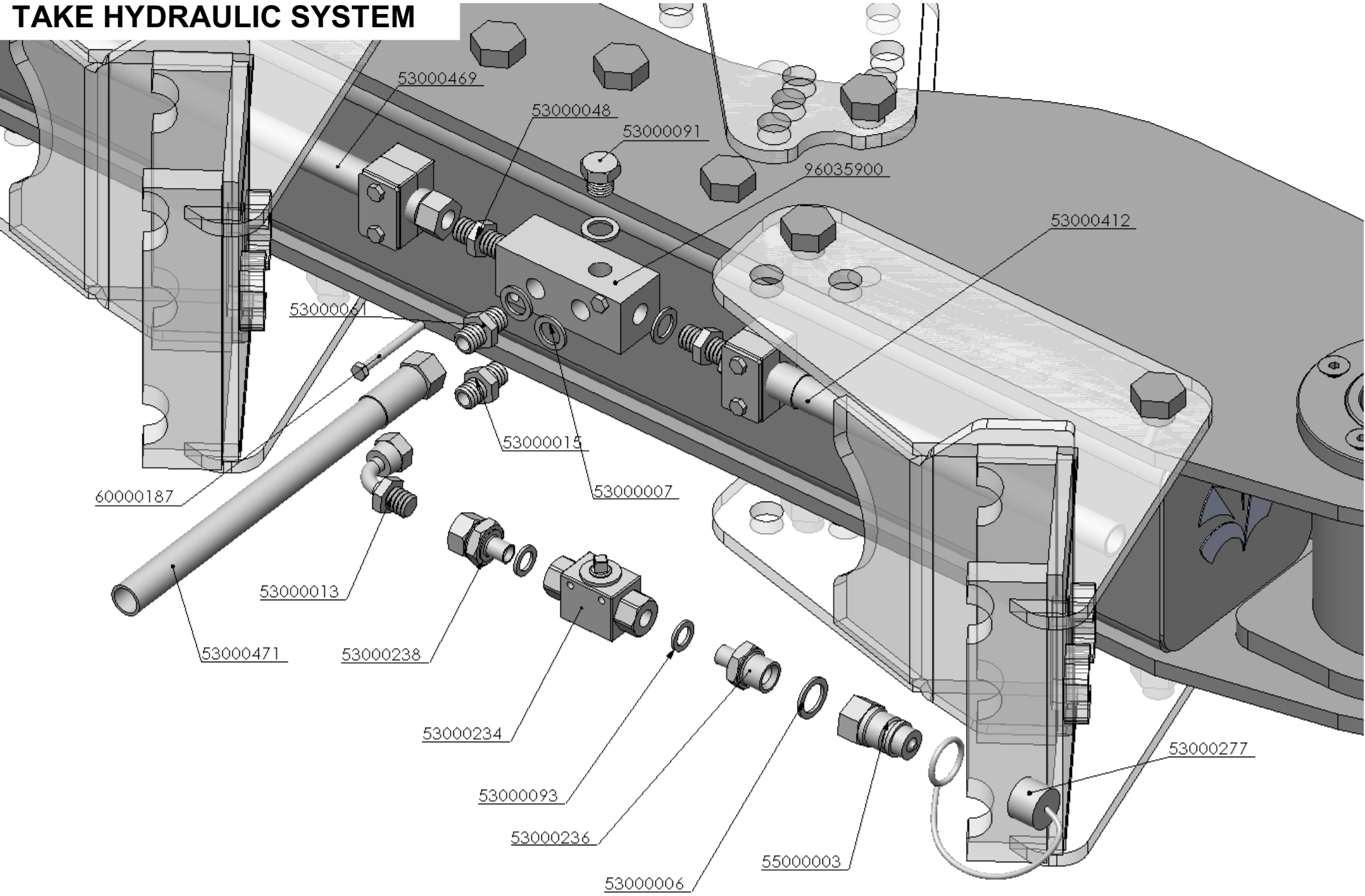
HYDRAULIC SYSTEM BEAM SUPPORT



HYDRAULIC SYSTEM BEAM SUPPORT

REFERENCIA	DESCRIPCIÓN
51000082	CILIND.TRACCION 90/36/60 AR
53000001	TORNILLO SIMPLE 3/8
53000007	JUNTA METAL/GOMA 3/8"
53000026	PLACA RFZO.AB.SIMPLE 20 DP3
53000041	ABRAZ.SIMPLE D=19mm. 319PP
53000412	LATIG.R2-3/8*1370mm.OR-3/8/TL-18
53000471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
60000180	TORN.EXAG.DIN-931 6* 40 8.8 ZINC.

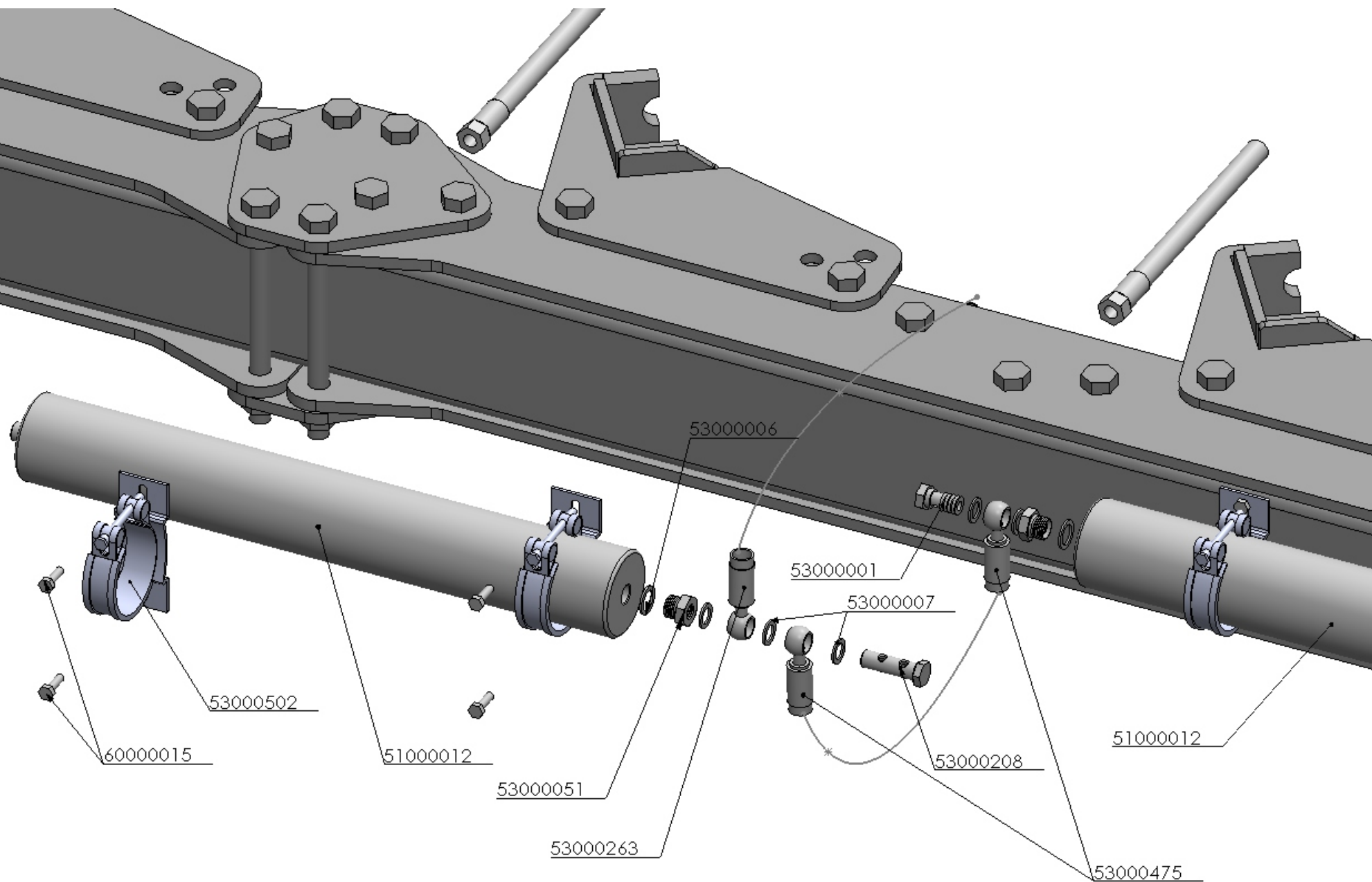
TAKE HYDRAULIC SYSTEM



TAKE HYDRAULIC SYSTEM

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
53000061	ESFERICO 3/8" TUBO 12mm.LARGO
53000091	TAPON MACHO 3/8 4152
53000093	JUNTA METAL GOMA 1/4 11601
53000234	VALV.ESFERA 2/2 1/4 GE2 DN6
53000236	UNION REDUCCION 1/4-1/2 4371
53000238	REDUCCION MACHO-TUERCA LOCA 1/4-3/8 4322
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
60000187	TORN.EXAG.DIN-931 6* 60 8.8 ZINC.
96035900	SOP.TOMAS HIDRAULICAS

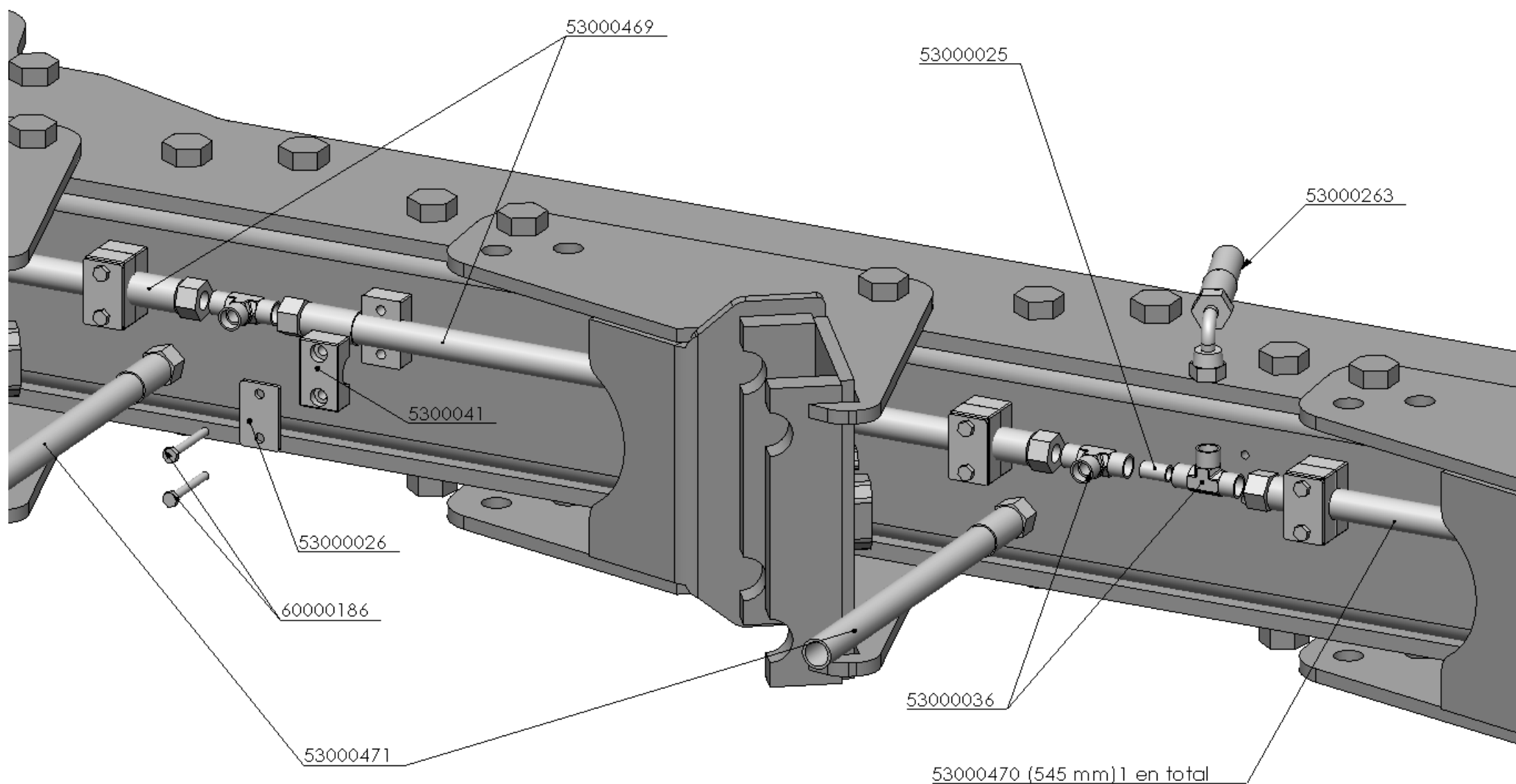
HYDRAULIC SYSTEM ACUMULATOR (Front Part)



HYDRAULIC SYSTEM ACUMULATOR (Front Part)

REFERENCIA	DESCRIPCIÓN
51000012	ACUMULADOR PISTON PO20A34N1-AC RAL-6029
53000475	LATIG.R2-3/8* 300mm.OR-3/8/OR-3/8
60000015	TORN.EXAG.DIN-933 8* 25 8.8 ZINC.
53000208	TORNILLO DOBLE 3/8" 4032
53000007	JUNTA METAL/GOMA 3/8" 11602
53000001	TORNILLO SIMPLE 3/8 4022
53000006	JUNTA METAL/GOMA 1/2" 11603
53000502	ABRAZ.ACUMULADOR
53000263	LATIG.R2-3/8* 450mm.OR-3/8/CTL-18

HYDRAULIC SYSTEM ACUMULATOR (Back Part)

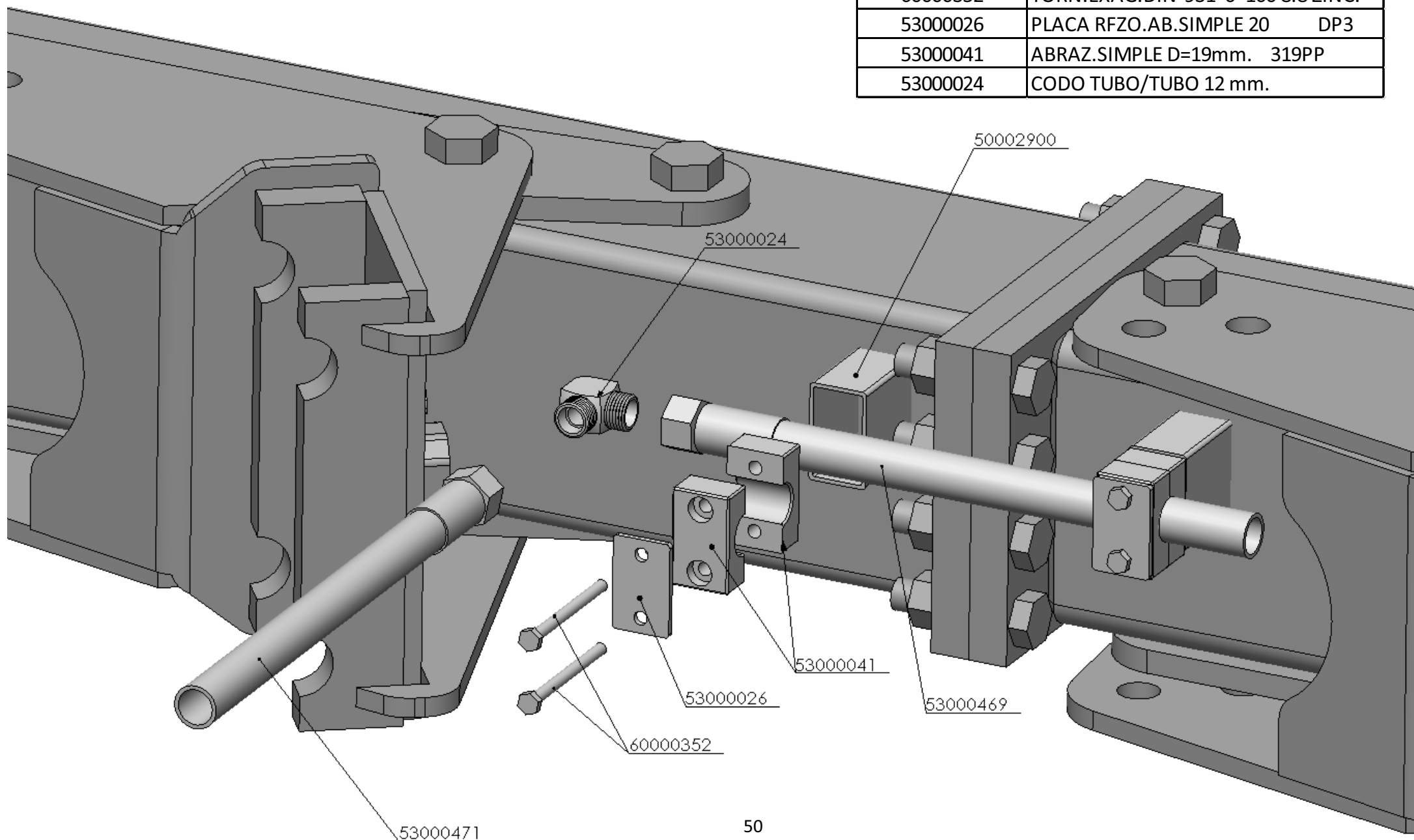


HYDRAULIC SYSTEM ACUMULATOR (Back Part)

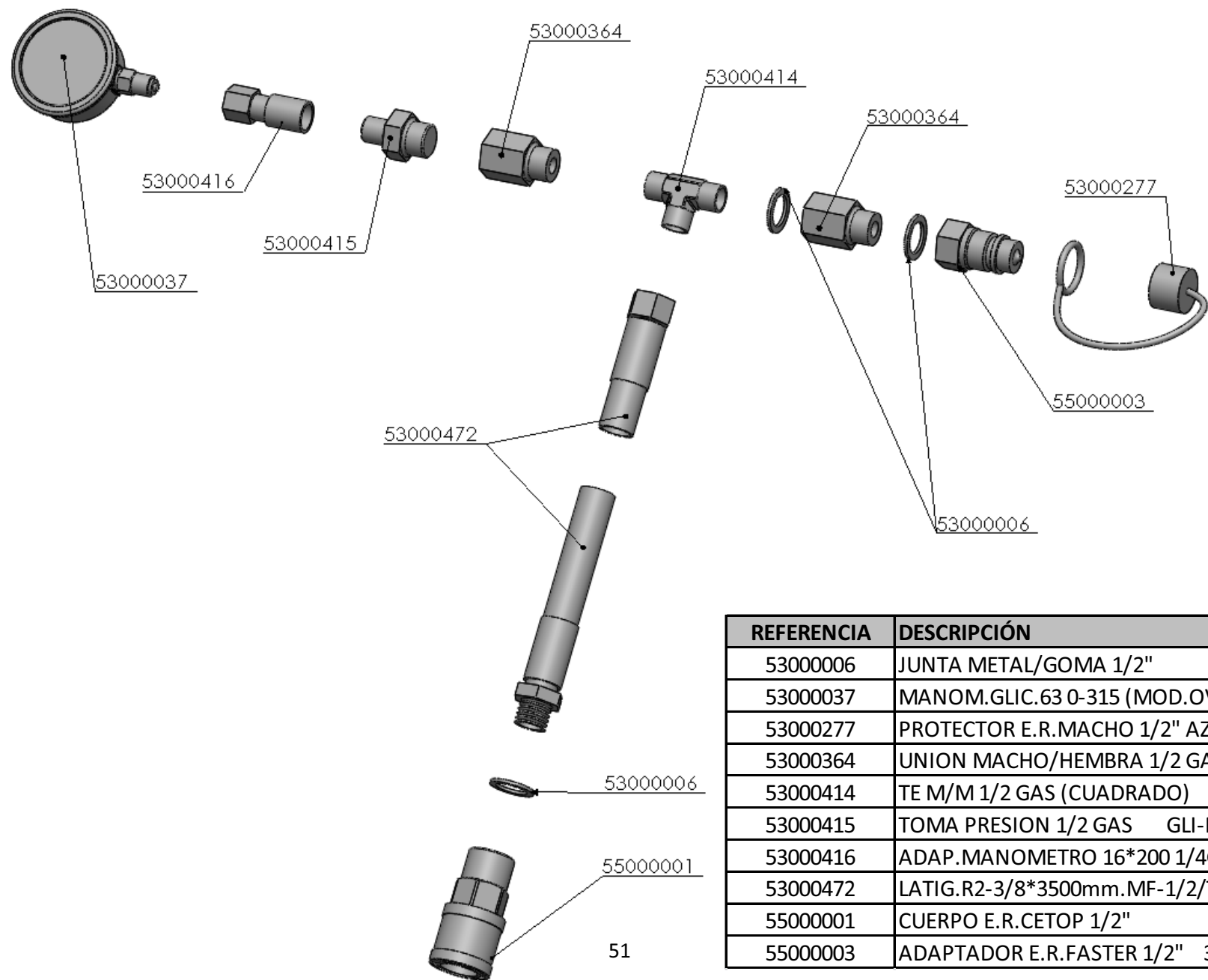
REFERENCIA	DESCRIPCIÓN
53000469	LATIG.R2-3/8* 610mm.TL-18/TL-18
53000471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
60000186	TORN.EXAG.DIN-931 6* 50 8.8 ZINC.
53000026	PLACA RFZO.AB.SIMPLE 20 DP3
53000041	ABRAZ.SIMPLE D=19mm. 319PP
53000036	TE UNION IGUAL 12 T12-L
53000470	LATIG.R2-3/8* 545mm.TL-18/TL-18
53000263	LATIG.R2-3/8* 450mm.OR-3/8/CTL-18
53000025	M.TUBO ACERO D=12*9mm.ZINC..

HYDRAULIC SYSTEM ADDITIONAL BODY

REFERENCIA	DESCRIPCIÓN
53000469	LATIG.R2-3/8* 610mm.TL-18/TL-18
53000471	LATIG.R2-3/8* 970mm.OR-3/8/TL-18
60000352	TORN.EXAG.DIN-931 6*100 8.8 ZINC.
53000026	PLACA RFZO.AB.SIMPLE 20 DP3
53000041	ABRAZ.SIMPLE D=19mm. 319PP
53000024	CODO TUBO/TUBO 12 mm.

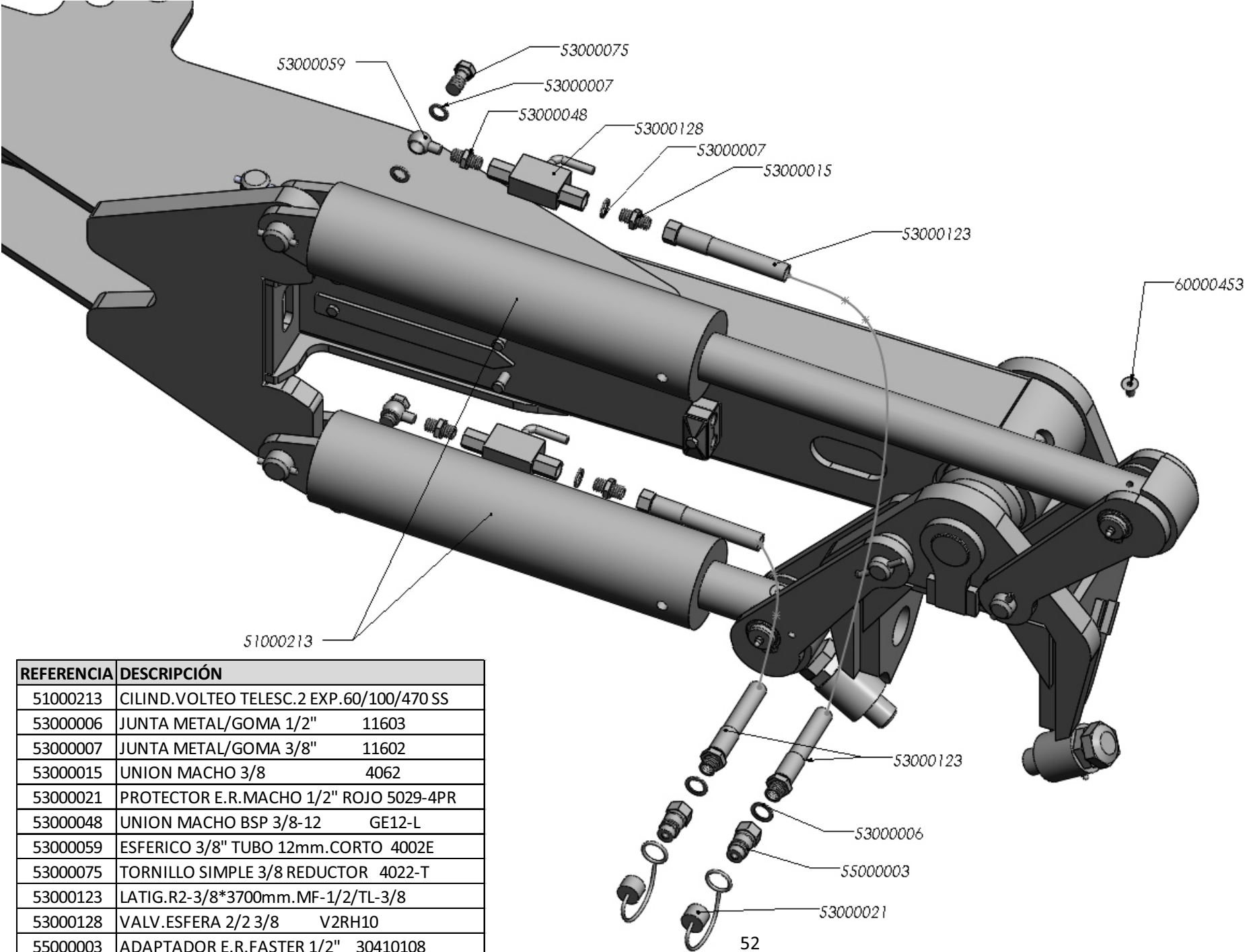


HYDRAULIC TUBE OF LOAD

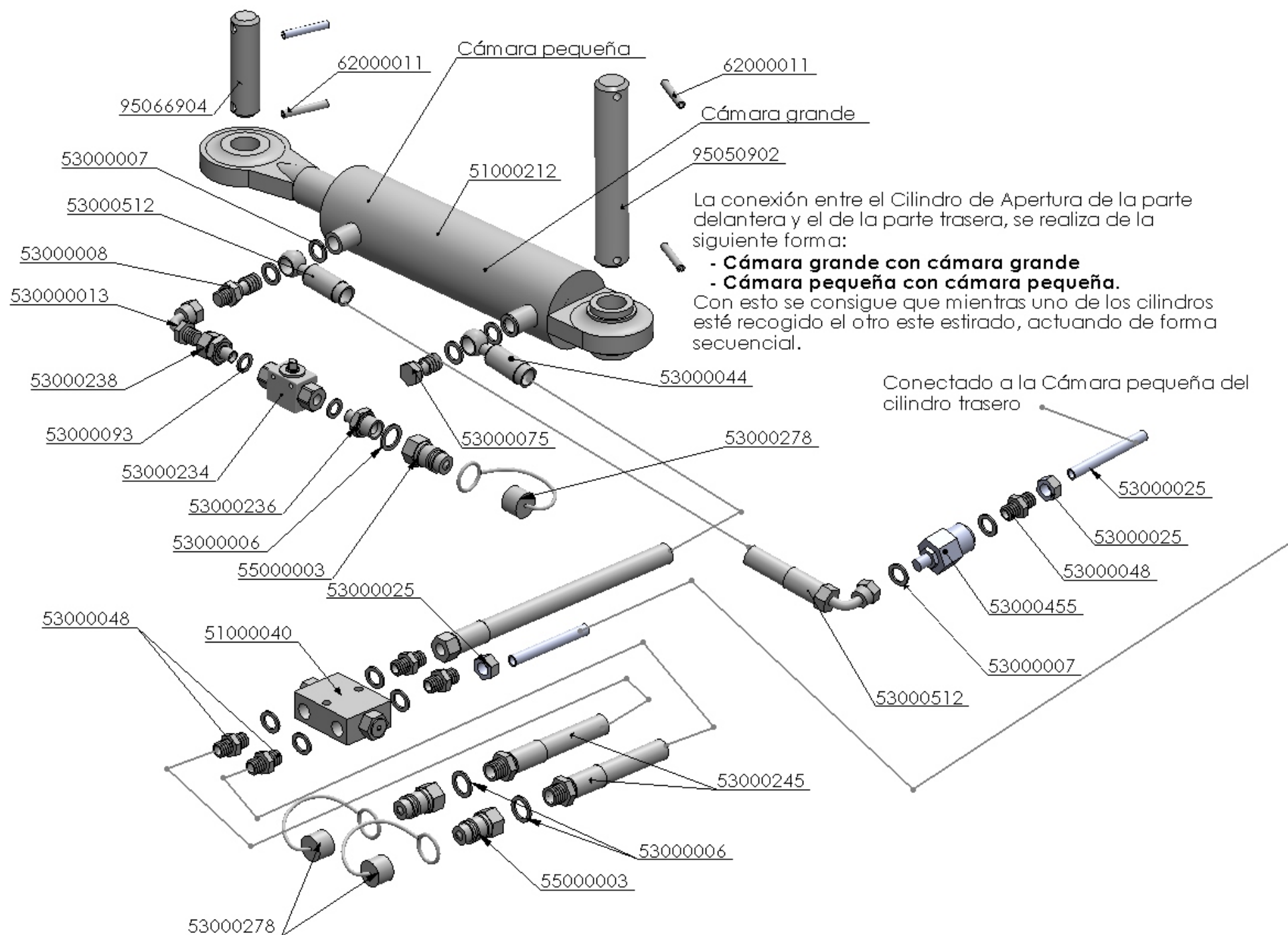


REFERENCIA	DESCRIPCIÓN
53000006	JUNTA METAL/GOMA 1/2" 11603
53000037	MANOM.GLIC.63 0-315 (MOD.OVLAC) 263R0-315
53000277	PROTECTOR E.R.MACHO 1/2" AZUL 5029-4PB
53000364	UNION MACHO/HEMBRA 1/2 GAS LEK-S-816-21-50
53000414	TE M/M 1/2 GAS (CUADRADO) LEK-S-955-21
53000415	TOMA PRESION 1/2 GAS GLI-MH191608
53000416	ADAP.MANOMETRO 16*200 1/4G GLI-MH181604
53000472	LATIG.R2-3/8*3500mm.MF-1/2/TL-1/2
55000001	CUERPO E.R.CETOP 1/2"
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108

HYDRAULIC ROLLOVER SYSTEM



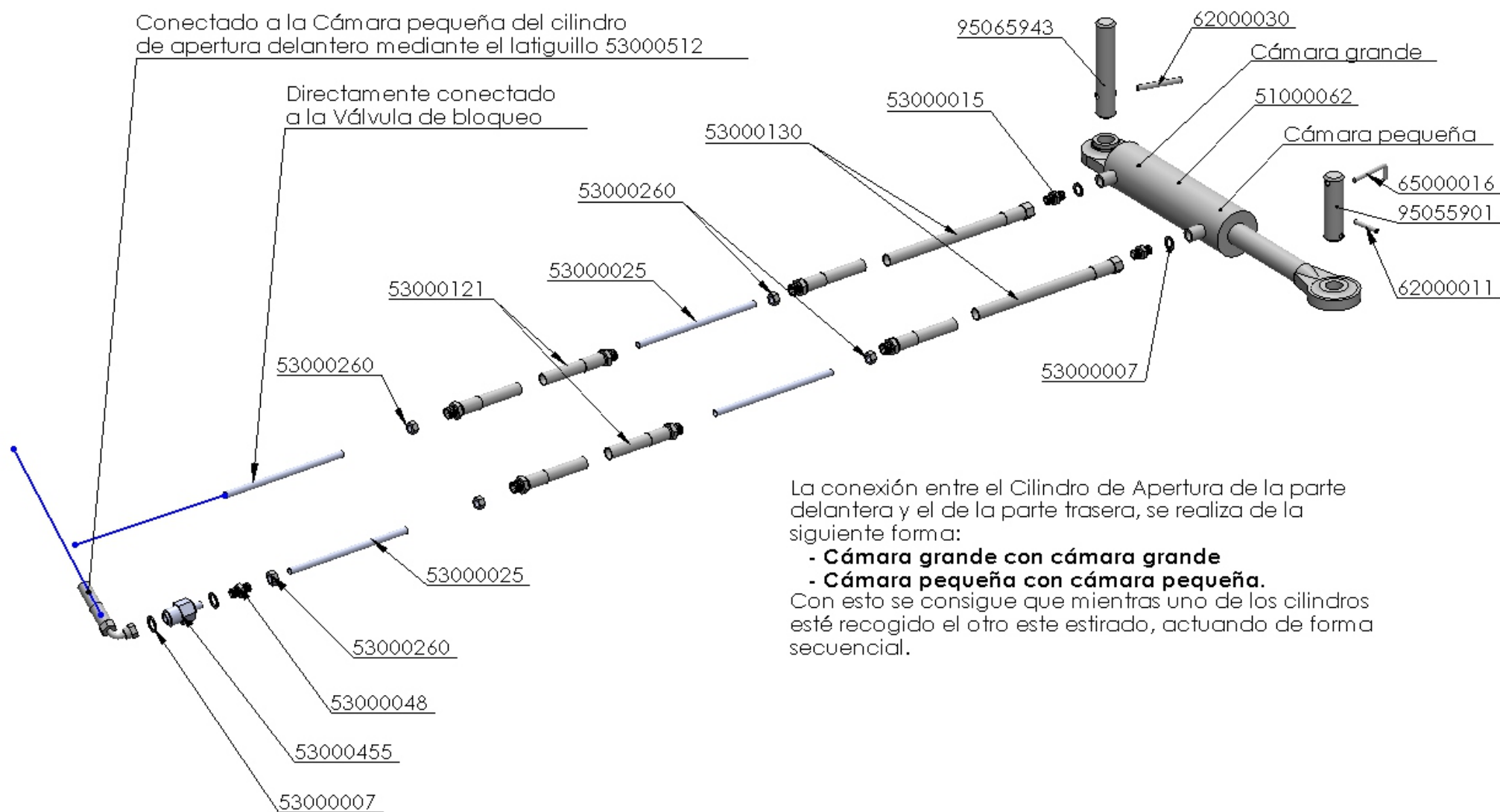
HYDRAULIC SYSTEM FOLK (Front Cylinder)



HYDRAULIC SYSTEM FOLK (Front Cylinder)

REFERENCIA	DESCRIPCIÓN
51000040	VALV.BLOQUEO ZINC.3/8 VBPDE-3/8-A
51000212	CILIND.APERT. 40/70/230 C/TCA.
53000006	JUNTA METAL/GOMA 1/2" 11603
53000007	JUNTA METAL/GOMA 3/8" 11602
53000008	TORNILLO PROLONGACION 3/8 4182
53000013	CODO 90° M/H-3/8" 4292
53000024	CODO TUBO/TUBO 12mm. W12-L
53000025	M.TUBO ACERO D=12*9mm.ZINC..
53000044	LATIG.R2-3/8*1900mm.OR-3/8/TL-18
53000048	UNION MACHO BSP 3/8-12 GE12-L
53000075	TORNILLO SIMPLE 3/8 REDUCTOR 4022-T
53000093	JUNTA METAL GOMA 1/4 11601
53000234	VALV.ESFERA 2/2 1/4 GE2 DN6
53000236	UNION REDUCCION 1/4-1/2 4371
53000238	REDUCCION MACHO-TUERCA LOCA 1/4-3/8 4322
53000245	LATIG.R2-3/8*2200mm.MF-1/2/TL-18
53000278	PROTECTOR E.R.MACHO 1/2" AMARILLO 5029-4PY
53000455	RACOR GIRATORIO RECTO 3/8 G1060
53000512	LATIG.R2-3/8*1800mm.OR-3/8/CTL-3/8
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108
62000011	PASADOR ELAST.DIN-1481 8* 50 ZINC.
95066904	BULON D=29,7*112mm.CILIND.APERT SS
99050902	BULON D=34,8*208mm.CILIND.RDA.SFB + DACROMET
53000025	M.TUBO ACERO D=12*9mm.ZINC..

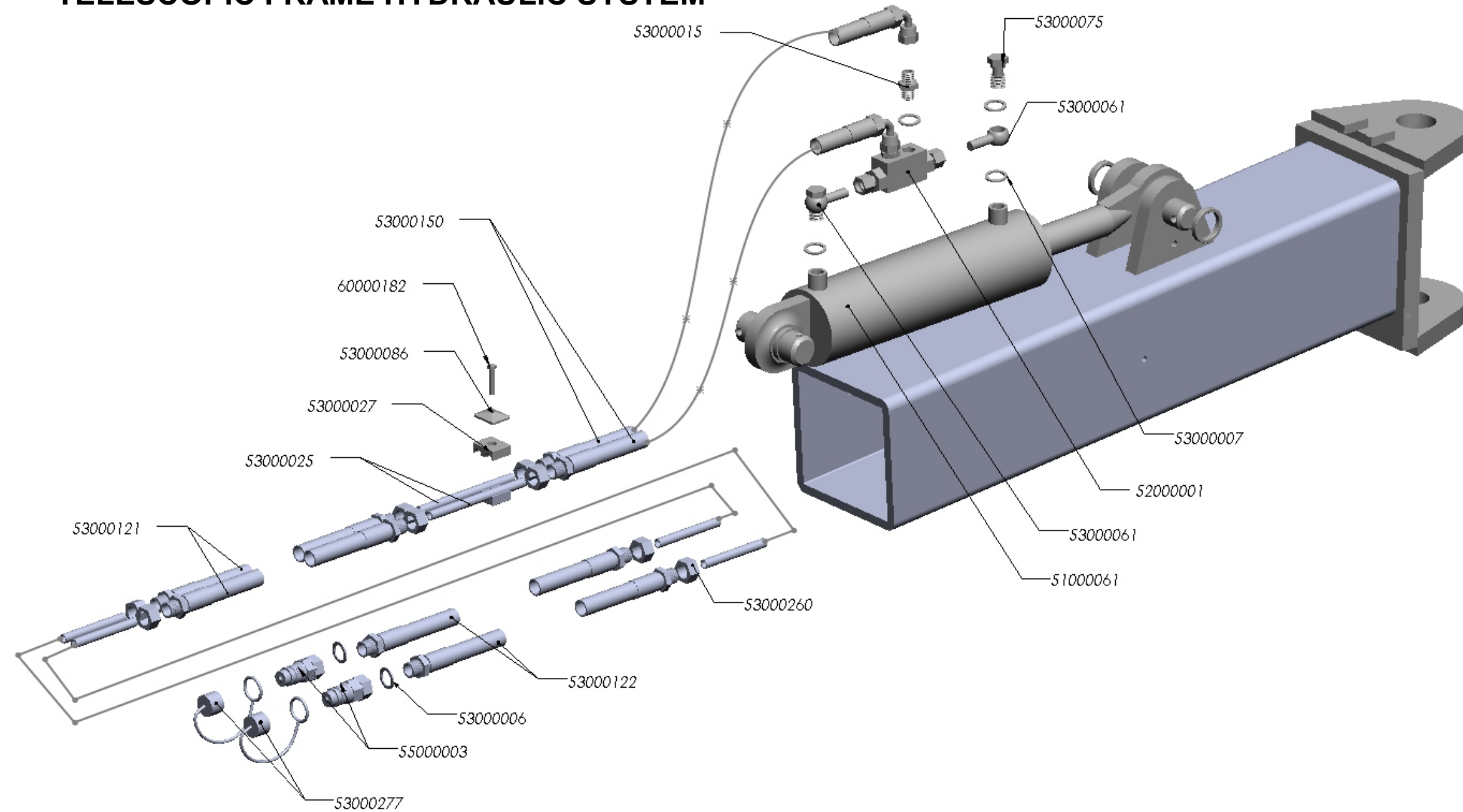
HYDRAULIC SYSTEM FOLK (Back Cylinder)



HYDRAULIC SYSTEM FOLK (Back Cylinder)

REFERENCIA	DESCRIPCIÓN
53000015	UNION MACHO 3/8 4062
51000062	CILIND.VOLTEO 40/70/230 ROT.D=35/30
53000024	CODO TUBO/TUBO 12mm. W12-L
53000025	M.TUBO ACERO D=12*9mm.ZINC..
53000048	UNION MACHO BSP 3/8-12 GE12-L
53000121	LATIG.R2-3/8* 500mm.MT-12/MT-12
53000130	LATIG.R2-3/8*2150mm.MT-12/TL-3/8
53000260	TUERCA M18*1,5 C/BICONO D12L M12-L PSR12LX
53000455	RACOR GIRATORIO RECTO 3/8 G1060
62000011	PASADOR ELAST.DIN-1481 8* 50 ZINC.
62000030	PASADOR ELAST.DIN-1481 10* 80 ZINC.
65000016	PASADOR FIJACION D= 7,5mm.
95055901	BULON D=34,8*122mm.CIL.BAST.TELESC.SS + DACROMET
95065943	BULON D=34,8*180mm.CILIND.APERT.SSN

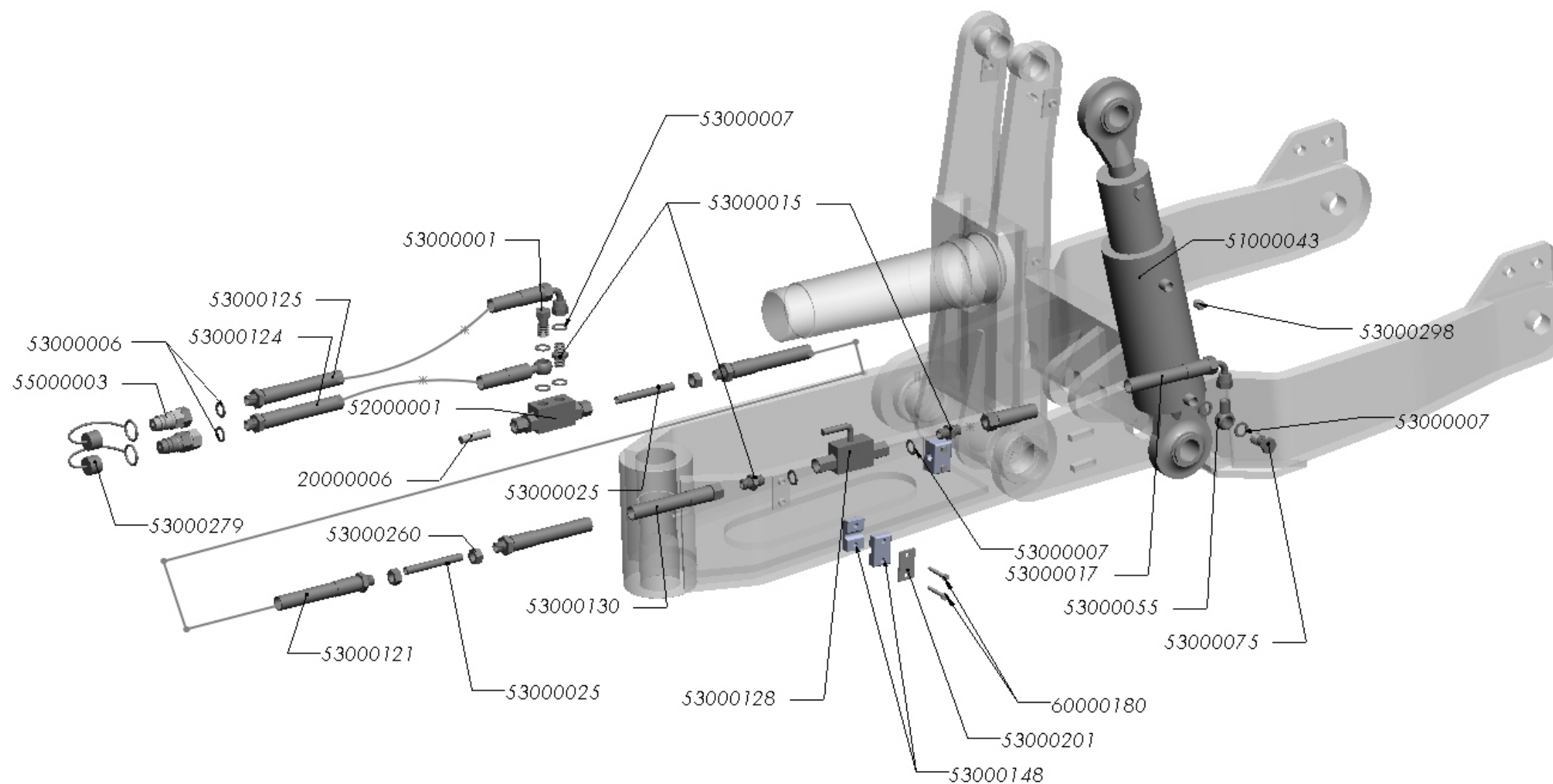
TELESCOPIC FRAME HYDRAULIC SYSTEM



TELESCOPIC FRAME HYDRAULIC SYSTEM

REFERENCIA	DESCRIPCIÓN
15018906	CASQ. D=45/35*8 SEP.APERT.CICRO
51000061	CILIND.VOLTEO 40/95/300 ROT.D=40/35
52000001	VALV.BLOQUEO ZINC.12 VBD38
53000001	TORNILLO SIMPLE 3/8 4022
53000006	JUNTA METAL/GOMA 1/2" 11603
53000007	JUNTA METAL/GOMA 3/8" 11602
53000015	UNION MACHO 3/8 4062
53000025	M.TUBO ACERO D=12*9mm.ZINC..
53000027	ABRAZ.DOBLE D=12mm. 1D12PP
53000061	ESFERICO 3/8" TUBO 12mm.LG=205 4002E-205
53000075	TORNILLO SIMPLE 3/8 REDUCTOR 4022-T
53000086	PLACA RFZO.AB.DOBLE 12 GD1D
53000121	LATIG.R2-3/8* 500mm.MT-12/MT-12
53000122	LATIG.R2-3/8*2150mm.MF-1/2/MT-12
53000150	LATIG.R2-3/8* 500mm.MT-12/CTL-3/8
53000260	TUERCA M18*1,5 C/BICONO D12L M12-L PSR12LX
53000277	PROTECTOR E.R.MACHO 1/2" AZUL 5029-4PB
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108
60000182	TORN.EXAG.DIN-931 6* 35 8.8 ZINC.

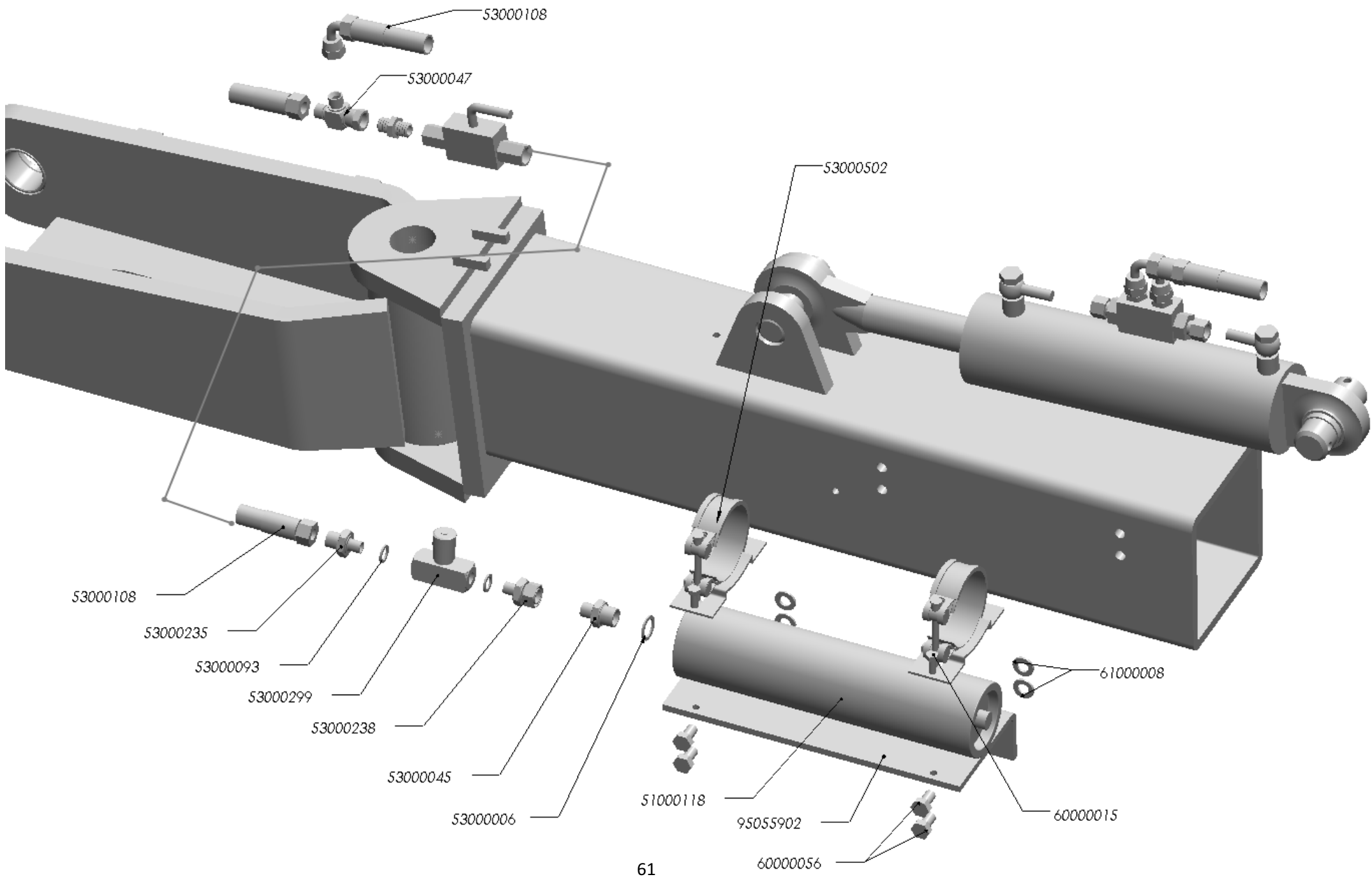
HYDRAULIC SYSTEM WHEEL



HYDRAULIC SYSTEM WHEEL

REFERENCIA	DESCRIPCIÓN
51000043	CILIND.ELEV.RDA.C/TCA.50/110/150 SS
52000001	VALV.BLOQUEO ZINC.12 VBD38
53000001	TORNILLO SIMPLE 3/8 4022
53000006	JUNTA METAL/GOMA 1/2" 11603
53000007	JUNTA METAL/GOMA 3/8" 11602
53000015	UNION MACHO 3/8 4062
53000017	LATIG.R2-3/8* 500mm.TL/CTL-3/8
53000025	M.TUBO ACERO D=12*9mm.ZINC..
53000055	ESFERICO ROSCADO 3/8 4012
53000075	TORNILLO SIMPLE 3/8 REDUCTOR 4022-T
53000121	LATIG.R2-3/8* 500mm.MT-12/MT-12
53000124	LATIG.R2-3/8*2250mm.MF-1/2/OR-3/8
53000125	LATIG.R2-3/8*2290mm.MF-1/2/CTL-3/8
53000128	VALV.ESFERA 2/2 3/8 V2RH10
53000130	LATIG.R2-3/8*2150mm.MT-12/TL-3/8
53000148	ABRAZ.SIMPLE D=18mm. 218PP
53000201	PLACA RFZO.ABSIMPLE 18
53000279	PROTECTOR E.R.MACHO 1/2" VERDE 5029-4PG
53000298	TAPON DESVAPORADOR 1/4" FA101
55000003	ADAPTADOR E.R.FASTER 1/2" 30410108
60000180	TORN.EXAG.DIN-931 6* 40 8.8 ZINC.

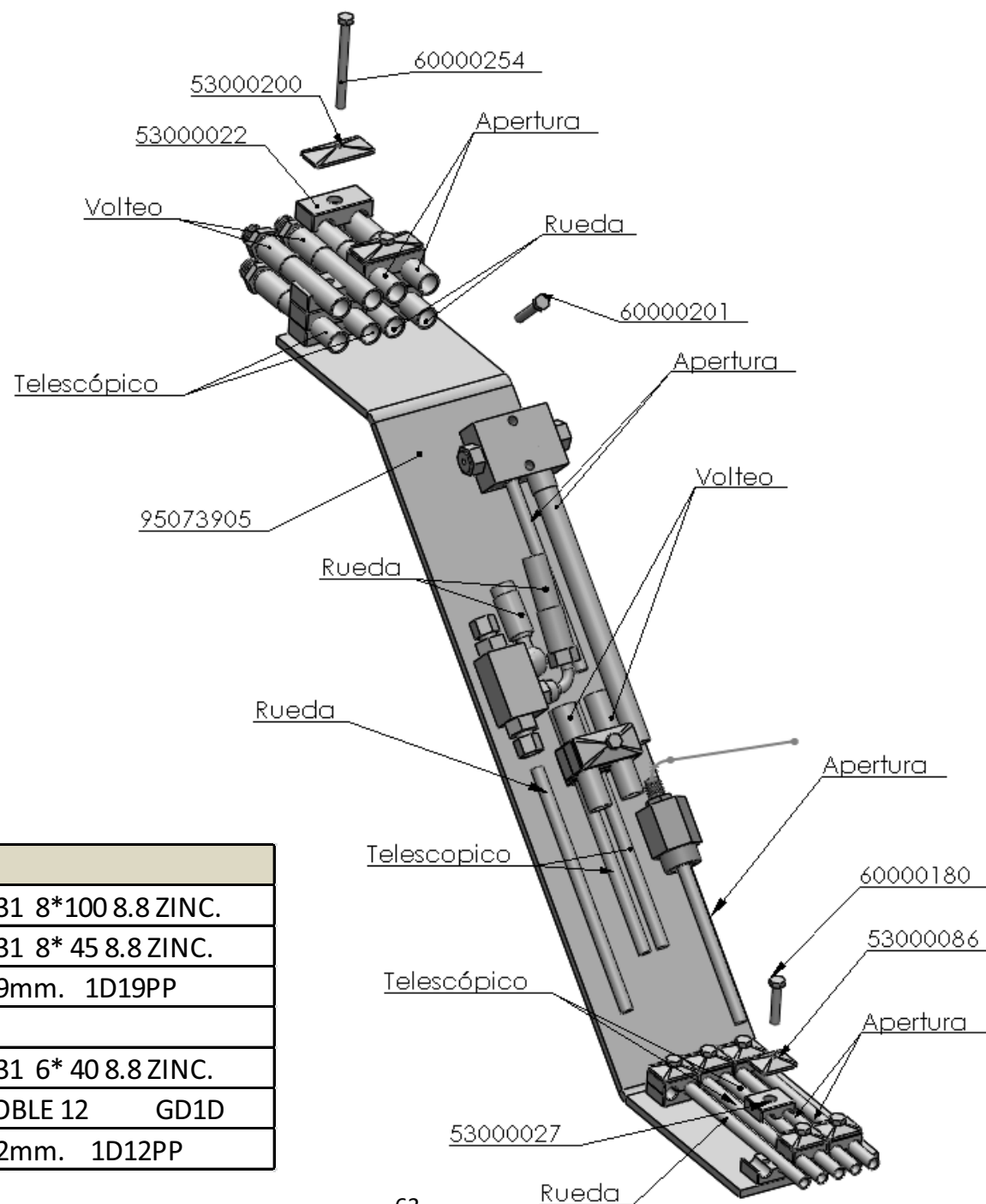
HYDRAULIC SYSTEM ACUMULATOR WHELL



HYDRAULIC SYSTEM ACUMULATOR WHELL

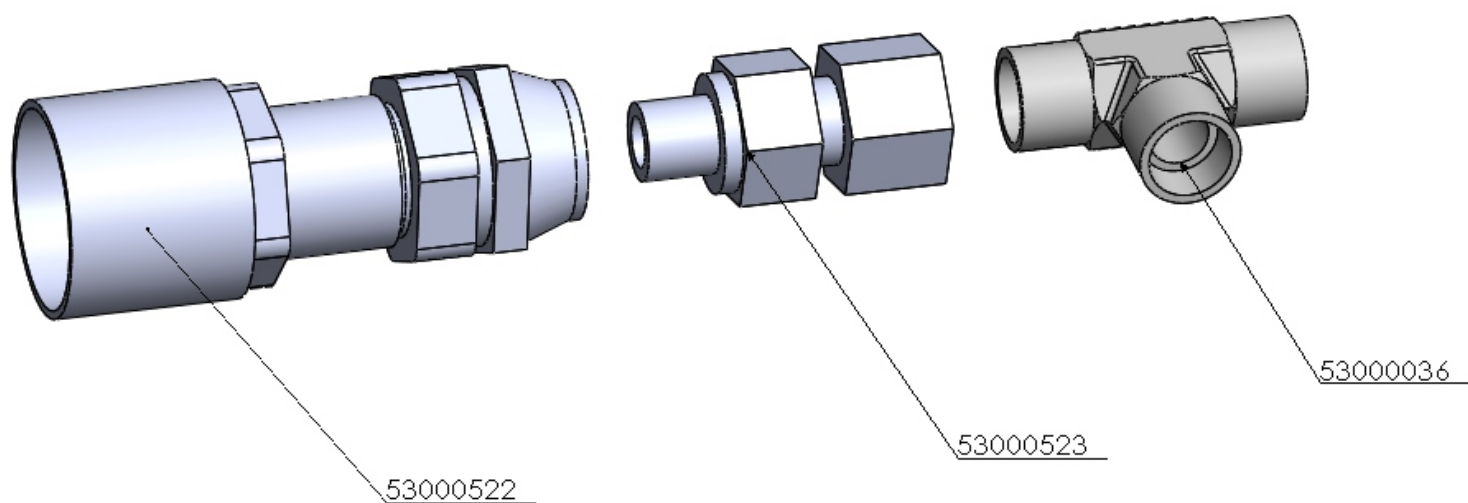
REFERENCIA	DESCRIPCIÓN
51000118	ACUMULADOR PISTON PO10A34N1-AC RAL-6029
53000006	JUNTA METAL/GOMA 1/2" 11603
53000045	UNION REDUCCION 3/8-1/2 4072
53000047	TE M/M C/TCA.LOCA LAT.3/8 4402
53000093	JUNTA METAL GOMA 1/4 11601
53000108	LATIG.R2-3/8* 900mm.TL/CTL-3/8
53000235	UNION REDUCCION 1/4-3/8 4071
53000238	REDUCCION MACHO-TUERCA LOCA 1/4-3/8 4322
53000299	REGULADOR CAUDAL POMO UNID.1/4 9F400S
60000015	TORN.EXAG.DIN-933 8* 25 8.8 ZINC.
60000056	TORN.EXAG.DIN-933 12* 20 12.9
61000008	ARAND.DIN-125 12 ZINC.
95055902	SOP.ACUMULADOR RDA.SS
96034900	ABRAZ.ACUMULADOR

SUPPORT HOSE



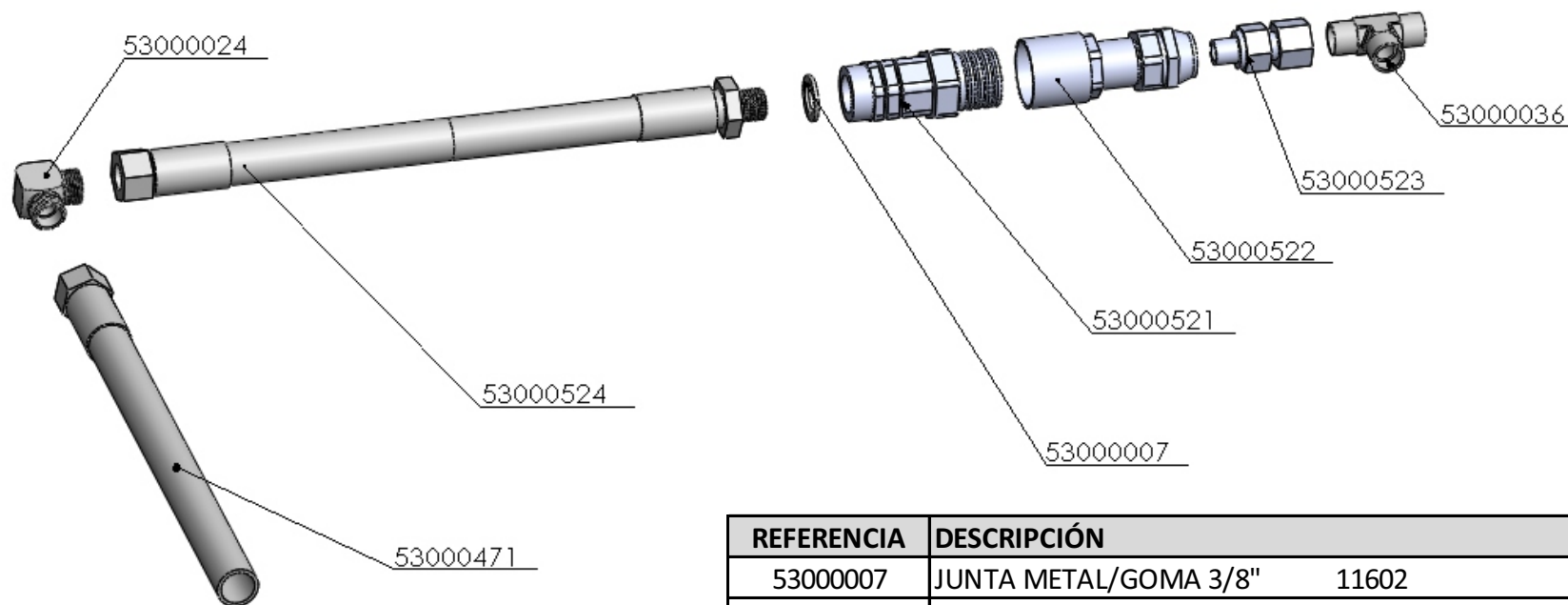
REFERENCIA	DESCRIPCIÓN
60000254	TORN.EXAG.DIN-931 8*100 8.8 ZINC.
60000201	TORN.EXAG.DIN-931 8* 45 8.8 ZINC.
53000022	ABRAZ.DOBLE D=19mm. 1D19PP
95073905	SOPORTE LATIG.SS
60000180	TORN.EXAG.DIN-931 6* 40 8.8 ZINC.
53000086	PLACA RFZO.AB.DOBLE 12 GD1D
53000027	ABRAZ.DOBLE D=12mm. 1D12PP

FAST PLUG BASE NH



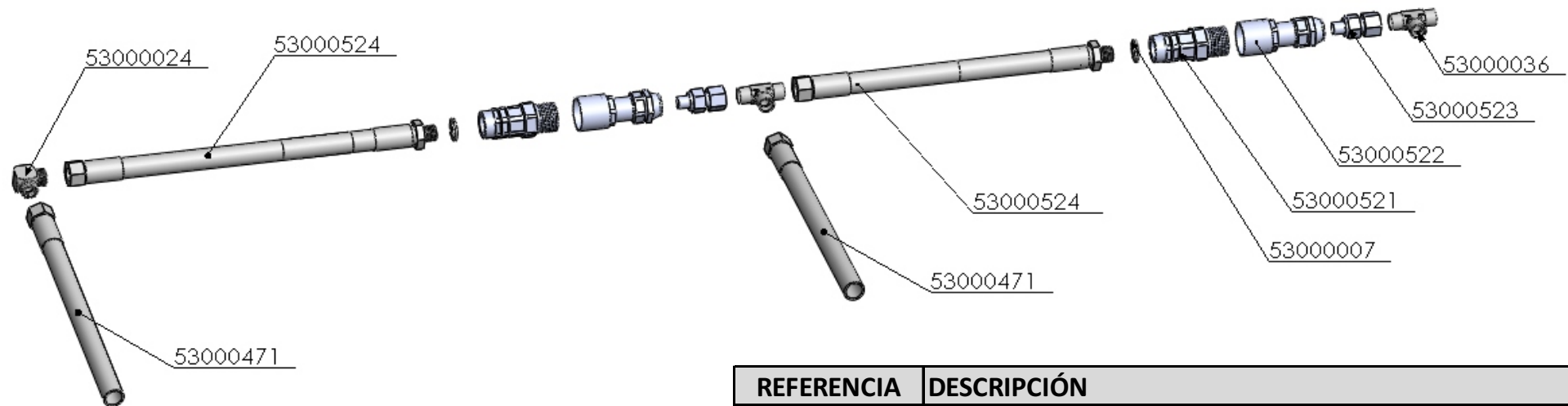
REFERENCIA	DESCRIPCIÓN
53000036	TE UNION IGUAL 12 T12-L
53000522	CONECTOR ROSCADO 3/8 HEMBRA LEK-PVT4-3/8F
53000523	MACHO GAS 3/8 TUERCA LOCA 12 VG-TN126AGG12L

FAST PLUG LAST 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

FAST PLUG LAST AND INTERMEDIATE 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



ovlac

FÁBRICA Y ADMINISTRACIÓN

OVLAC Fabricación de Maquinaria Agrícola, S.A. Polígono Industrial,
C/ TAF, P-163

34200 – Venta de Baños (Palencia) SPAIN

Telef.: + 34 979 76 10 11

Fax: + 34 979 76 10 22

E-mail: fabricacion@ovlac.com