

PEDESTAL BREAKER SYSTEM FOR CRUSHING SESA GOA Ltd



MOD: BA5-360VR



GUARANTEE

TABE hydraulic breaker is guaranteed for 12 months from the date of delivery to the customer.

This date will be included in GUARANTEE SHEET, as well as hammer working conditions.

This GUARANTEE sheet must be filled up and signed by TALLERES BETOÑO S.A. or an authorised dealer.

Possession of the "GUARANTEE SHEET" by the TABE Technical Assistance Service conditions the validity of the guarantee.

TABE's responsibility is limited to the defects which occur to the product only if it has been used in the conditions for which it was designed and whenever it has been used following the operating instructions.

The stated guarantee period is valid for work performed during one daily shift (8 hours).

If the shift is longer, the guarantee period will be reduced proportionally.

Similarly, it will be necessary to individually establish specific guarantee conditions in jobs of a particular nature (submarine, opening tunnels, cleaning slags,..etc.).

During the guarantee period, **TABE**, or its authorized Dealer will replace, free of charge, any parts which are acknowledged as being defective as a result of a faulty material or construction by our Technical Assistance Service.

Transportation costs of spare parts under guarantee will be at **TABE** expenditure. Nevertheless rates and tariffs will be cleared up by the distributor.

The replacement of a part during the guarantee period does not result in an extension of guarantee period of the whole unit.

The parts replaced free of charge should be sent to our workshops within 15 days from the date of sending the replacement under guarantee, so that the factory may decide whether the said parts qualify for guarantee conditions. After this period payment will be required.

The replaced parts will remain under factory property.

The following hammer parts are excluded from the guarantee:

<u>DENOMINATION</u>	<u>REFERENCE</u>
Tool	AGB-70
Pressure hose	AGB-111
Return hose	AGB-110
Lock-pin	AGB-46

The guarantee does not apply to parts, the wear, deterioration or breakage of which is due to negligence in the maintenance of the hammer, as it is shown in the manual instructions.

Pedestal Breaker model	BA5-360VR	200829
Hammer model	AGB-475BC	8751
Delivery date:	27.8.08	

Signature: TABE

Signature: SESA GOA Ltd

SUMMARY

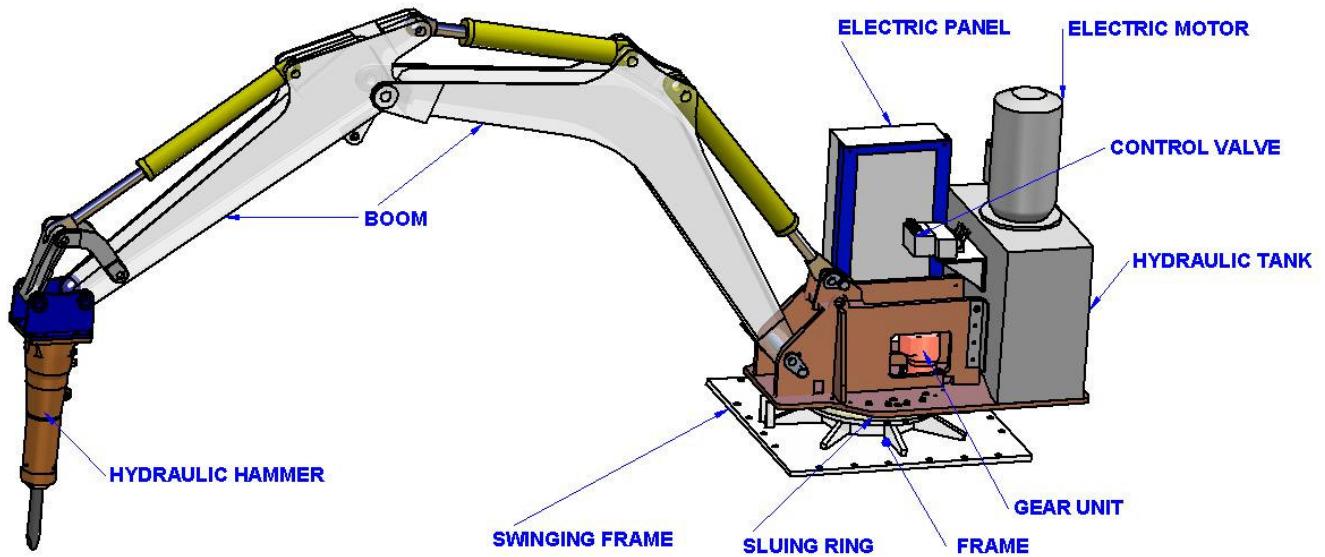
1. ASSEMBLING
2. EQUIPMENT DESCRIPTION
3. TECHNICAL FEATURES
4. START-UP
5. EQUIPMENT MAINTENANCE
6. PRECAUTIONS DURING SERVICE
7. PEDESTAL BREAKER EXPLODED VIEW
8. ELECTRICAL SCHEME
9. HYDRAULIC SCHEME
10. REMOTE CONSTROL

1. ASSEMBLING

Equipment is made up of the following :

- Frame
 - Boom
 - Power pack
 - Hydraulic pack
 - Operating element
 - Hydraulic hammer
- { Electrical
Hydraulic

ASSEMBLING BA5 360VR



2. EQUIPMENT DESCRIPTION

2-1 Lower frame

Welded structure supporting the following elements:

- Frame
- Sluing ring
- Swinging frame
- Power pack
- Hydraulic pack
- Operating elements

Frame is joint throughout 20 metric screws to the structure which is placed over the mill.

2-2 Boom

Made up of:

- Jib
- Arm
- Hydraulic cylinders

2-3 Power Pack

Electric motor placed over the hydraulic tank.

2-4 Hydraulic pack

Placed over the swinging frame.

Made up of:

- 2-4-1 Hydraulic pumps.
- 2-4-2 Hydraulic tank.
- 2-4-3 Accessories.

2-4-1 Hydraulic pump
Double geared pump.
Located inside tank.

2-4-2 Hydraulic tank.
Capacity: 400l.

2-4-3 Accessories:
- Return filter.
- Oil level.
- Hoses.
- Fittings.

2-5 Operating elements.

2-5-1 Electrical.
2-5-2 Hydraulic.

2-5-1 Electrical

- Switchboard.
- Switch desk.

Switchboard is over the frame, on it are seated contactors, fuses, transformers, power supply and switch desk strip.

Switch desk. Is a unit hold by the operator where the pushing buttons are placed and the arm movements are made.

2-5-2 Hydraulic

- A. Movement control valve.
 - B. Hammer control valve.
-
- A. Proportional distributor throughout which arm cylinders movements are controlled, they are situated over the hydraulic tank.
 - B. Hammer control valve throughout this valve we control the hydraulic hammer they are situated over the hydraulic tank.

2-6 Hydraulic Hammer

Hammer is joint to the boom through bracket.

Hammer's purpose is to break big size stone that to not enter into the mill.

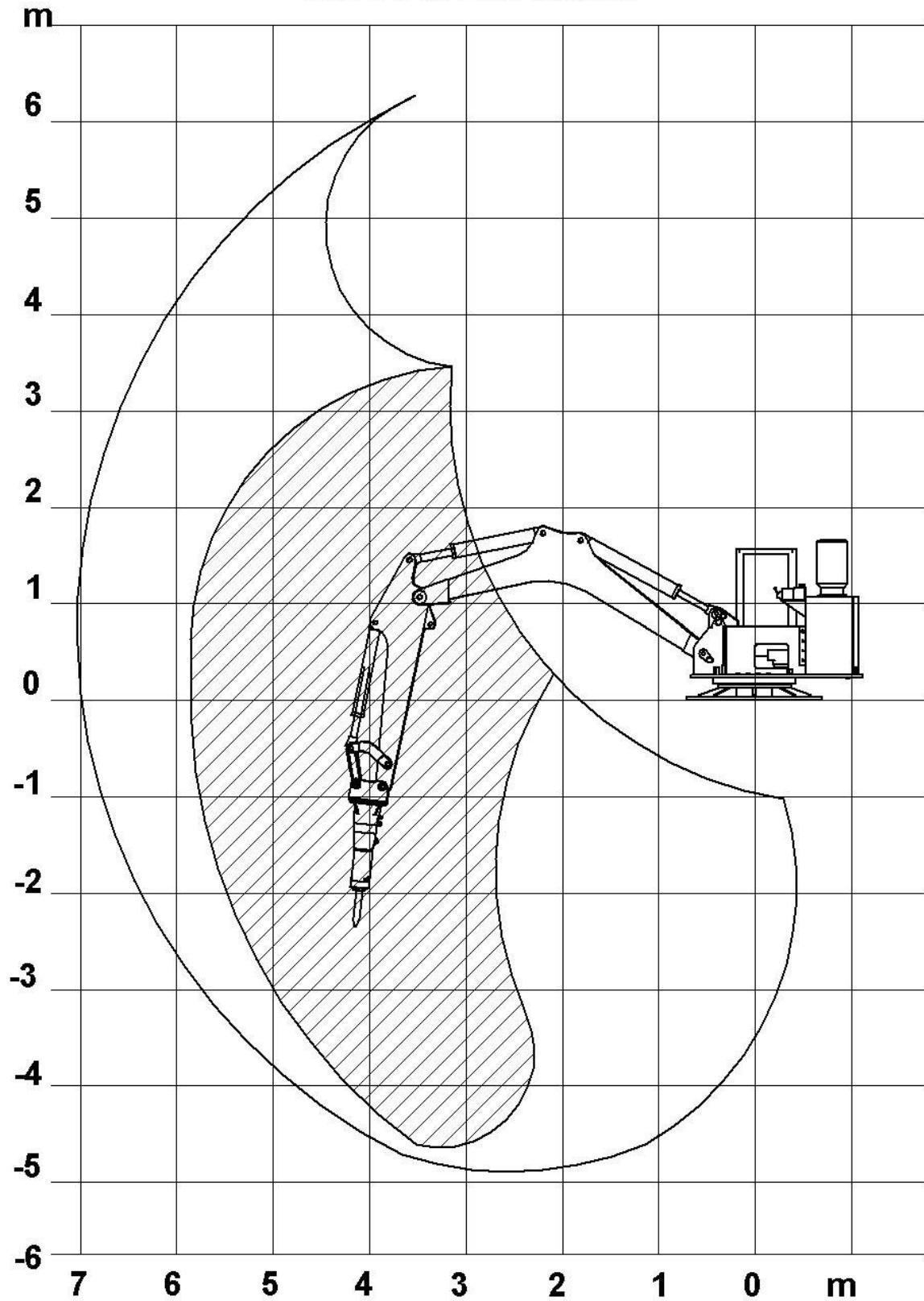
Technical features

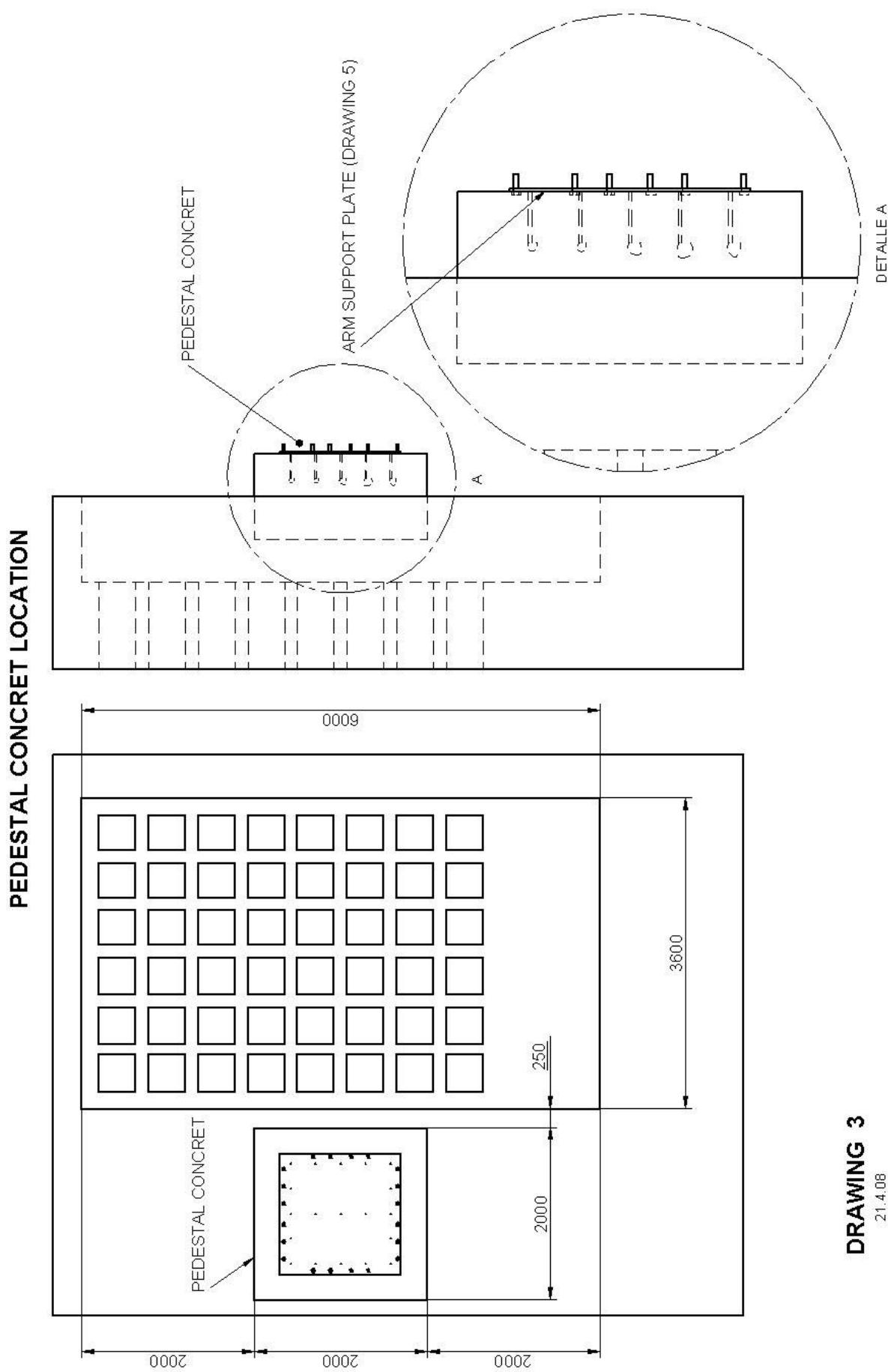
Model : AGB-475BC
Oil-flow : 80 l/min.
Pressusre : 140 bars.
Weight : 410 kgs.

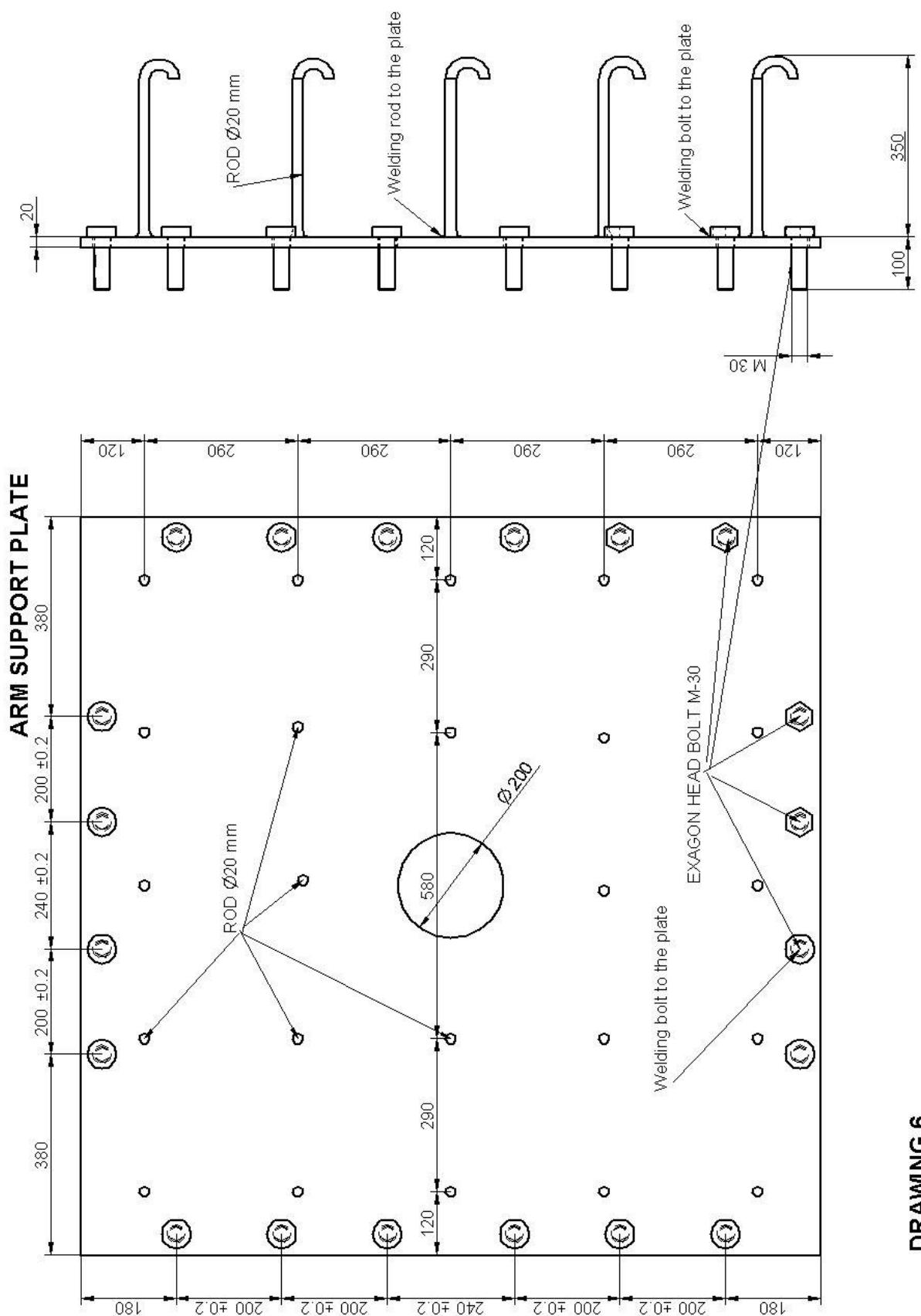
3. TECHNICAL FEATURES

- 3-1 Hammer working area.
- 3-2 Equipment weight and dimensions.
- 3-3 Installed power.
- 3-4 Hydraulic system
- 3-5 Equipment weight and dimensions .
- 3-6 Forces and moments over the basement.
- 3-7 Holding platform to the structure.

MODELO BA5 360VR

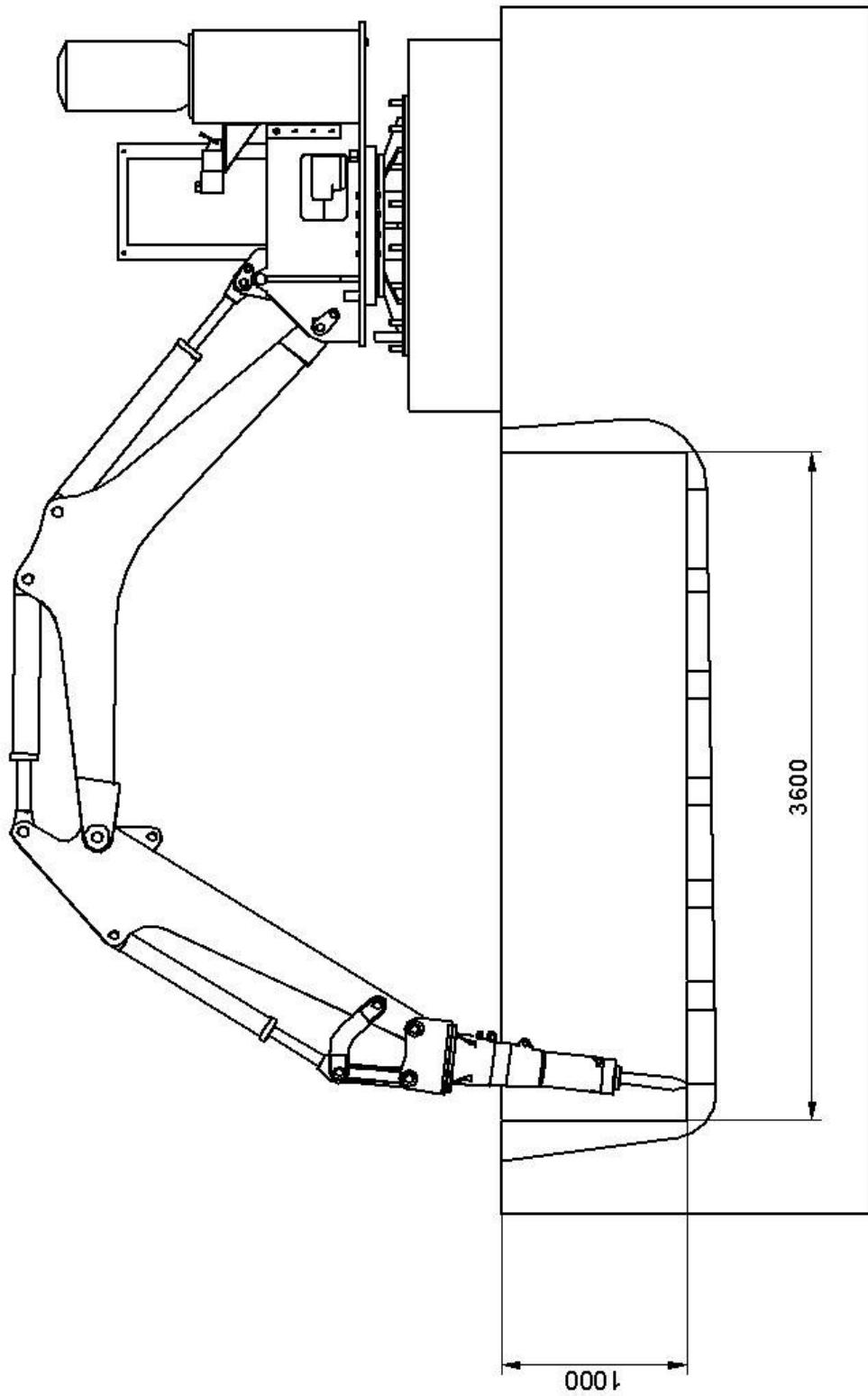






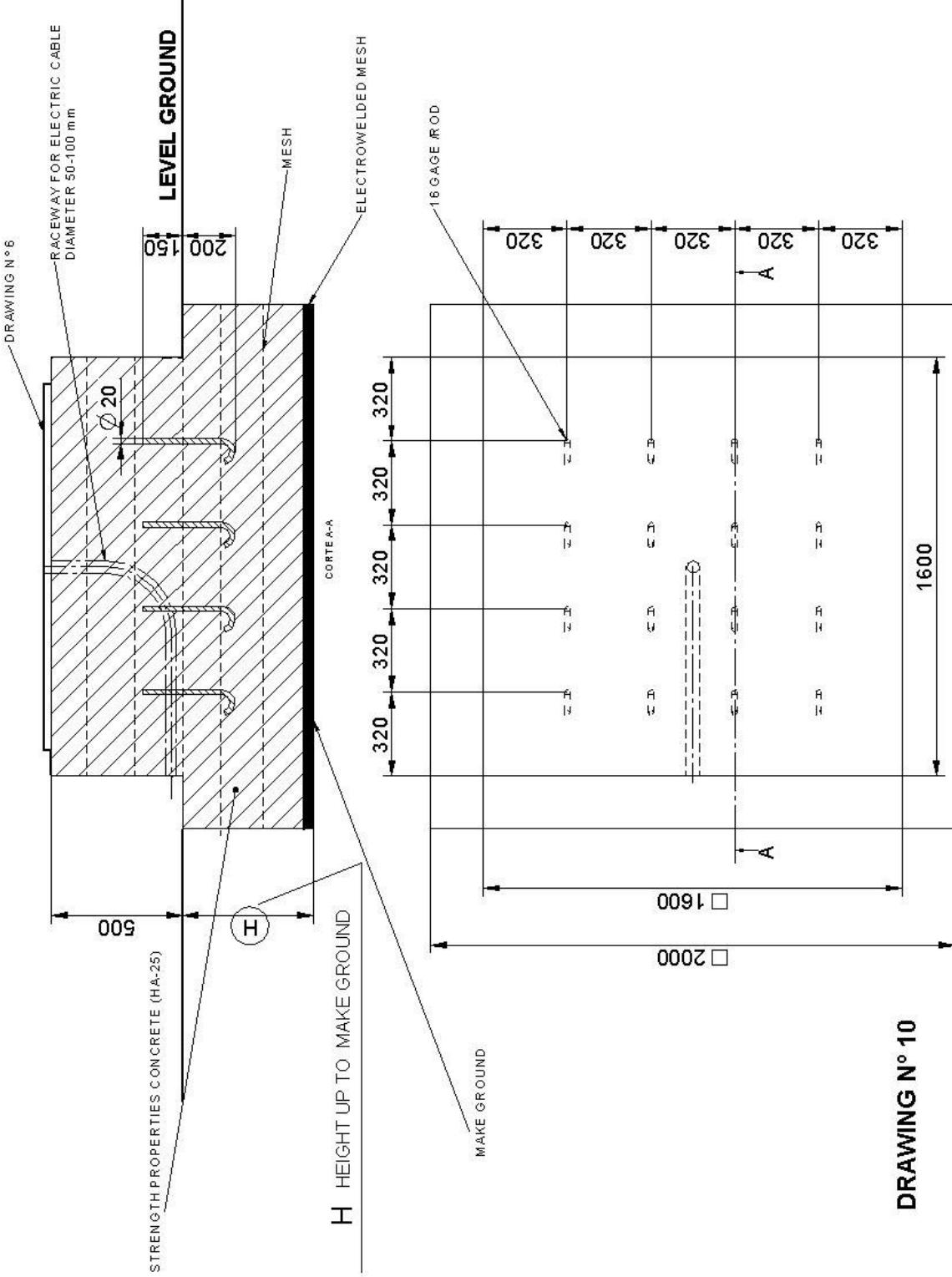
DRAWING 6

POSITION OF THE HAMMER
IN INTERIOR GUARD

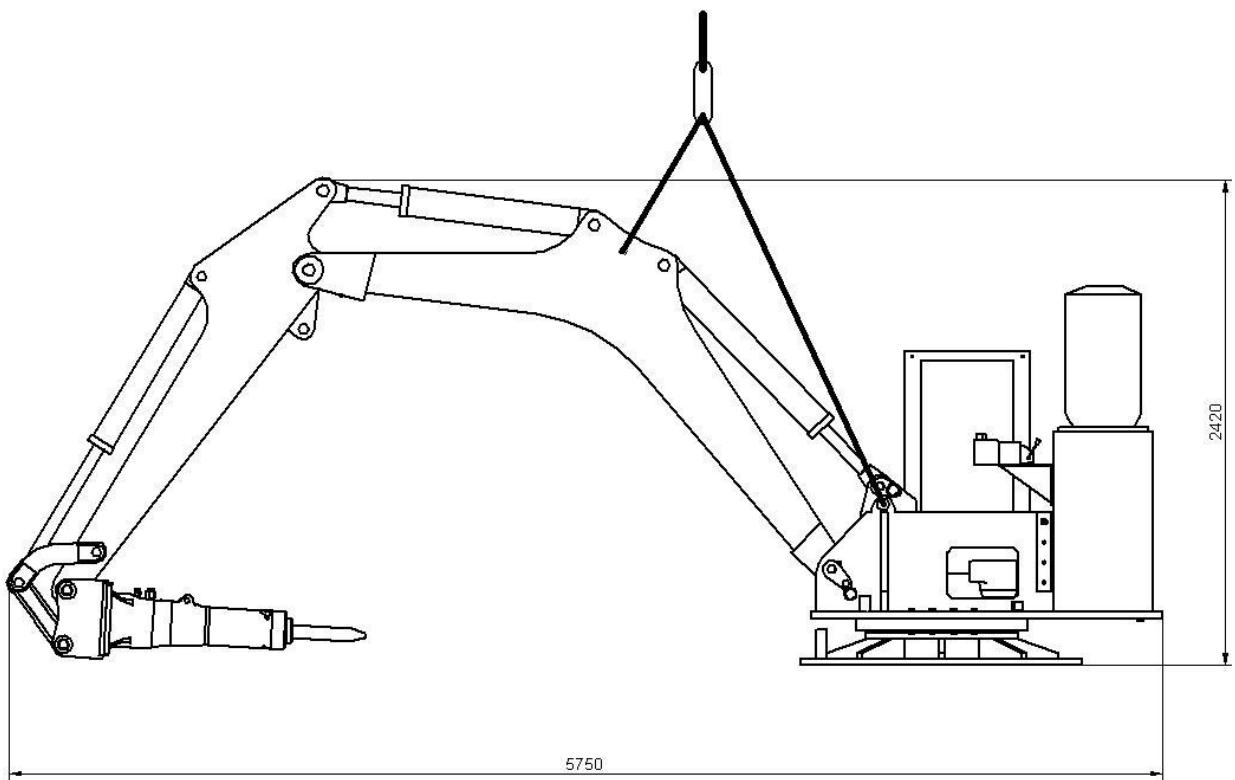


DRAWING 7

REINFORCED CONCRETE



3-2 Equipment dimensions



WIDE : 1500mm.

WEIGHT : 3750 Kg

3-3 Installed power.

Electric motor.

Mark	ASEA
Refer.	M2AA 225S4
Power	37 Kw
Revolutions	1500 r.p.m.
Voltage	380/660 V.
Frequency	50 Hz.

3-4 Hydraulic system

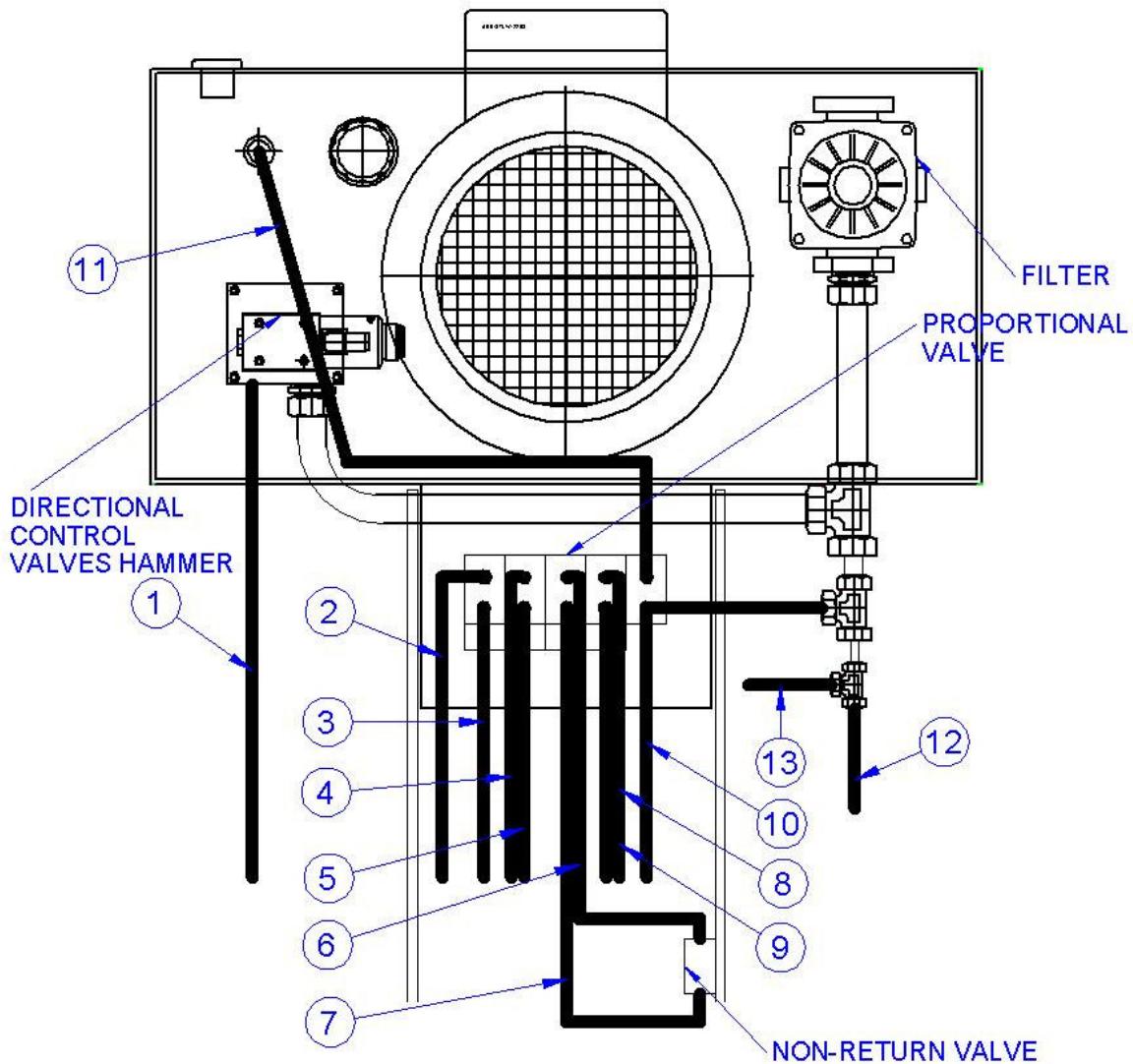
Made up of:

- Hydraulic group
 - Manufacturer : BIYAK
 - Reference : EH-677-0
- Hydraulic pump
 - Reference : T6CCB20B081R00C111
 - Oil flow : 80+30 l/min. (1500 r.p.m)
 - Pressure : 240 bars
- Proportional valves
 - Mark : DANFOSS
 - Reference : PVG-32 -11043175
- Hammer valve
 - Mark : DENISON NG-10
 - Reference : 4D0231510101B1G0Q

3-5 Equipment weight

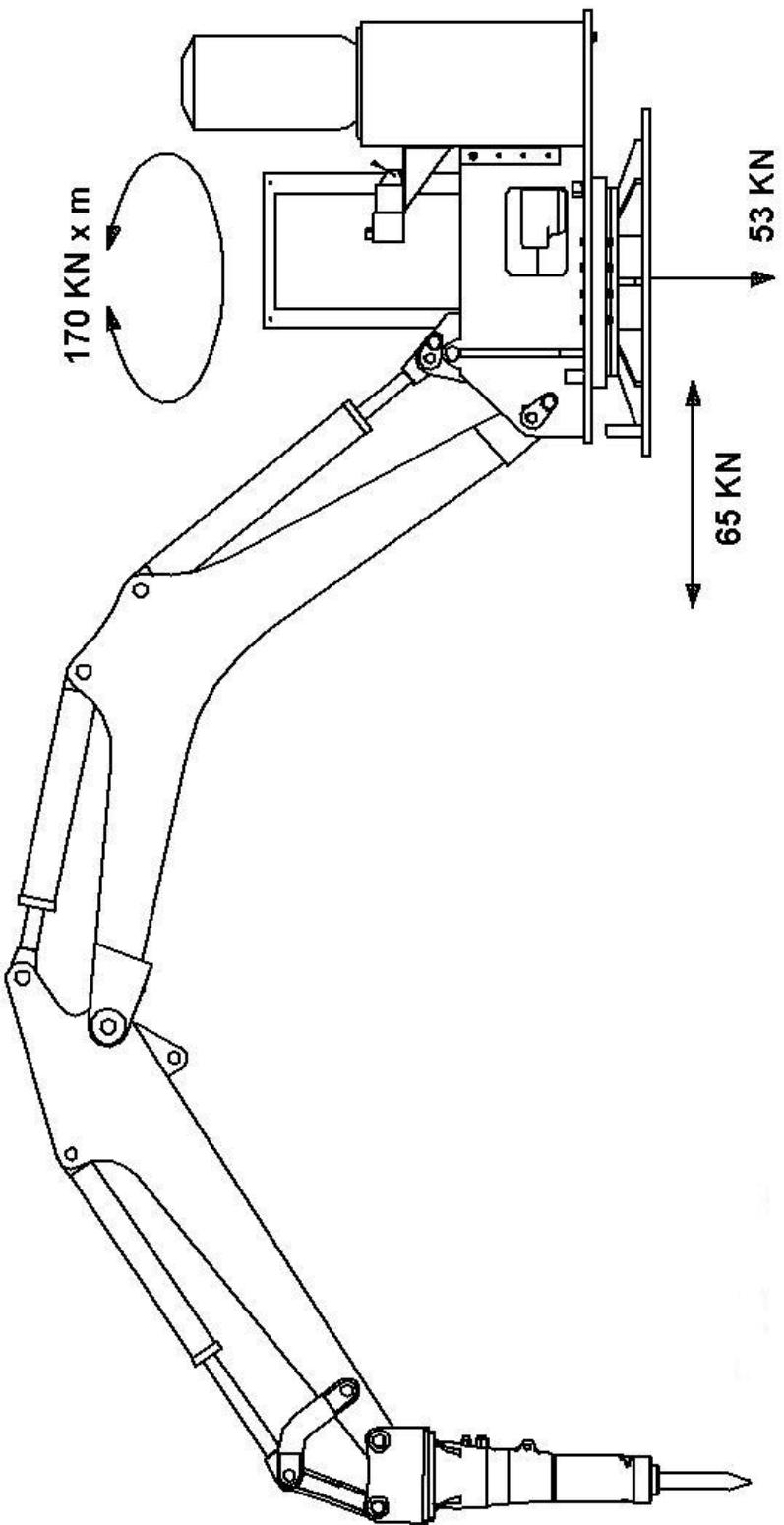
3750 kgs

HYDRAULIC HOSE LINE



1	HAMMER PRESSURE LINE	HOSE LINE 2500mm. 1/2"
2	HYDRAULIC CYLINDER HAMMER	HOSE LINE 4750mm. Ø22 / 1/2"
3	HYDRAULIC CYLINDER HAMMER	HOSE LINE 4750mm. Ø22 / 1/2"
4	HYDRAULIC CYLINDER DIPPER ARM	HOSELINE 4300mm. 1/2"
5	HYDRAULIC CYLINDER DIPPER ARM	HOSELINE 4500mm. Ø20 / 1/2"
6	ROTATION	HOSELINE 1000mm. 1/2" / 90° 1/2"
7	ROTATION	HOSELINE 1000mm. 1/2" / 90° 1/2"
8	HYDRAULIC CYLINDER BOOM	HOSE LINE 3500mm. Ø20 / 1/2"
9	HYDRAULIC CYLINDER BOOM	HOSE LINE 3000mm. 1/2" / 90° 1/2"
10	HAMMER RETURN LINE	HOSE LINE 4700mm. 3/4"
11	EXIT PUMP	HOSE LINE 1150mm. 3/4"
12	DRAIN	HOSE LINE 2500mm. 1/4"
13	DRAIN	HOSE LINE 800mm. 3/8"

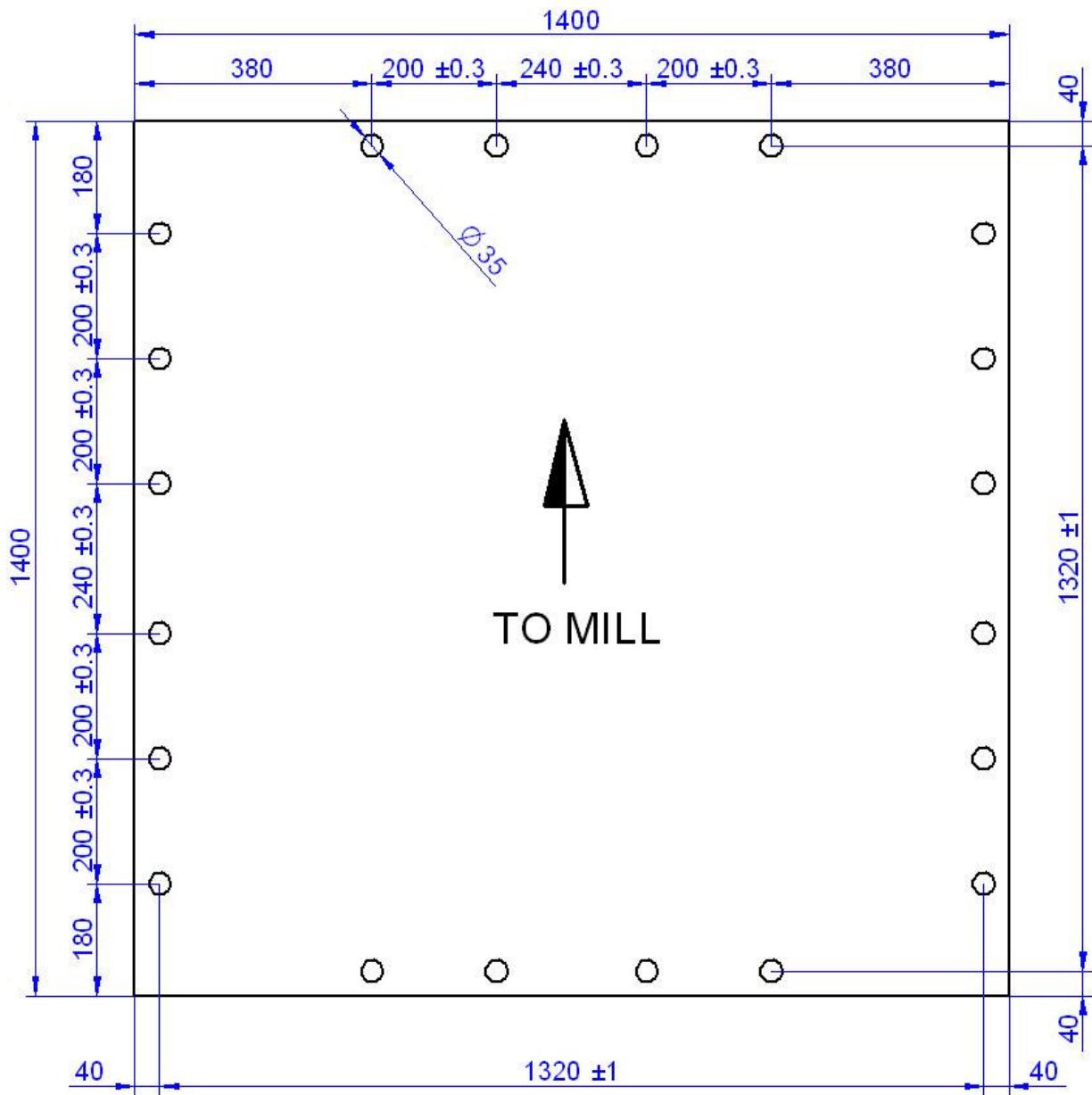
STATIC FORCES AND TORQUE OVER SUPPORT



3-7 Holding platform to the structure.

Its is done with 20 bolts M30*90 which joints basis arm support to the support structure profile.

PLATE SUPPORTING BOOM



4. START UP

Switchborad.

- 1 – Turn OFF general switch.
- 2 – Check that the emergency push button is OFF.

Switch desk.

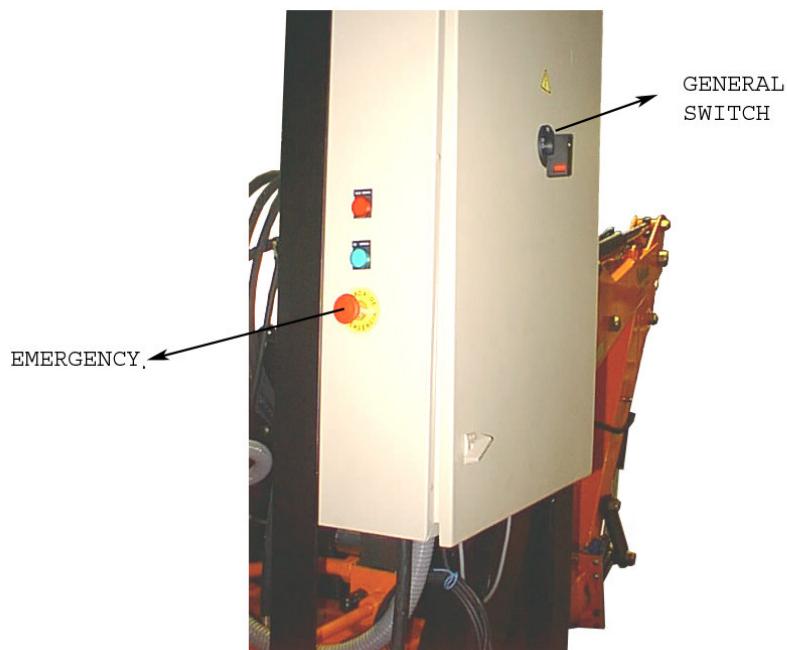
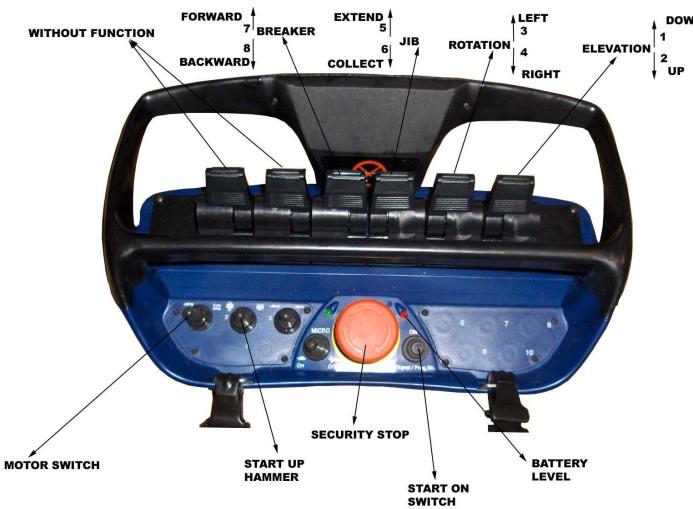
- 3 – Check battery condition (Red Light on)
- 4- Emergency push button OFF
- 5 – Joystick in left position.
- 6 – Push start bottom

Arm movements

Act with the joysticks smoothly (They are step controlled)

Hydraulic hammer

- Place motor joystick in central position
- Act over hammer switch



3- Every 2000 hours oil from hydraulic circuit should be changed.

Hydraulic oil

Trademark : DELTA
Reference : HM46MF
Capacity : 400 l.
Viscosity : 42-50cSt (40°C.)

Check periodically stage of hydraulic hoses and fittings.

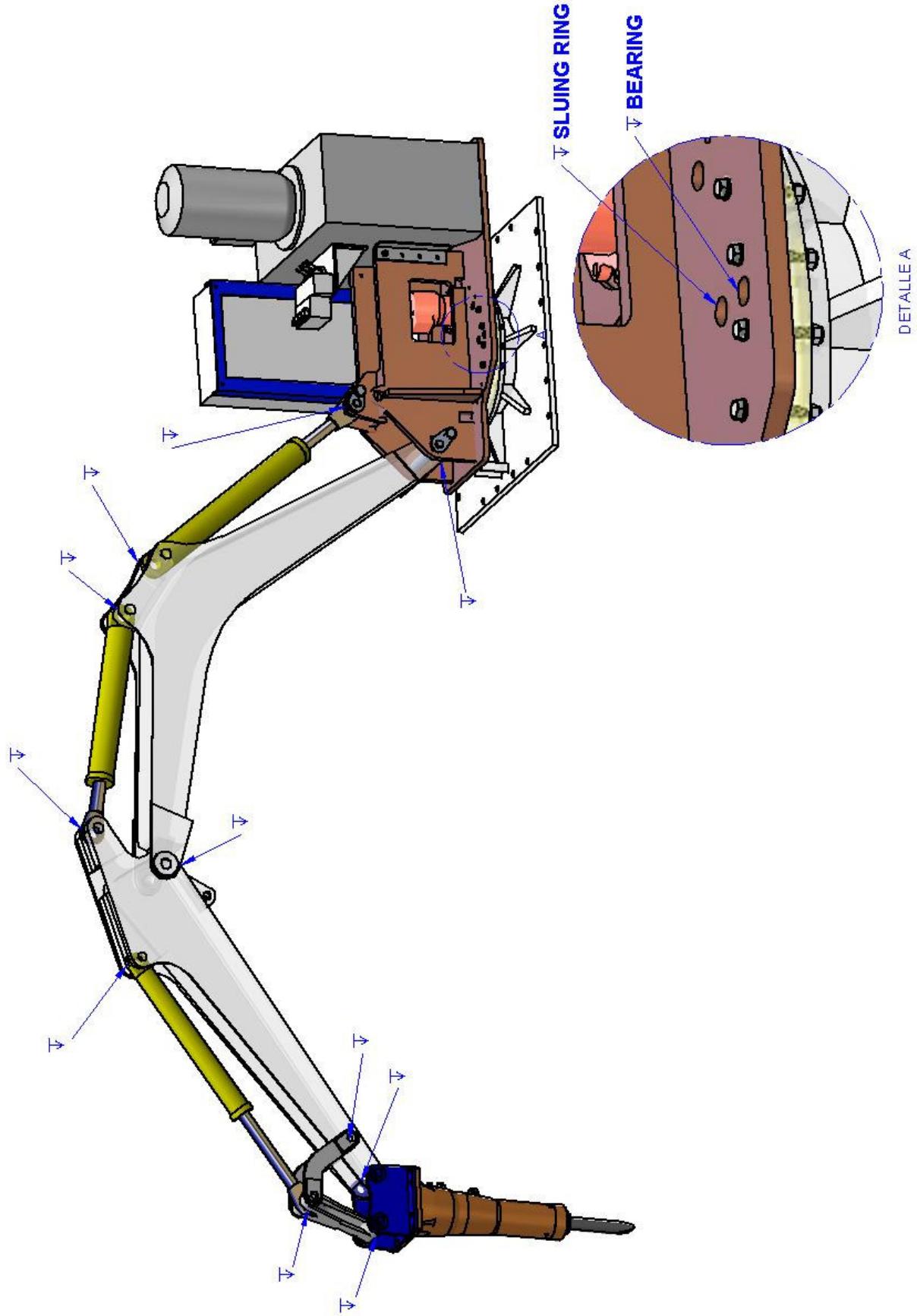
EQUIVALENT OIL TABLE

MOBIL	DTE-25
SHELL	TELLUS OIL 46
TEXACO	RANDO MD 46

HYDRAULIC HAMMER MAINTENANCE

Enclosed hydraulic hammer instructions manual.

GREASING POINTS (EVERY 50 HOURS) AREA



6. PRECAUTIONS DURING SERVICE

Equipment precautions are crushing and moving stone choked up in the crusher jaw.

To be avoided:

- Try to move stones with the rotation.
- Lift loads.

The handlers are proportional which means that the speed arm movements depend how they drive.

Rough movements on the joysticks should be avoided.

IMPORTANT

Whenever welding jobs in the equipment or supporting structure should be done, radio equipment has to be protected. Then general switch should be placed in the OFF position.

7. PEDESTAL BREAKER EXPLODED VIEW

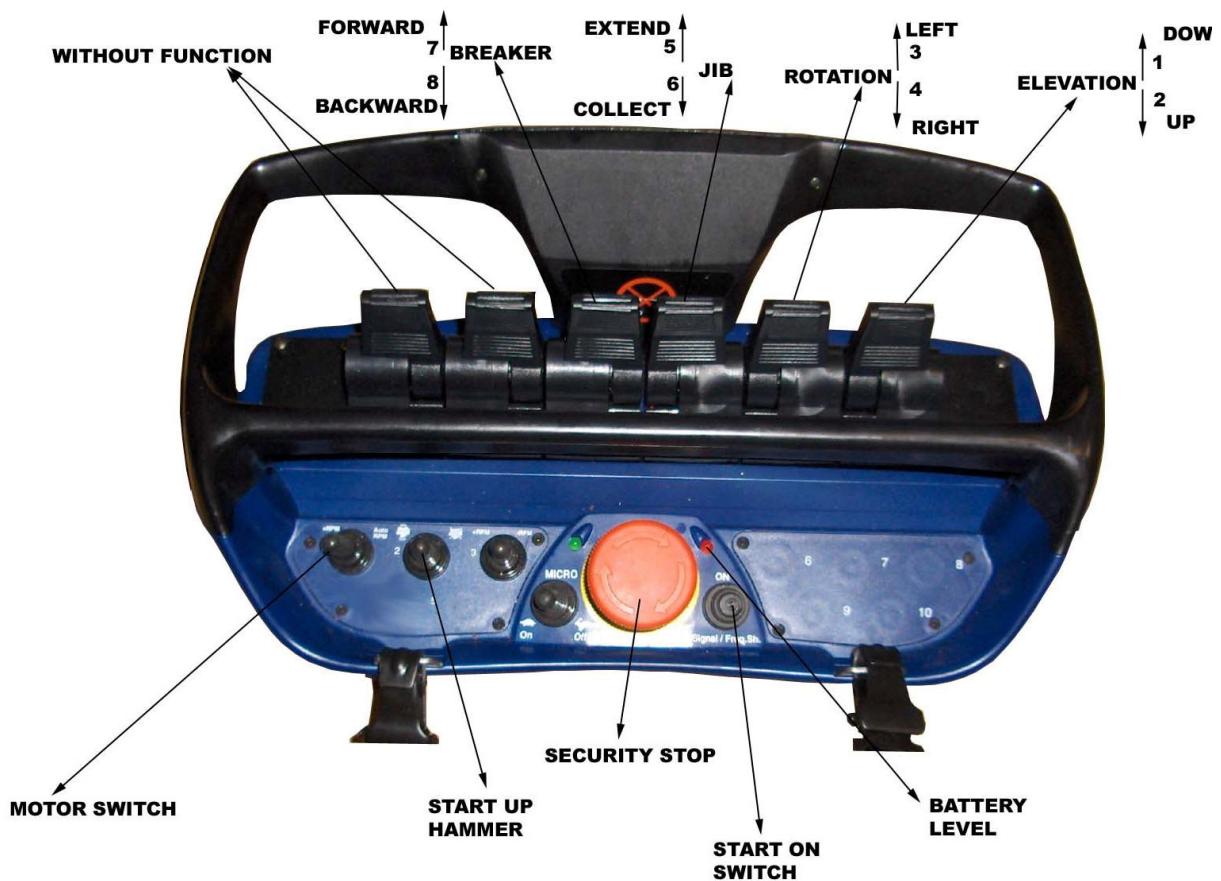
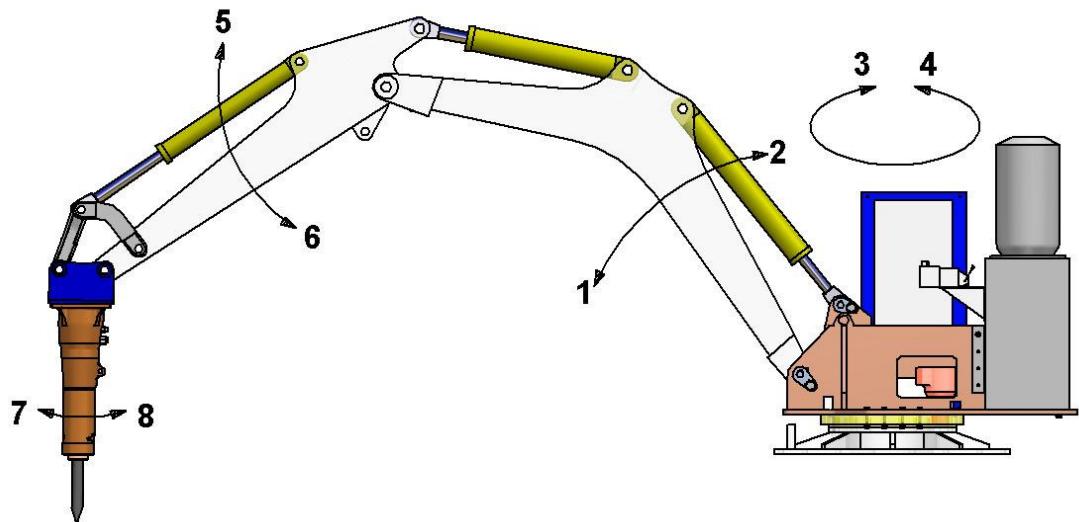
Herewith we enclose pedestal breaker parts list frame.

ELECTRICAL SCHEME

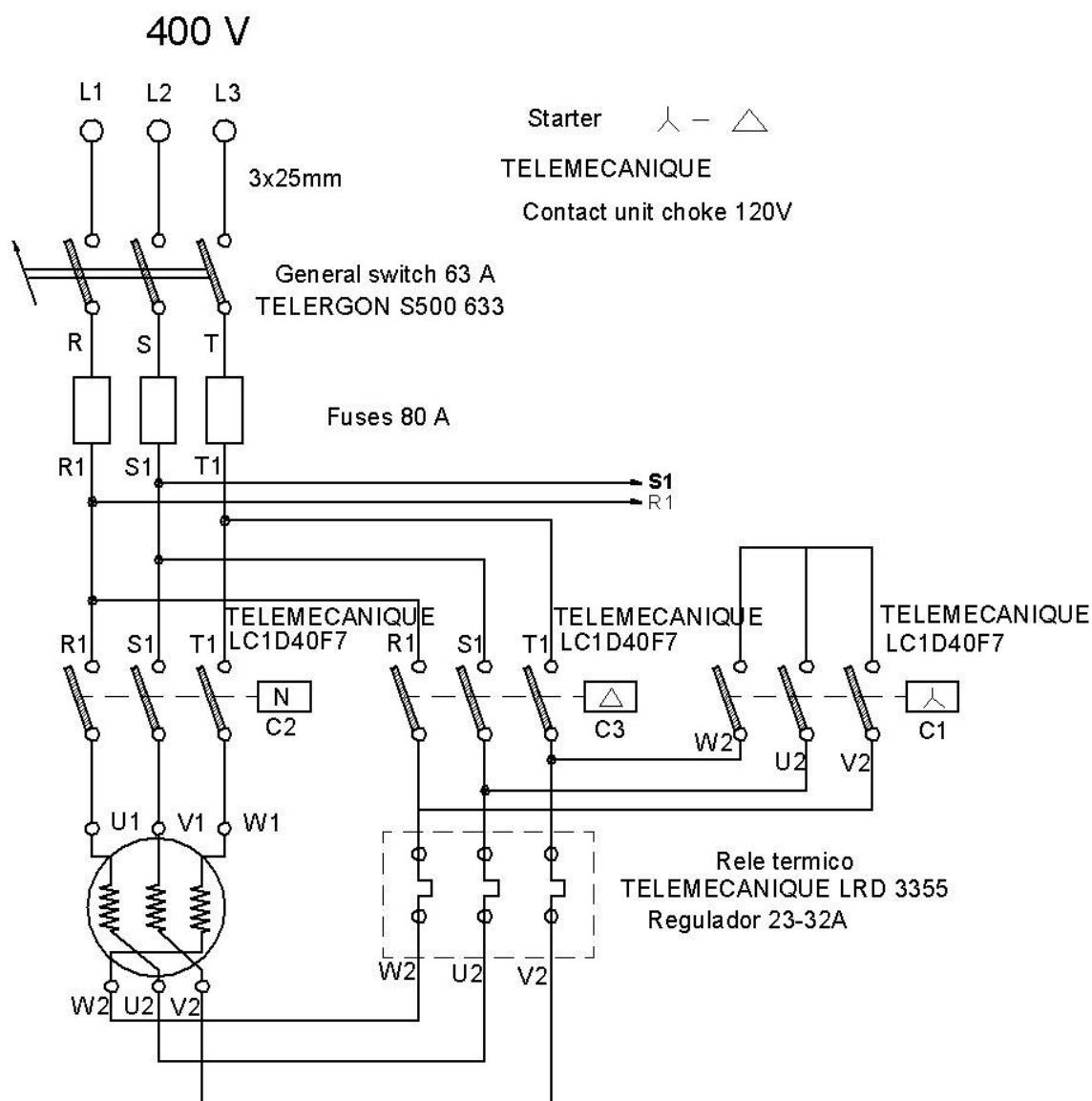
HYDRAULIC SCHEME

STRUCTURE PLANE FRAME SUPPORT

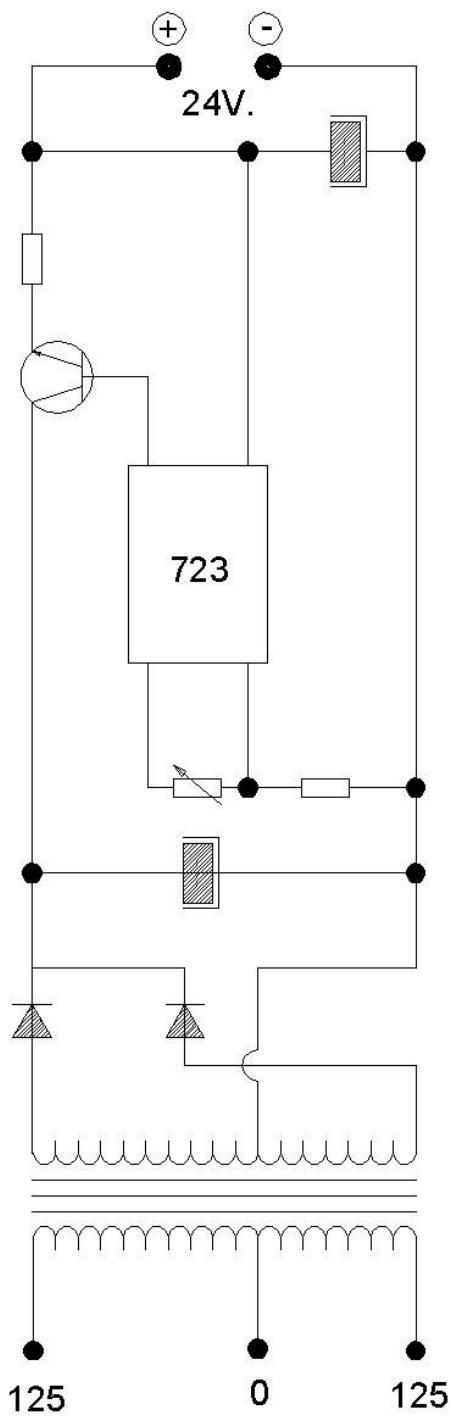
PEDESTAL BREAKER MOVEMENTS



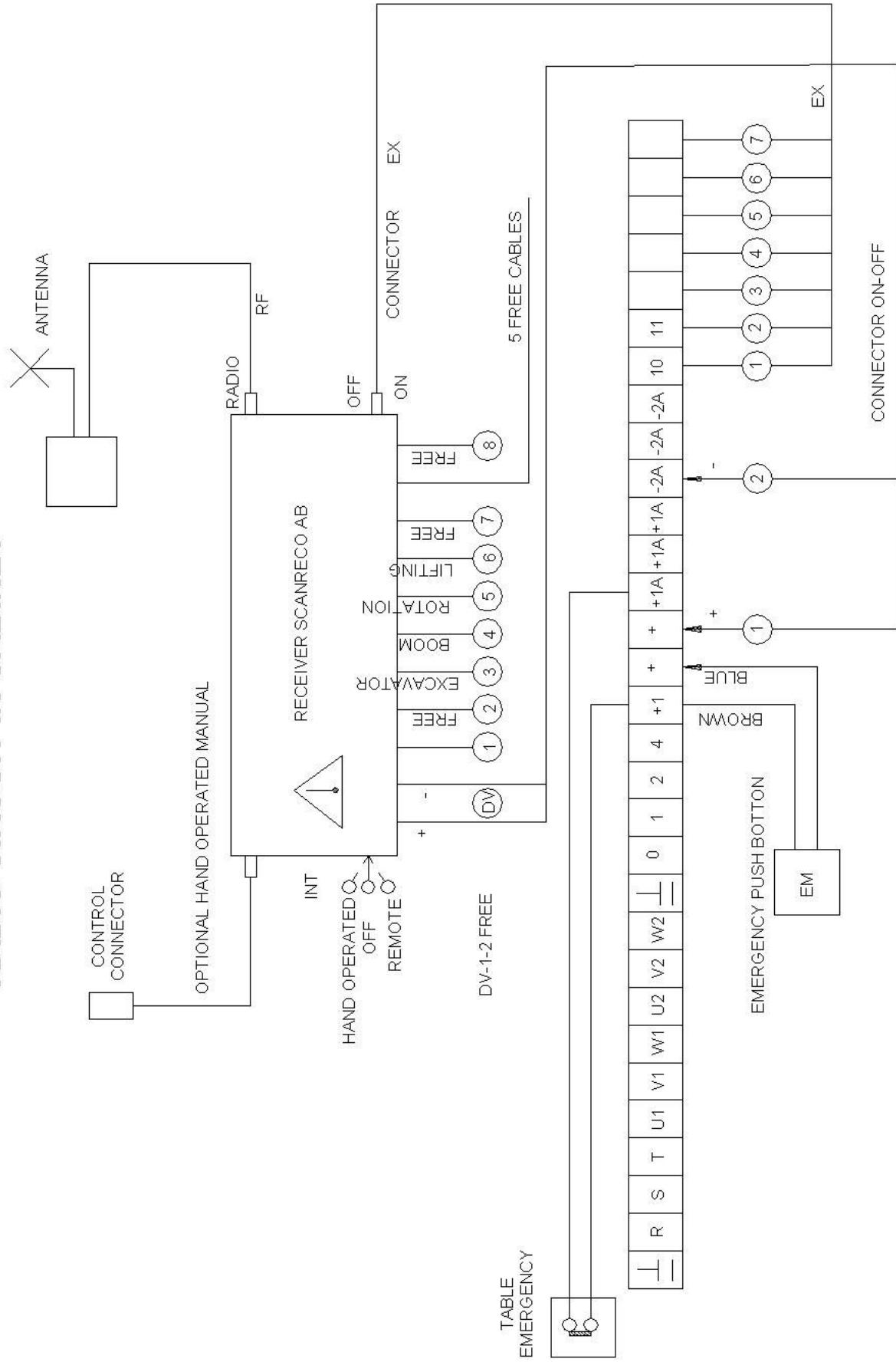
POWER SCHEME (37 Kw)



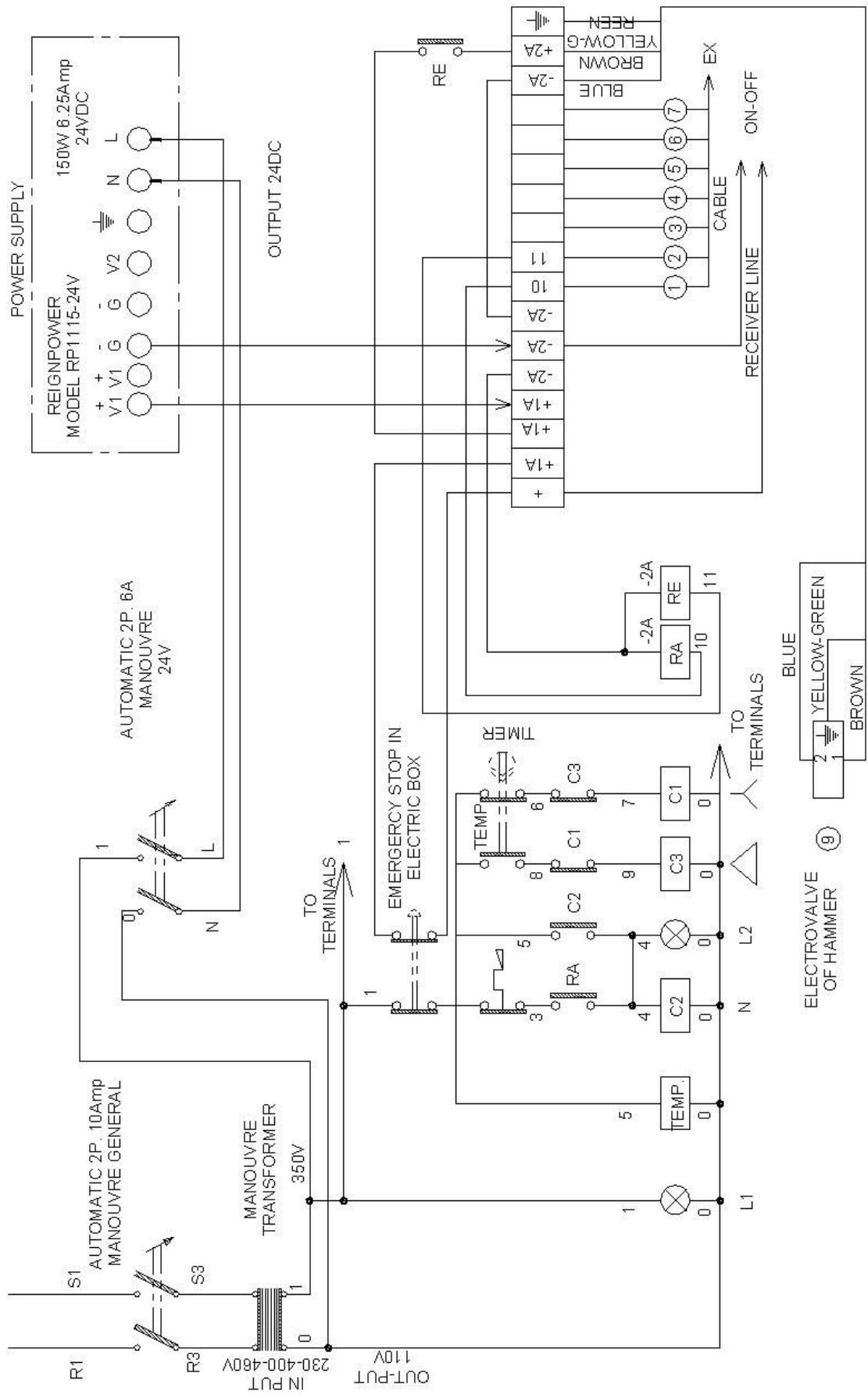
FUENTE ALIMENTACION ESTABILIZADA WEIDMÜLLER 8708670000



RADIO CIRCUIT IN CABINET

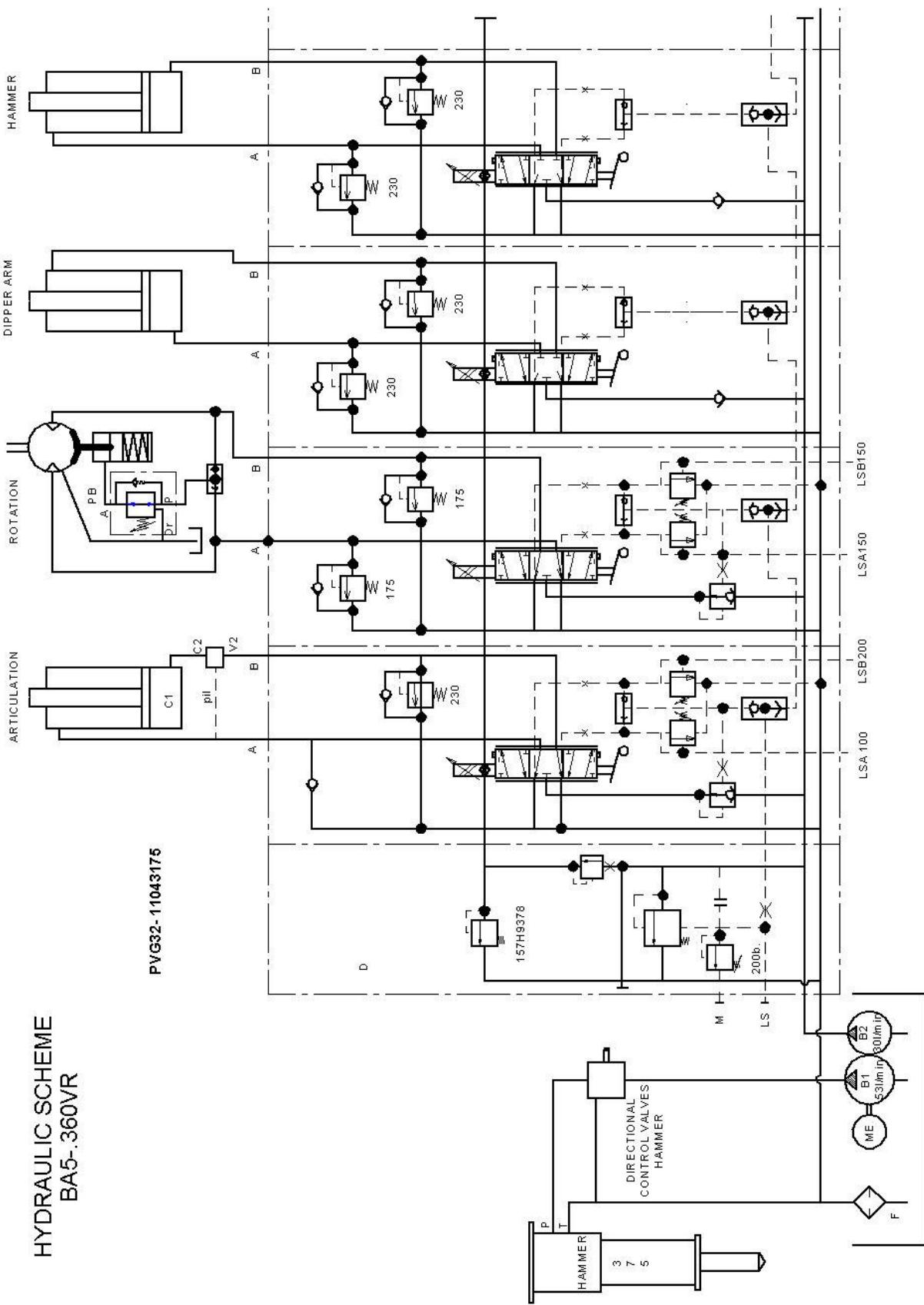


OPERATING SCHEME (RADIO)

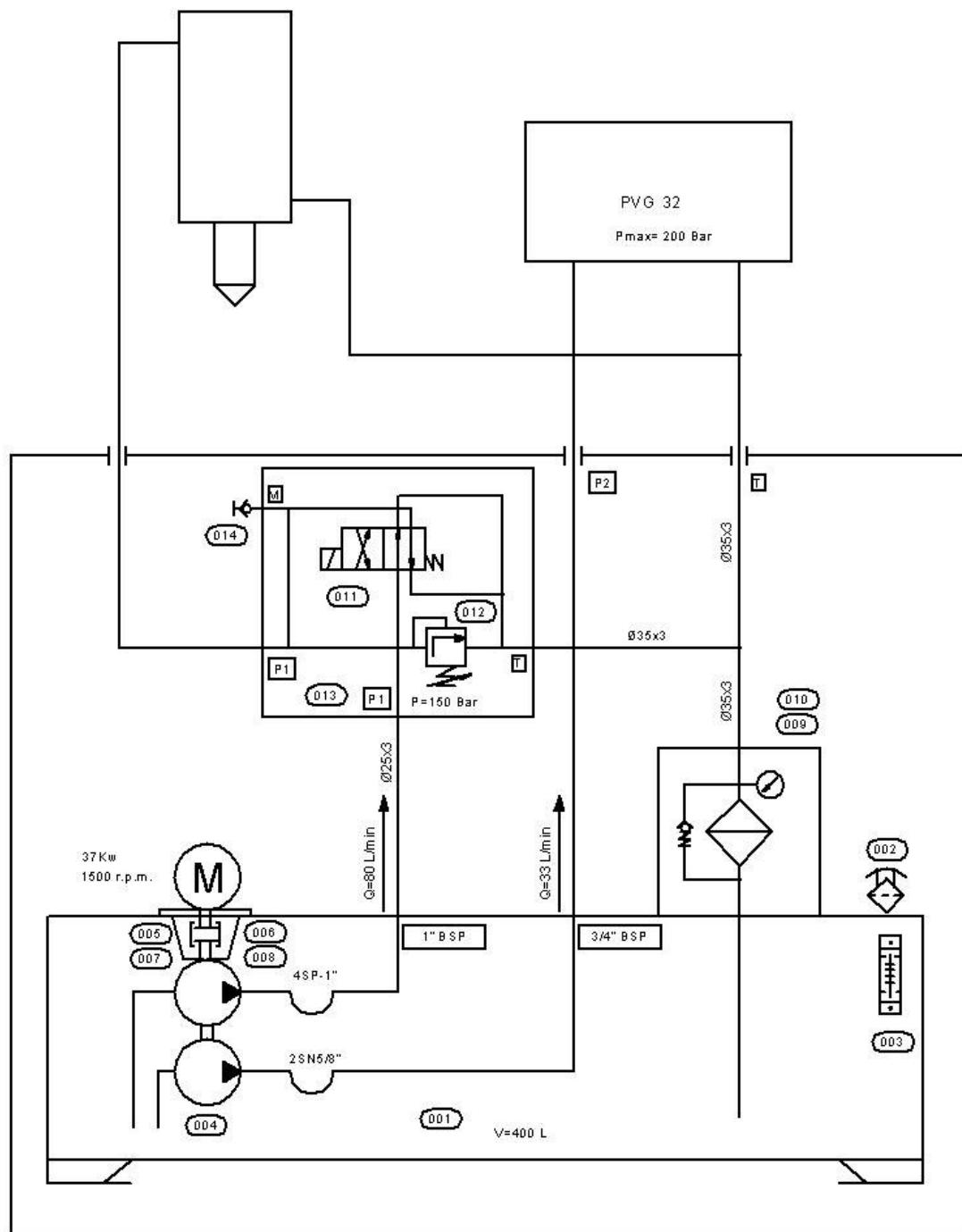


**HYDRAULIC SCHEME
BA5-.360VR**

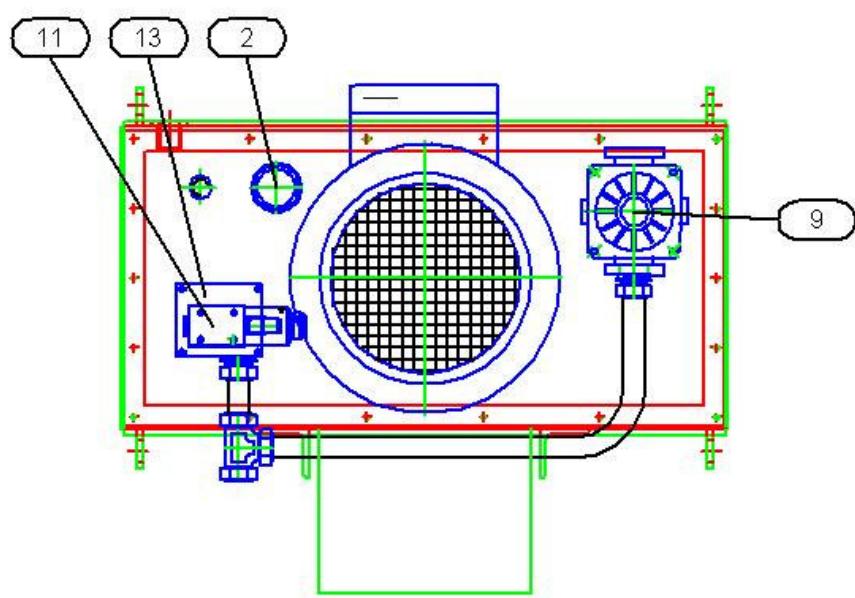
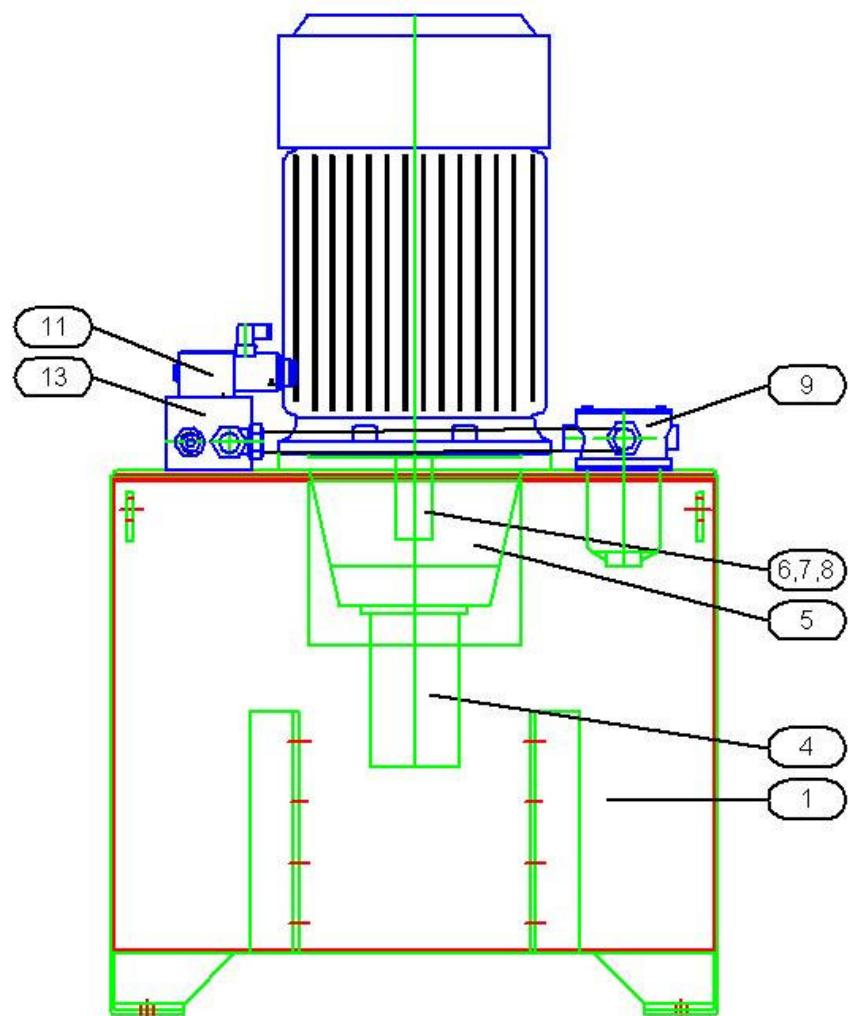
PVG32-11043175



POWER GROUP EH-677-00



POWER GROUP PARTS



<u>POS.</u>	<u>CANT</u>	<u>DENOMINACION</u>	<u>MARCA</u>
1	1	DEPOSITO DE ACEITE.CAPACIDAD 400L PC-2734-00 + SOPORTE PARA DISTRIBUIDOR PINTURA CREMA RAL-1015	BI-YAK
2	1	FILTRO DE AIREACION Y LLENADO ELFP 3 F10 W1.0	HYDAC
3	1	INDICADOR DE NIVEL CON TERMOMETRO LG2T	MINTOR
4	1	BOMBA DOBLE DE PALETAS T6CC B20 B08 1 R 00 C 111 024-59255-0	PARKER
5	1	CAMPANA B45T1G-101A	OMT
6	1	ACOPLAMIENTO LADO MOTOR OMT6140C57 E=140 D=60 CH=18	OMT
7	1	ANILLO ELASTICO POL 6	OMT
8	1	ACOPLAMIENTO LADO BOMBA OMT 6080D27	OMT
9	1	FILTRO DE RETORNO SIN INDICADOR RFM BN/HC 330 G 20 A 1.1 314754	HYDAC
10	1	INDIC. SUCIEDAD VISUAL [MANOMET] VR 2 E.0 306827	HYDAC
11	1	ELECTROVALVULA NG10 4D02 3151 0101 B1 G0Q 026-57366-H	DENISON
12	1	LIMITADORA DE PRESION RAH 161 S 50	PARKER
13	1	PLACA BASE NG10 + RAH161 PB-2493-00	BI-YAK
14	1	TOMA MINIMESS 1620 - G 1/4" - TAP.METAL.	MINIMESS

Bildtafel 4.001 | SCHWENKSABLE - MONDAUSLEGER
Diagram 4.001 | KING POST - BOOM MONO
Planche 4.001 | PIVOT - FLECHE MONOBLOC

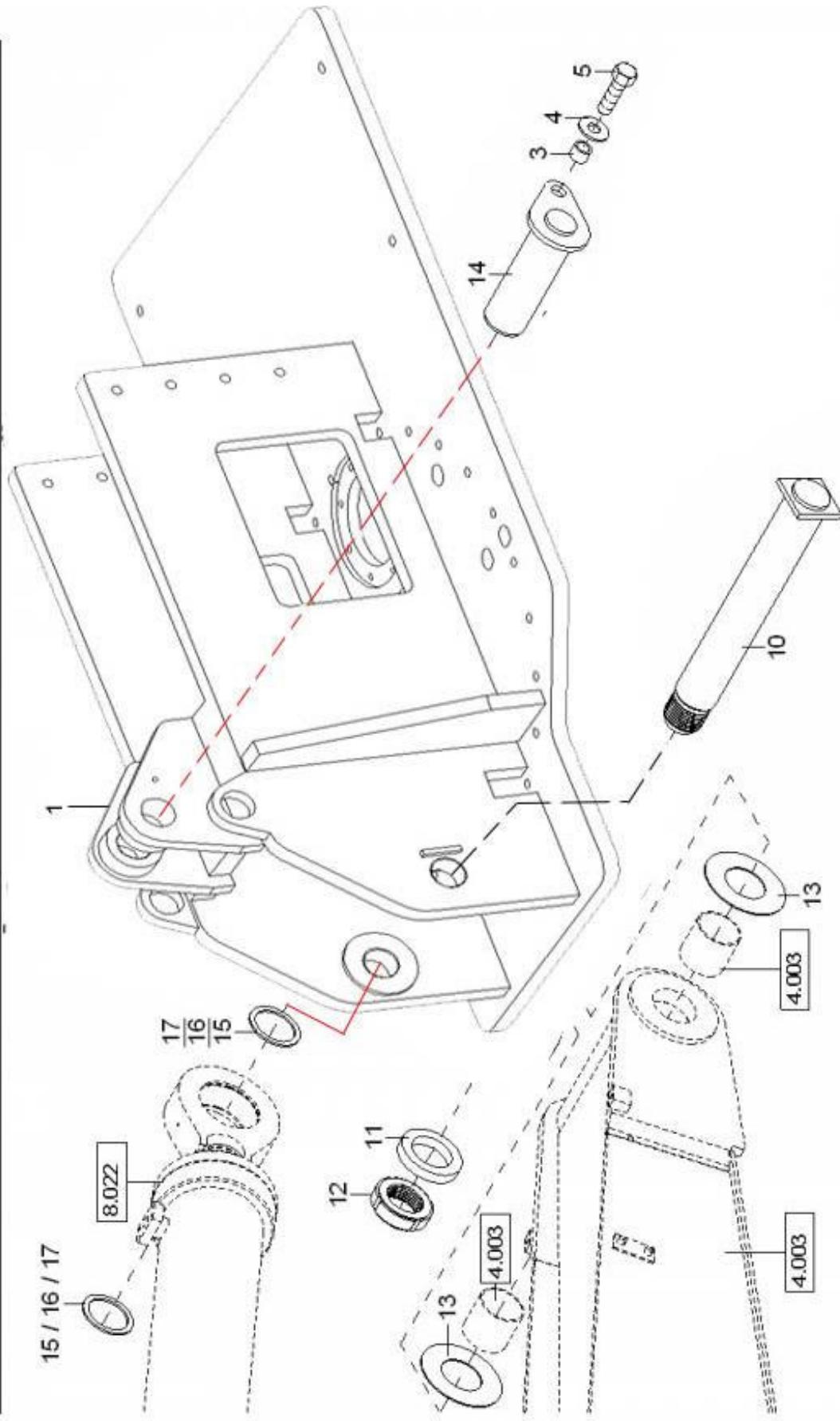
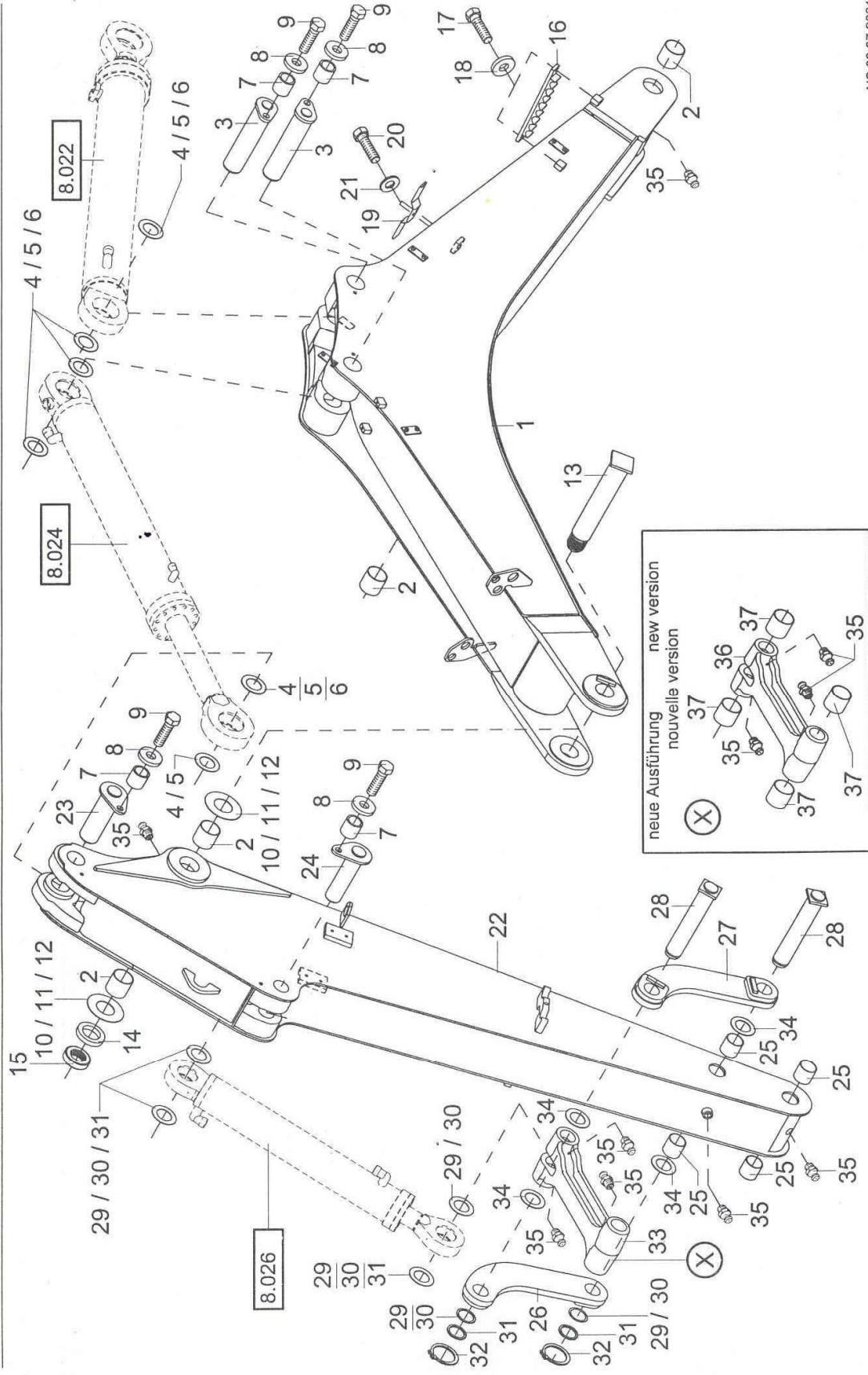


DIAGRAM 4.001

	Position n°	Article numero	Description	Additional information	Quantity	Unit	Weight	BHW
	1	BA4HR32-360VR-2T	SUPPORT		1	ST	719,000 kg	
	3	0156029033	SPACER		1	ST	0,015 kg	
	4	1343707061	WASHER 13		1	ST	0,025 kg	
	5	1008707829	BOLT M 12X30		1	ST	0,044 kg	
	10	0209127041	PIN		1	ST	9,500 kg	
	11	0209127045	RING		1	ST	0,410 kg	
	12	1212707446	SLOTTED ROUND NUT M 56X2		1	ST	0,500 kg	
	13	0202524050	WASHER 60,5X120X2		2	ST	0,133 kg	
	14	0190024020	PIN		1	ST	2,600 kg	
	15	1309412013	SHIM 60X75X1		N.B.	ST	0,012 kg	
	16	1309412825	SHIM 60X75X2		N.B.	ST	0,024 kg	
	17	1309412834	SHIM 60X75X3		N.B.	ST	0,035 kg	

Bildtafel 4.003 | AUSLEGER, LOEFFELSTIEL - MONO
 Diagram 4.003 | BOOM, DIPPER ARM - MONO
 Planche 4.003 | FLECHE, BALANCIER - MONO

HR 32



HR02061D

NS 09.07.2001

	Position n°	Article number	Description	Additional information	Quantity	Unit	Weight	BHW
	1	0234105002	BOOM		1	ST	320,000 kg	
	2	5809625667	BUSHING		4	ST	0,212 kg	
	3	0155128043	PIN		2	ST	6,030 kg	
	4	1309412013	SHIM 60X75X1		N.B.	ST	0,012 kg	
	5	1309412825	SHIM 60X75X2		N.B.	ST	0,024 kg	
	6	1309412834	SHIM 60X75X3		N.B.	ST	0,035 kg	
	7	0156029033	SPACER		4	ST	0,015 kg	
	8	1343707061	WASHER 13		4	ST	0,025 kg	
	9	1008707829	BOLT M 12X30		4	ST	0,044 kg	
	10	0202524050	WASHER 60,5X120X2		1	ST	0,133 kg	
	11	0203024057	WASHER 60,5X120X2,5		2	ST	0,162 kg	
	12	0202524051	WASHER 60,5X120X3		1	ST	0,200 kg	
	13	0190105020	PIN 60X370		1	ST	8,100 kg	
	14	0209127045	RING		1	ST	0,410 kg	
	15	1212707446	SLOTTED ROUND NUT M 56X2		1	ST	0,500 kg	
	16	0190105025	HOSE CLIP		1	ST	0,750 kg	
	17	1008707618	BOLT M 8X30		2	ST	0,013 kg	
	18	1343707057	WASHER 8,4		2	ST	0,008 kg	
	19	6190105030	BRACKET		1	ST	0,410 kg	
	20	1008707018	BOLT M 8X20		2	ST	0,012 kg	
	21	1290707018	WASHER 8,4		2	ST	0,004 kg	
	22	0190106502	DIPPER ARM 2000MM		1	ST	205,000 kg	
	23	0176106055	PIN		1	ST	4,684 kg	
	24	0156132075	PIN		1	ST	3,450 kg	
	25	5809625553	BUSHING		4	ST	0,150 kg	
	26	0176106065	TILTING LEVER		1	ST	9,100 kg	
	27	0176106070	TILTING LEVER		1	ST	9,100 kg	
	28	0211007110	PIN		2	ST	4,560 kg	
	29	1309412412	SHIM 50X62X1		3	ST	0,008 kg	
	30	1309412425	SHIM 50X62X2		N.B.	ST	0,016 kg	

	Position n°	Article number	Description	Additional information	Quantity	Unit	Weight	BHW
	31	1309412434	SHIM 50X62X3		N.B.	ST	0,022 kg	
	32	1455622750	CIRCLIP 50X3		2	ST	0,018 kg	
	33	0209129055	GUIDE LINK		1	ST	22,400 kg	
	34	0194002226	SHIM 50,5X100X3		4	ST	0,140 kg	
	35	1607003010	GREASE NIPPEL M 10X1		N.B.	ST	0,006 kg	
	36	0209129055	GUIDE LINK CPL. WITH 37		1	ST	22,400 kg	
	37	5809625675	BUSHING 50X55X60		4	ST	0,200 kg	
	38	1607010010	GREASE NIPPEL M 10X1		2	ST	0,003 kg	
	39	1608010010	GREASE NIPPEL M 10X1 45°		1	ST	0,011 kg	
	40	0190112002	DIPPER ARM 2200MM		1	ST		
	41	6209319002	HOOK		1	ST	7,780 kg	
	42	1007707554	BOLT M 20X140		2	ST	0,390 kg	
	43	1212251018	NUT M 20		2	ST	0,060 kg	
	44	0190106502	DIPPER ARM PRONG 2000MM		1	ST	205,000 kg	

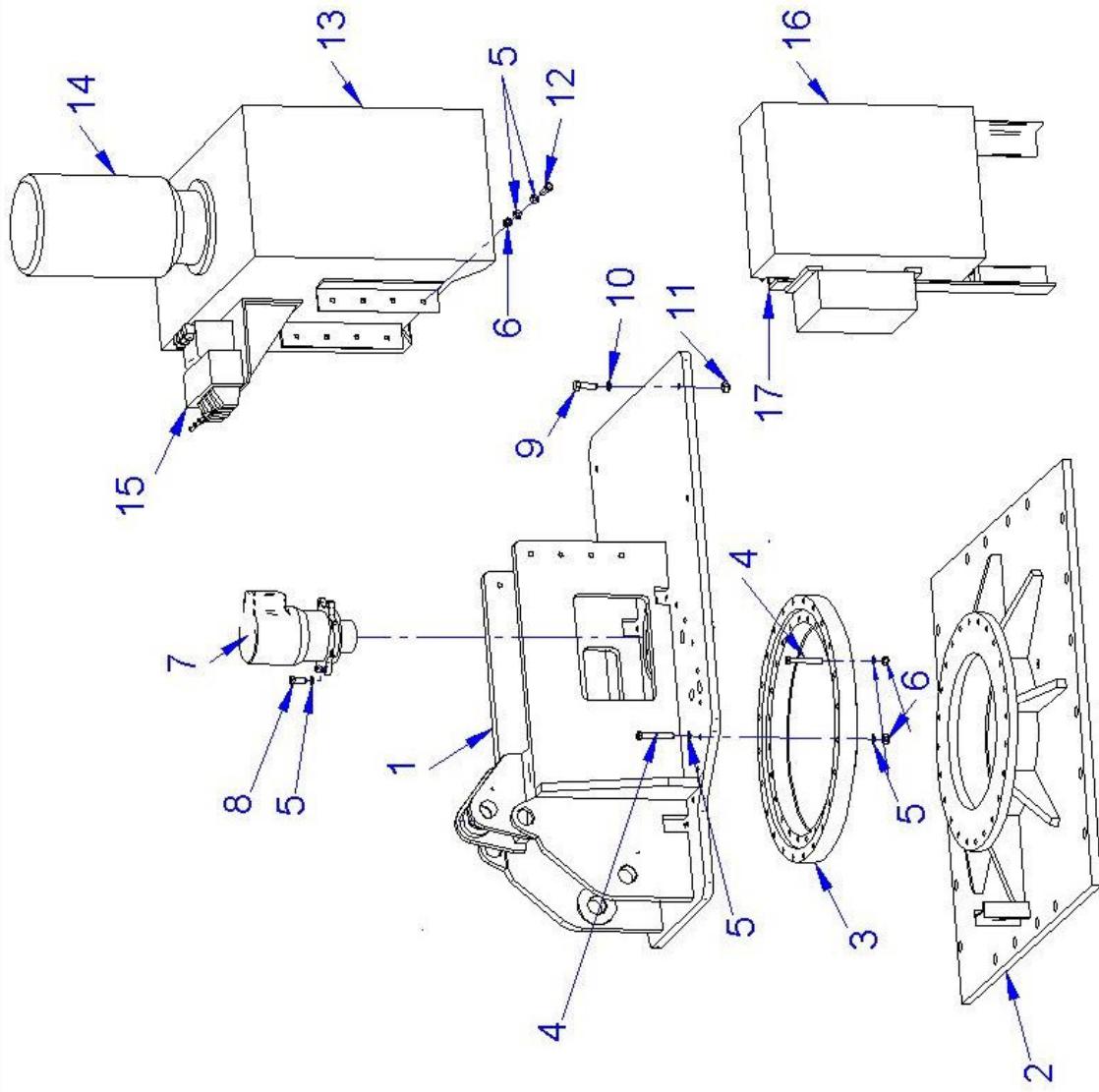


DIAGRAM 4.000

	Position nº	Article number	Description	Additional information	Quantity
	1	BA4HR32-360VR-2CB	BOOM SUPPORT		1
	2	NA4HR32-360VR-1	CROWN SUPPORT		1
	3	BA4360-6	ROTATION CROWN		1
	4	93112916110	SCREW DIN931 12.9 M16x110		48
	5	12516	FLAT WASHER DIN 125 M16		96
	6	98516	SELF-LOCKING NUT M16		56
	7	BA4360-7	SLEW DRIVE		1
	8	9311291640	SCREW DIN931 12.9 M16x40		8
	9	931881860	SCREW DIN931 8.8 M18x60		4
	10	12518	FLAT WASHER DIN125 M18		8
	11	98518	SELF-LOCKING NUT M18		4
	12	931881670	SCREW DIN931 8.8 M16x70		8
	13	BA4360-10	HYDRAULIC PACK		1
	14	BA4180-15	ELECTRIC MOTOR		1
	15	BA4HR32-360VR-11CB	PROPORTIONAL VALVE		1
	16	BA4HR32-14D	ELECTRIC PANEL		1
	17	BA4HR32-36	SILENTBLOC		4

Bildtafel 8.022 | HYDRAULIKZYLINDER - AUSLEGER
Diagram 8.022 | HYDRAULIC CYLINDER - BOOM
Planche 8.022 | VERNIN HYDRAULIQUE - FLECHE

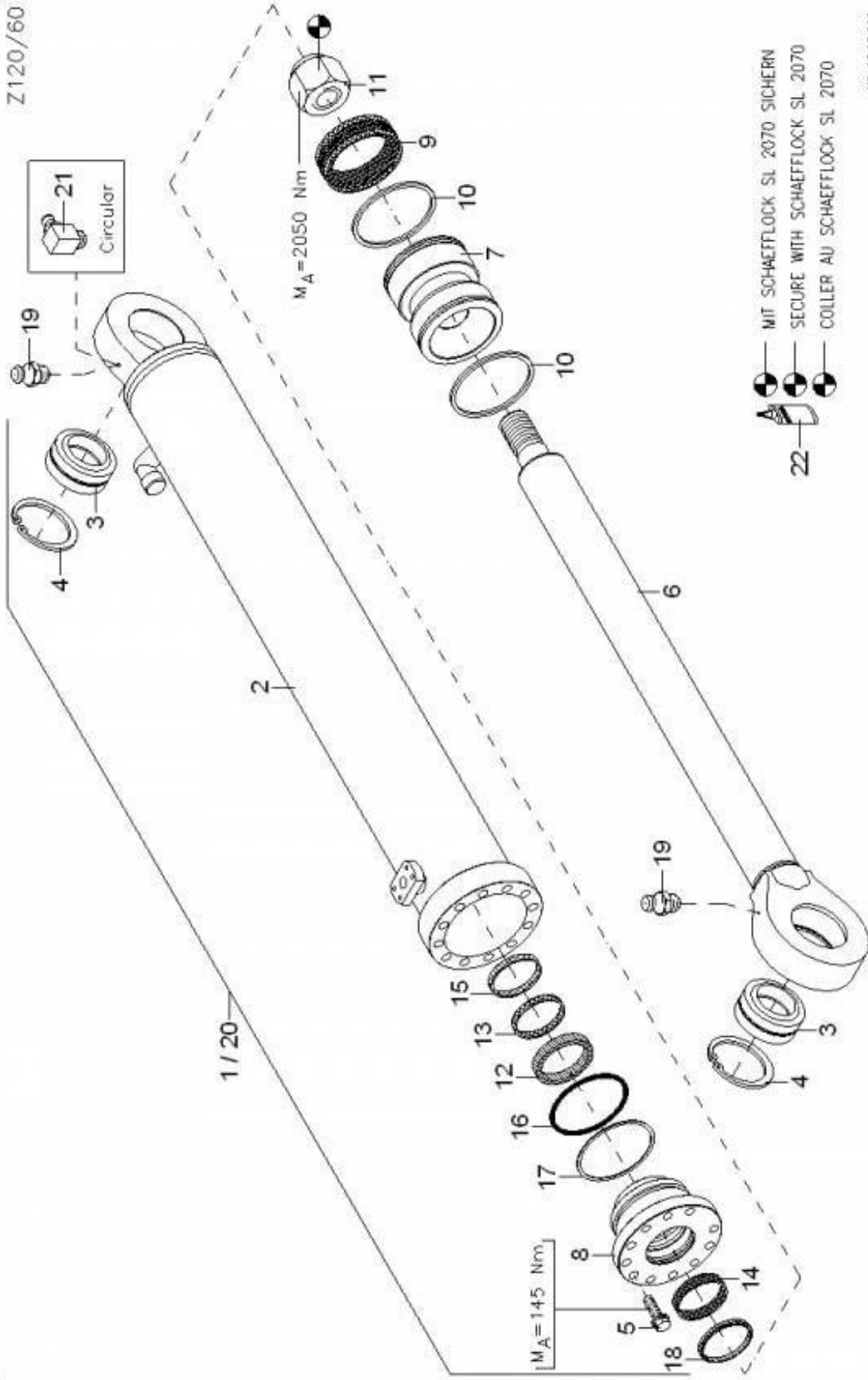


DIAGRAM 8.022

	Position n°	Article number	Description	Additional information	Quantity	Unit	Weight	BHW
	1	6501609000	HYDRAULIC CYLINDER		1	ST	87,500 kg	
	2	6501609003	CYLINDER BARREL		1	ST	40,900 kg	
	3	1950000865	LINKAGE BEARING		2	ST	1,000 kg	
	4	1456622369	CIRCLIP 90X3		2	ST	0,035 kg	
	5	1017370230	BOLT M 12X40		12	ST	0,052 kg	
	6	6501388711	PISTON ROD		1	ST	28,600 kg	
	7	0501609015	DUMPING PISTON		1	ST	4,200 kg	
	8	0501609017	PIERCING BUSHING		1	ST	5,900 kg	
	9	1634934120	PISTON SEAL		1	ST	0,137 kg	
	10	5074609265	SEGMENT		2	ST	0,050 kg	
	11	1212251840	NUT		1	ST	0,300 kg	
	12	1965956675	ROD SEAL		1	ST	0,020 kg	
	13	5060503060	GUIDING RING		1	ST	0,007 kg	
	14	5060507060	GUIDING RING		1	ST	0,008 kg	
	15	5060502060	GUIDING RING SOFT		1	ST	0,010 kg	
	16	1970960869	O-RING 110X5		1	ST	0,008 kg	
	17	1969956112	SPIRAL RING 120X112X1		1	ST	0,006 kg	
	18	1974955060	SCRAPER RING		1	ST	0,006 kg	
	19	1607003006	GREASE NIPPLE		2	ST	0,003 kg	
	20	1976999617	SEAL KIT		1	ST	1,194 kg	
	21	1609003006	GREASE NIPPLE M 6X1 90°		1	ST	0,009 kg	
	22	MCS001036A	GLUE		1	ST	0,010 kg	

Bildtafel 8.024 | HYDRAULIKZYLINDER - LOEFFELSTIEB
Diagram 8.024 | HYDRAULIC CYLINDER - DIPPER ARM
Planche 8.024 | VERIN HYDRAULIQUE - BALANCIER

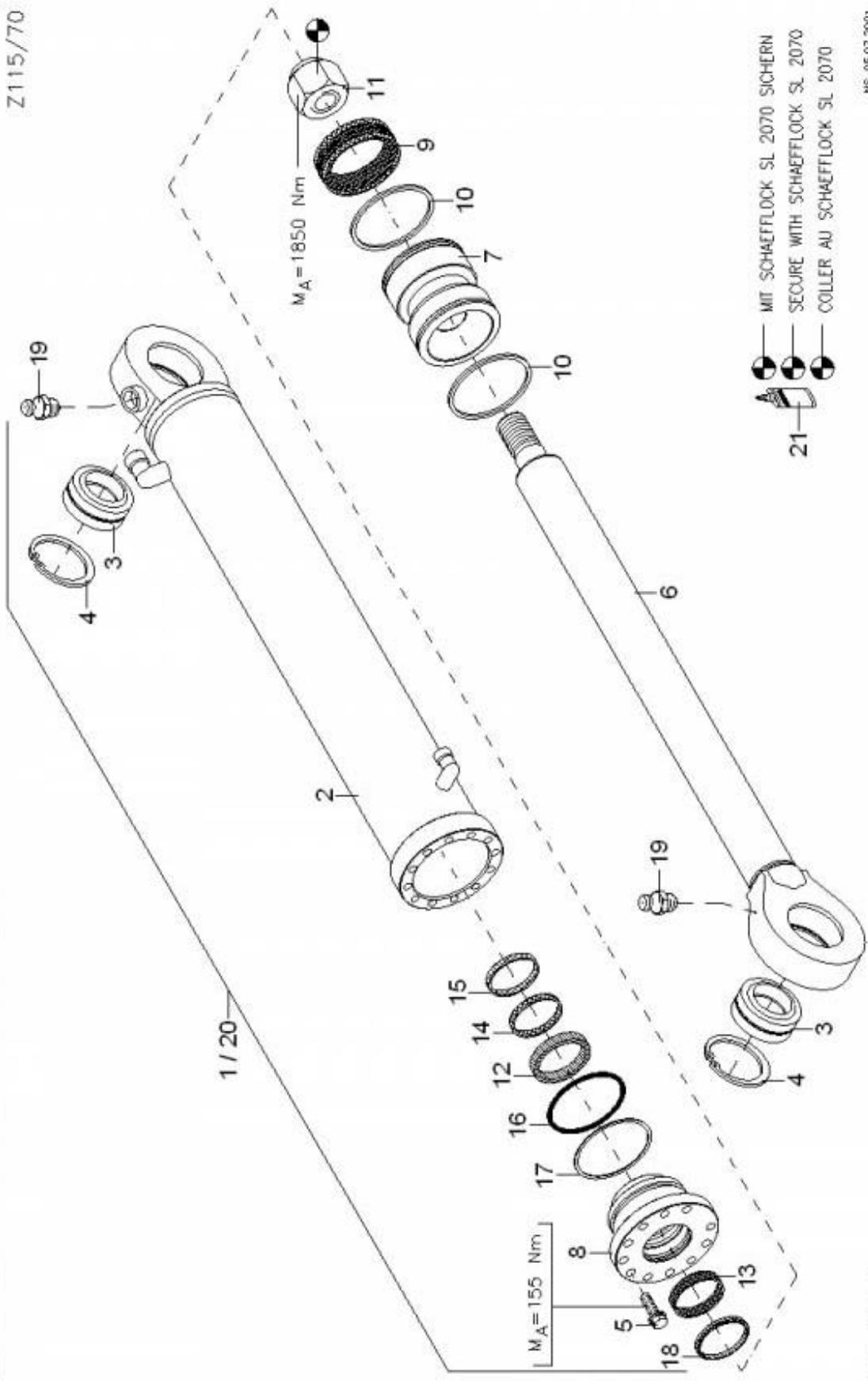


DIAGRAM 8.024

	Position n°	Article number	Description	Additional information	Quantity	Unit	Weight	BHW
	1	6501244500	HYDRAULIC CYLINDER		1	ST	78,000 kg	
	2	6501244503	CYLINDER BARREL		1	ST	35,500 kg	
	3	1950000865	LINKAGE BEARING		2	ST	1,000 kg	
	4	1456622369	CIRCLIP 90X3		2	ST	0,035 kg	
	5	1017370230	BOLT M 12X40		12	ST	0,052 kg	
	6	6501244011	PISTON ROD		1	ST	32,000 kg	
	7	0501244015	DUMPING PISTON		1	ST	4,000 kg	
	8	0501229017	PIERCING BUSHING		1	ST	4,500 kg	
	9	1634935021	PISTON SEAL		1	ST	0,140 kg	
	10	5074609200	SEGMENT		2	ST	0,045 kg	
	11	1212251836	NUT M 42X3		1	ST	0,600 kg	
	12	1965956785	SAEL		1	ST	0,022 kg	
	13	5060507070	GUIDING RING		1	ST	0,010 kg	
	14	5060503070	GUIDING RING		1	ST	0,006 kg	
	15	5060502070	GUIDING RING SOFT		1	ST	0,020 kg	
	16	1971958523	O-RING 104,2X5,7		1	ST	0,017 kg	
	17	1966960111	BACK UP RING 115X105,7X1,7		1	ST	0,005 kg	
	18	1974955070	SCRAPER RING		1	ST	0,005 kg	
	19	1607003006	GREASE NIPPLE		2	ST	0,003 kg	
	20	1976999603	SEAL KIT		1	ST	0,910 kg	
	21	MCS001036A	GLUE		1	ST	0,010 kg	

Bildtafel 8.026 HYDRAULIKZYLINDER - LÖEFFEL
Diagram 8.026 HYDRAULIC CYLINDER - BUCKET
Planche 8.026 VERIN HYDRAULIQUE - GOSET

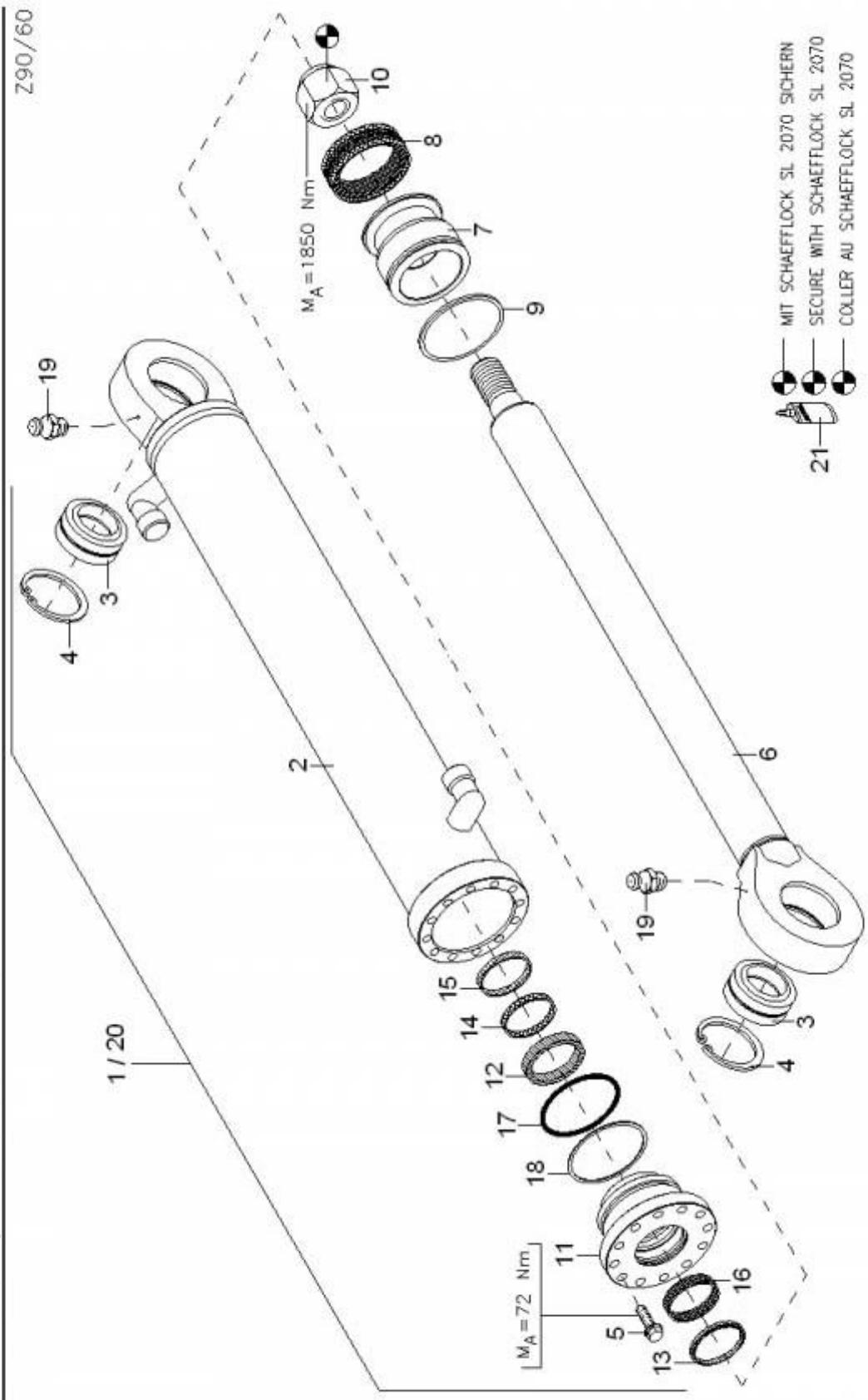


DIAGRAM 8.026

	Pos. númer.	Número de artículo	Descripción	Infor. adicionales	Cantidad	Unidad	Peso	BHW
	1	6500778700	HYDRAULIC CYLINDER		1	ST	49,000 kg	
	2	6500778703	CYLINDER BARREL		1	ST	22,100 kg	
	3	1950000814	LINKAGE BEARING		2	ST	0,400 kg	
	4	1456622363	CIRCLIP 75X2,5		2	ST	0,021 kg	
	5	1017341124	BOLT M 10X30		12	ST	0,028 kg	
	6	6500778111	PISTON ROD		1	ST	22,800 kg	
	7	0500778515	DUMPING PISTON		1	ST	1,700 kg	
	8	1634935661	PISTON SEAL		1	ST	0,077 kg	
	9	5074609230	SEGMENT		1	ST	0,025 kg	
	10	1212251836	NUT M 42X3		1	ST	0,600 kg	
	11	0500778517	PIERCING BUSHING		1	ST	2,100 kg	
	12	1965956675	ROD SEAL		1	ST	0,020 kg	
	13	1974955060	SCRAPER RING		1	ST	0,006 kg	
	14	5060503060	ROD SEAL		1	ST	0,007 kg	
	15	5060502060	GUIDING RING SOFT		1	ST	0,010 kg	
	16	5060507060	ROD SEAL		1	ST	0,008 kg	
	17	1971958509	O-RING 79,2X5,7		1	ST	0,010 kg	
	18	1966960908	BACK UP RING 90X80,7X1,7		1	ST	0,004 kg	
	19	1607003006	GREASE NIPPLE		1	ST	0,003 kg	
	20	1976999097	SEAL KIT		1	ST	0,806 kg	
	21	MCS001036A	GLUE		1	ST	0,010 kg	

Bildtafel 8.009 | SCHWENKANTRIEB
Diagram 8.009 | SLEW DRIVE
Planche 8.009 | ENTRAINEMENT ORIENTATION

1/2 — 1.002 — 7.005

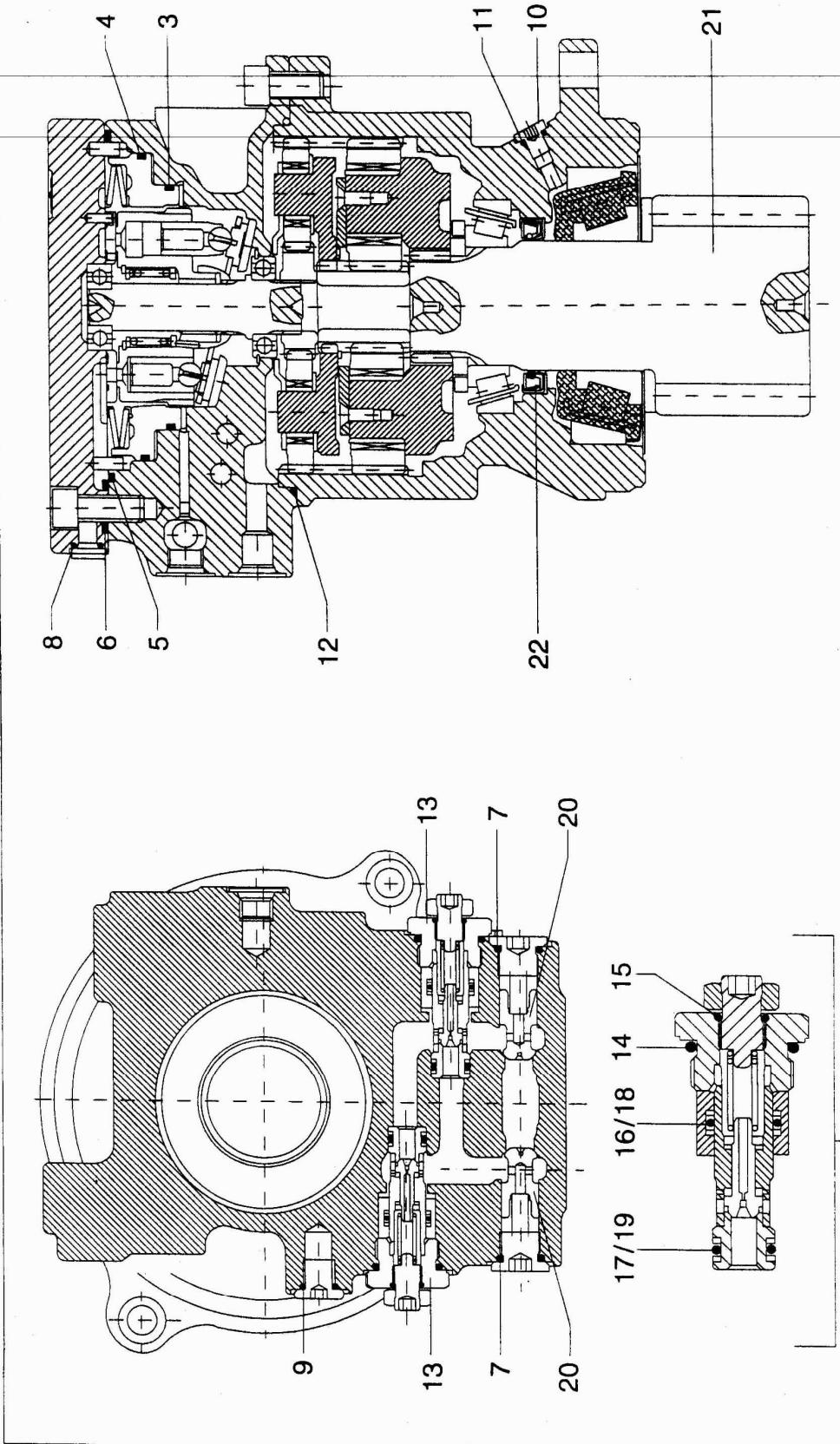


DIAGRAM 8.009

	Position n°	Article number	Description	Quantity
	1	5527665129	SWING DRIVE	1
	2	5527665030	REPAIR KIT	1
	3	----	O-RING	1
	4	----	O-RING	1
	5	----	O-RING	1
	6	----	O-RING	2
	7	----	O-RING	2
	8	----	O-RING	2
	9	----	O-RING	1
	10	----	PLUG	1
	11	----	O-RING	1
	12	----	O-RING	1
	13	5527665171	VALVE	2
	14	5527665022	O-RING	1
	15	5527665034	O-RING	1
	16	5527665033	O-RING	1
	17	5527665035	O-RING	1
	18	5527665037	RING	2
	19	5527665036	RING	2
	20	5527665032	VALVE	2
	21	5527665038	PINION SHAFT	1
	22	5527665039	SEAL	1