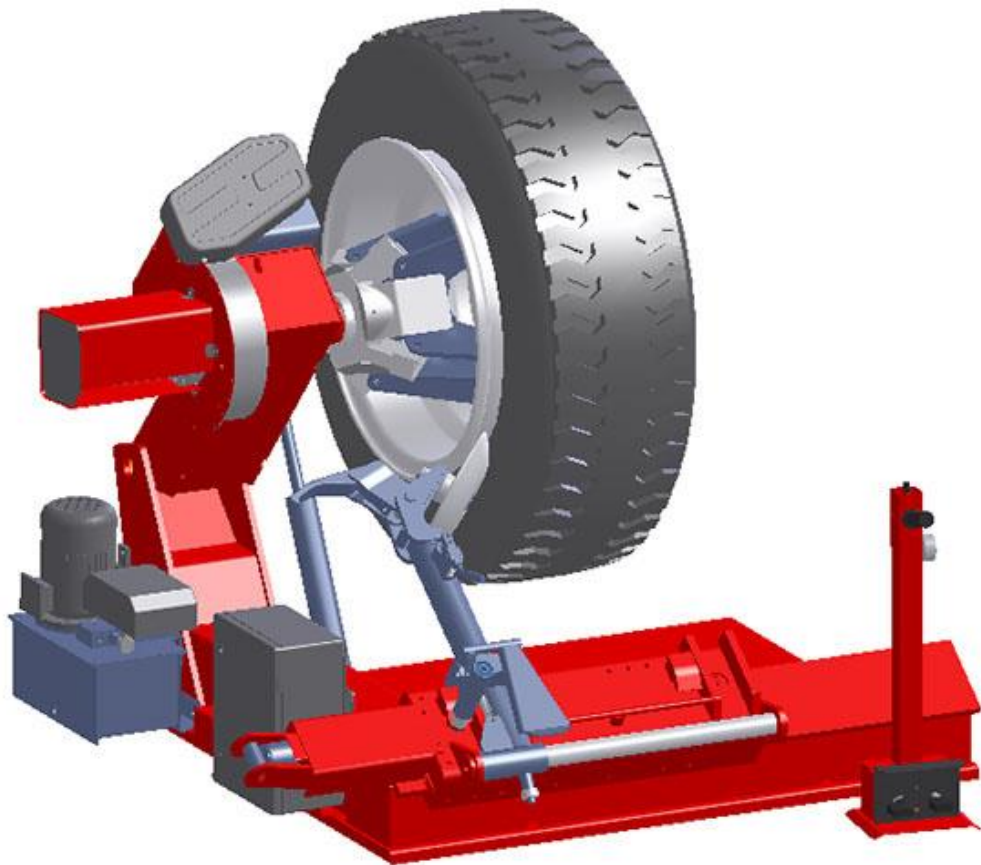




INSTRUCTIONS BOOKLET



***Automatic Truck Tyre Changer
Machine***

AT-56

WARNINGS

- The presents instructions booklet is an integral part of the product. Carefully study the warnings and instructions contained in it. This information is important for safe use and maintenance.
- Conserve this booklet carefully for further consultation.

AT- 56

Is a tyre changing machine designed and constructed to be used for mounting and demounting tyres on the wheel rims of trucks and light industrial vehicles.

The machine has been designed to operate within the limits described in this booklet and in accordance with the maker's instructions.

The machine must be used only for the functions for which it was expressly designed. Any other use is considered wrong and therefore unacceptable.

The maker cannot be held responsible for eventual damage casued by improper, erroneous or unacceptable use.

IMPORTANT

SPEEDY may be operated only by suitably trained personnel. Any work on the electrical, hydraulic, pneumatic systems must be conducted only by professionally qualified personnel.

TECHNICAL CHARACTERISTICS

DIMENSIONS

Height (min./max.).....	866 - 1540 mm
Length	1720 mm
Widht (min./max.).....	1910 -2257 mm

WEIGHT

Net weight.....	800 kg
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ENGINE DATA

Reduction Engine	1.3/1.8 Kw – 1400/3000 Rpm
	3 Phases
Hydraulic Engine	1.5 Kw – 1400 Rpm
	3 Phases
Noise Level	<65 db

RANGE OF APPLICATIONS

ALLEGRO can operate on wheels having the following minimum and maximum dimensions:

WHEEL

Work on wheels of.....	14" – 56"
Max. Wheel diameter.....	2300 mm
Max. Wheel width.....	1065 mm

WARNING !

It is absolutely prohibited to carry out tyre inflation procedures while the wheel is still on the machine!

At least two people are required for the movement of particularly heavy wheels!

WHEEL LOCKING SYSTEM

The self-centering chuck operates by means of a high pressure hydraulic circuit adjustable from 20 to 110 bar. The handle is turned and the pressure read on the manometer. Standart working pressure is 110 bar, but for weak or particularly thin rim it is necessary to reduce this pressure.

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PARTS OF THE MACHINE

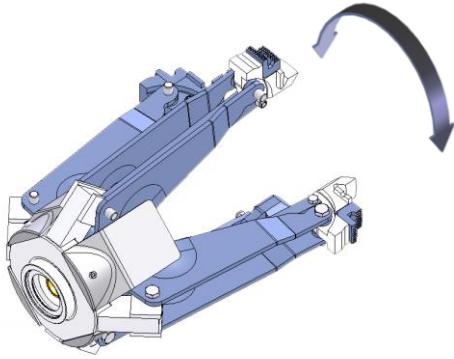


Fig.1 – FOUR-JAW UNIVERSAL CHUCK
With two rotation speeds in both directions.
Pressure adjustable hydraulic opening and closing.

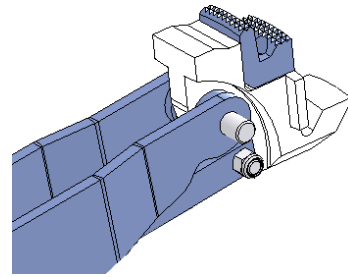


Fig.2 – LOCKING JAW
The Jaw was designed to give different gripping possibilities.

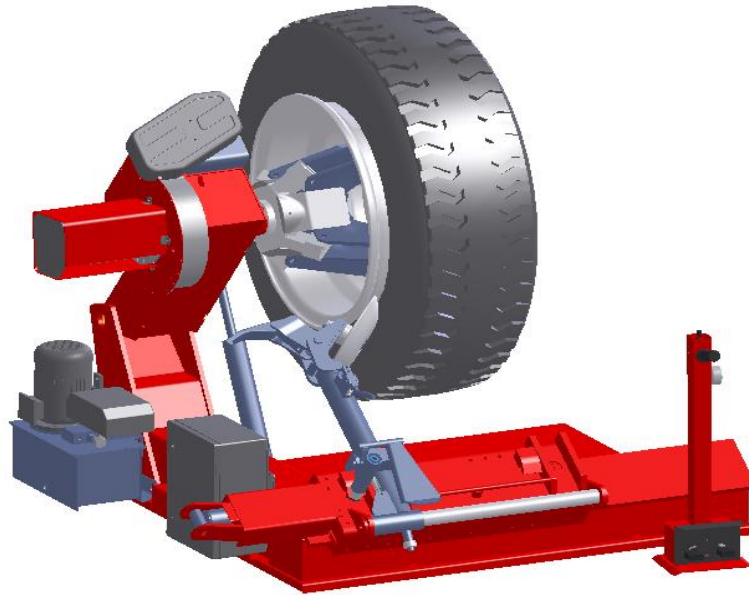


Fig.3 – AT - 56

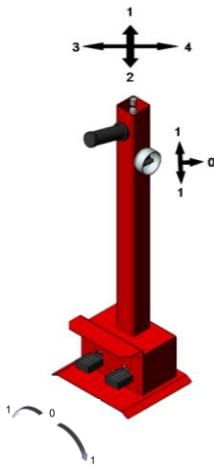


Fig.4 – MOBIL CONTROL UNIT
The controls are combined on a remote mobile control unit with which the operations are coordinated.

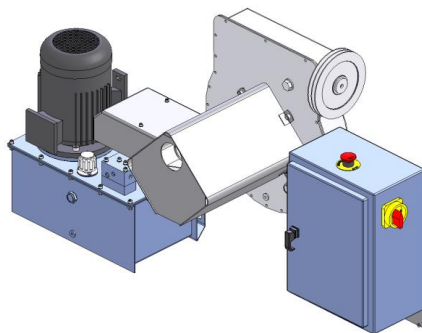


Fig.5 – HYDRAULIC UNIT
By regulating the operating pressure of the chuck, the unit allows safe working conditions even on the various types of alloy rim.

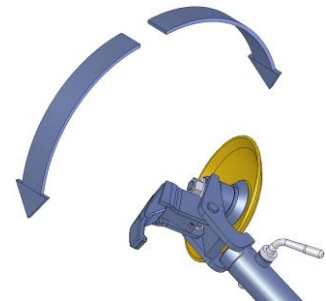


Fig.6 – WORKING ARM
A quick rotation system helps changes in operation during the various stages of bead breaking tool-assisted extraction of tyre etc.



Fig. 7

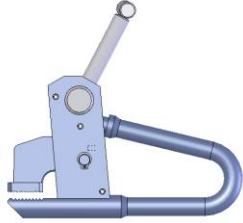


Fig. 8

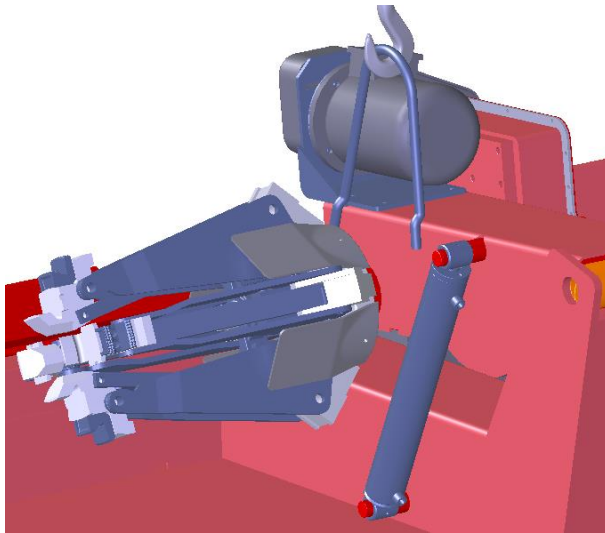


Fig. 9

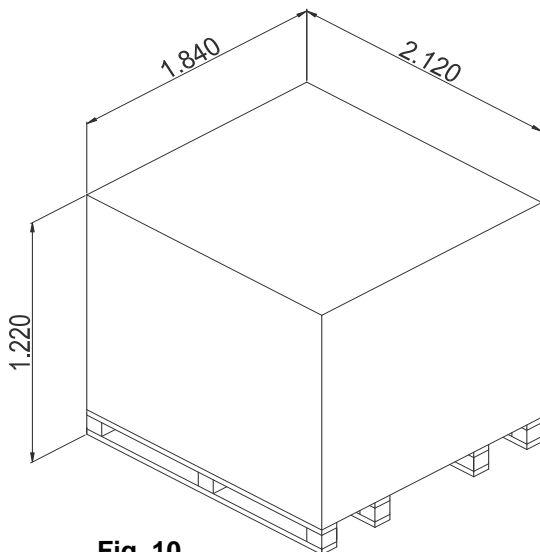


Fig. 10

ACCESSORIES PROVIDED

BEAD LIFTING LEVER (Fig. 7)

A toll necessary for lifting the tyre bead onto the head dunnig demounting.

RIM PINCERS (Fig. 8)

These are used when mounting tubeless and supersingle tyres.

MOVEMENT (Fig. 9)

For installation and ulterior movement of the machine, follow the instructions:

- **Herness** with cables (one of 1.5 m. and one of 2 m.) at the two points indicated.
- **Lift** with a hoist of suitable strength.

N.B. : Whenever it is necessary to move the machine take all precautions necessary to guarentee safe conditions.

NET WEIGHT : 850 Kg

UNPACKING (Fig. 10)

On receipt of the machine remove the packing an chack the machine visually for missing or damaged parts. If in doubt do not use the machine and refer to prefessionally qualified personnel and/or to the seller.

WARNING !

The packing materials must not be left within reach of children since they are potentially dangerous.

Deposit the above mentioned materials at the relevant collectin points if they are pollutants or are non biodegradable.

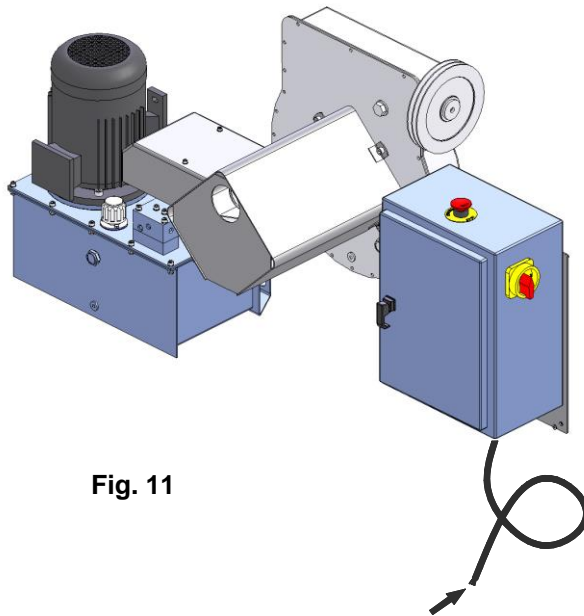


Fig. 11

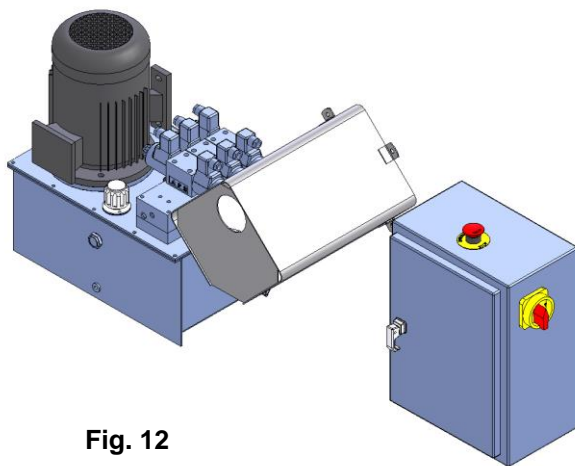


Fig. 12

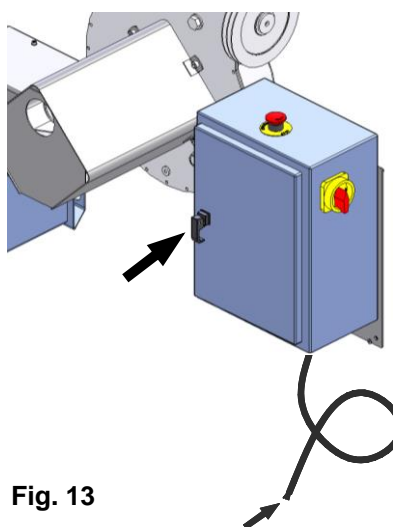


Fig. 13

ALL WORK ON THE ELECTRICAL SYSTEM , INCLUDING MINOR OPERATIONS, MUST BE CARRIED OUT BY PROFESSIONALLY QUALIFIED PERSONNEL

- Check that the cable mains supply is the same as that shown on the registration plate.
- Connect the cable to a plug that conforms with European norms or to the norms of the country in which the machine is used.
- The plug must have an earth terminal. (Fig. 11)
- Check that the earth connection is effective.
- The machine must be connected to the mains through a multipole isolating switch which conforms with European norms and with contact openings of at least 3 mm.
- Check that the multipole connector on the electrical board is correctly connected.
- When the machine is connected, switch it on and check the correct direction of rotation; this should be as shown by the arrow on the motor unit. (Fig. 12)
- If the rotation is reversed, reverse the two wires in the connection plug.
- If the machine behaves abnormally, immediately switch off the main switch (Fig. 13) and check the section "Malfunctions causes and possible remedies" in the instructions manual.

THE MANUFACTURER DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE FAILURE TO OBSERVE THE ABOVE MENTIONED INSTRUCTIONS.

TUBELESS AND SUPERSINGLE TYRES

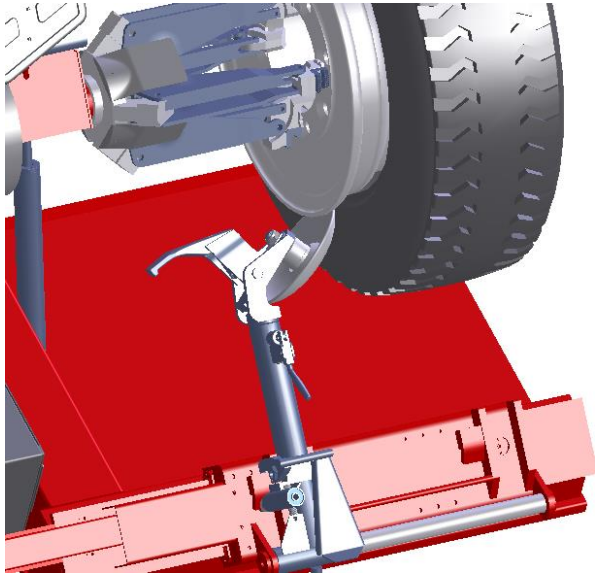


Fig. 14

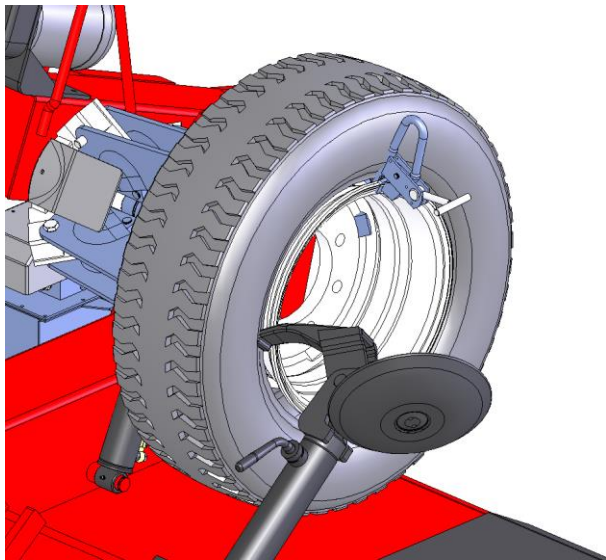


Fig. 15

DEMOUNTING

- Break the bead at the front part of the tyre and pushing on the bead, lubricate the rim flange and the bead with suitable grease (Fig. 14).Repeat the operation on the back.

- If it is a balcony rim (that is, inclined from 10" to 15") continue the bead – breaking operation until the tyre has come completely out of the rim.

N.B. The for the demounting of the particularly hard textile supersingle tyres or tubeless tyres with a very high rim flange refer to the instructions for the demounting of agricultural wheels.

N.B. The bead and the rim flange should be well lubricated.

MOUNTING

- For mounting undemanding tubeless tyres, place the tyre on the trolley keeping it tilted. Then insert and lower the rim, pressing on the tyre to allow the top of the rim to enter the tyre.

- If it is not possible use the special pincers supplied(Fig. 15) and mount the two beads at the same time. To mount the second bead proceed as shown in.

N.B. For mounting particularly hard tubeless and supersingle tyres, treat them as agricultural wheels.

Warnings !

It is absolutely forbidden to inflate tyres with the wheel still on the machine.

The movement of particularly heavy wheels requires at least two people.

AGRICULTURAL TYRES

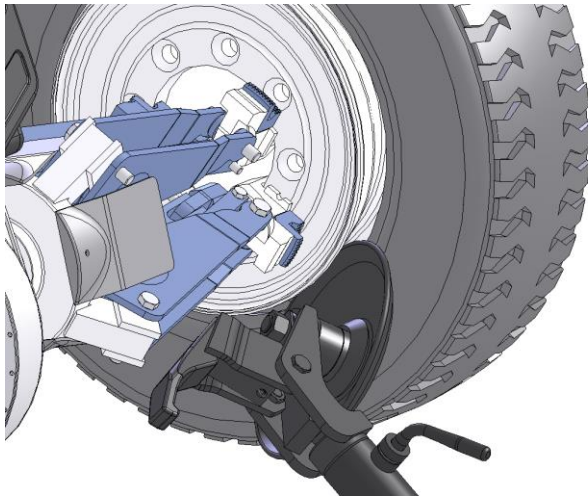


Fig. 16

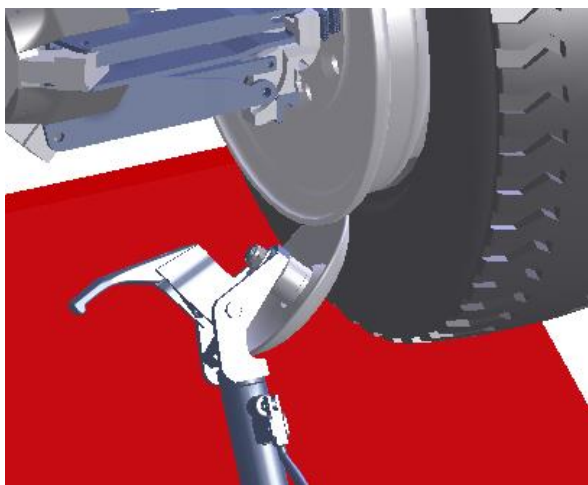


Fig. 17

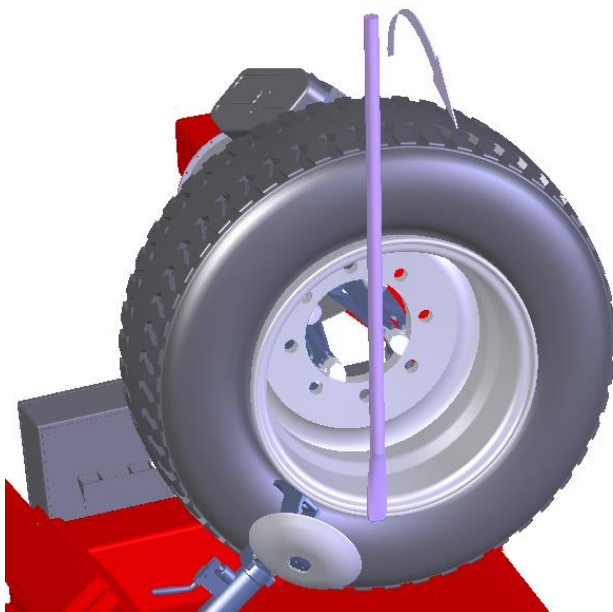


Fig. 18

DEMOUNTING

- Clamp the wheel on the self-centering chuck and raise it until the rim flange touches the bead breaking tool. Using the control and selector deflate the tyre and begin the bead breaking operation (Fig. 16 or Fig. 14). Use the pedal and selector to gradually advance the bead breaking roller turning the spindle continuously.

- Lubricate the bead and the rim flange with the special lubricant keeping the wheel in movement. When the operation is finished rotate the tool by 180°, removing the pin. Repeat the bead breaking on the other side of the tyre in the same way.

- Tilt the tool arm and move it back of the tyre pressing the pedal. Using the lever swing the tool into position 2 then re-attach the tool arm to the trolley. Use the control to move the tool against the tyre with the control until the bead is hooked on Fig. 18, put the tyre into tension moving the rim away from the tool so that the bead enters the channel.

- Insert the special lever (Fig. 18/ Fig. 6) between the rim and bead to the right of the tool to ensure that the bead remains on the tool. Move the rim towards the tool again (Fig. 18) until the front bead has completely come out. Rest the wheel on the trolley platform to obtain working space for the easy removal of the inner tube.

- To demount the back bead proceed as shown in Fig. 11 rotate the tool by 180°, insert it between the rim and the bead, move it against the rim flange and insert the lever (Fig 17) and then rotate the spindle in clockwise direction until the operation is complete.

MOUNTING

- Place the tyre on the rim , clamp the special pincers (Fig. 15/ Fig. 7) on the front rim flange and position the tool with reference to the edge of the rim flange.

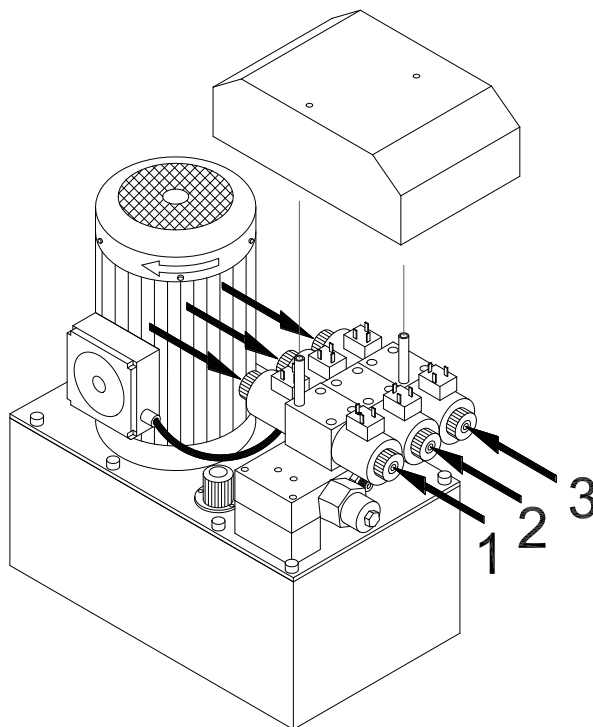
- Rotate the spindle in a clockwise direction until the back rear bead is fully mounted.

- Insert the inner tube and support the wheel on the trolley platform (Fig. 15) to assist the operation.

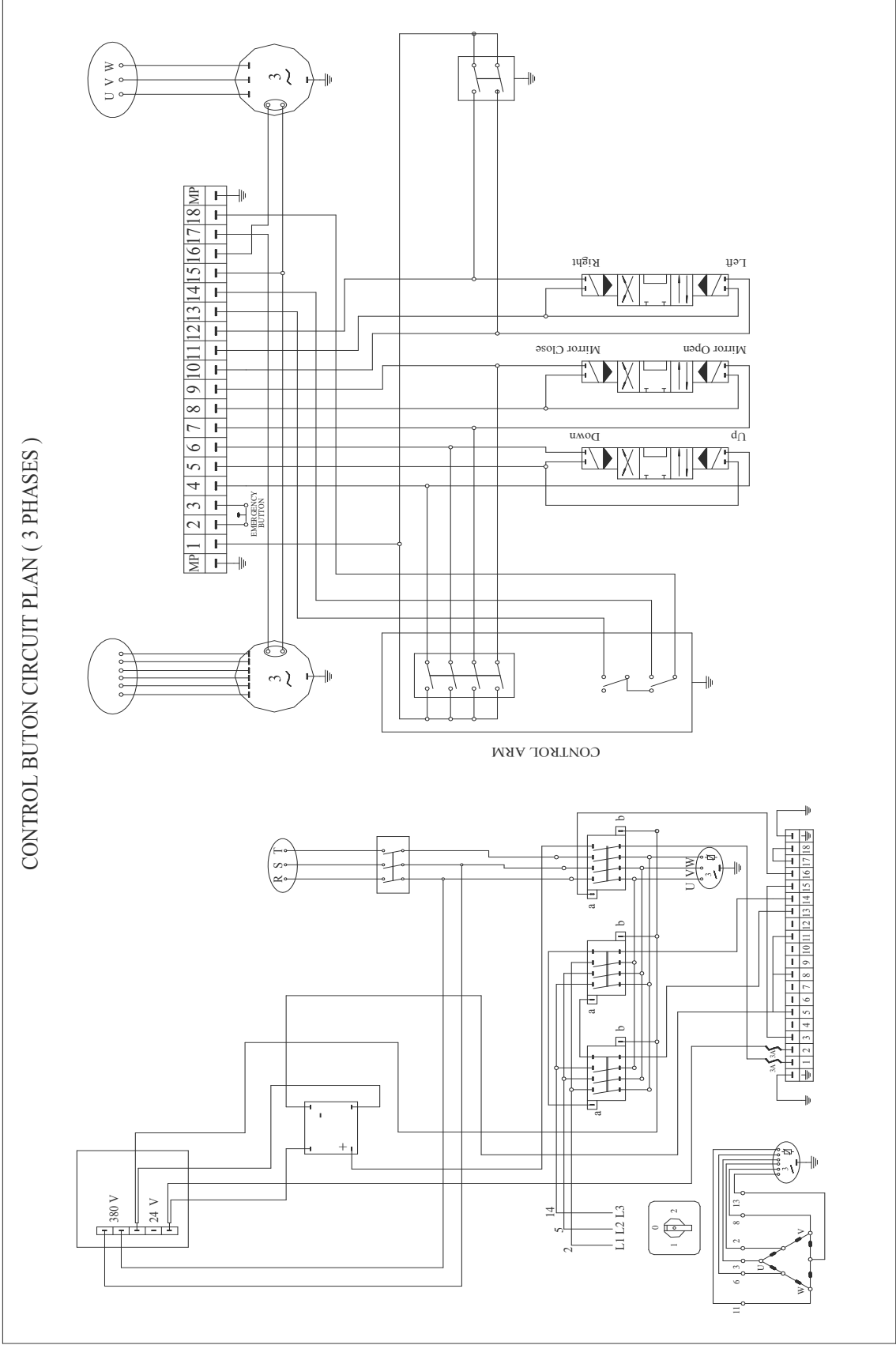
- Re-position the tool near to the valve with the relevant reference point on the edge of the rim. Clamp the pincers (Fig. 15/ Fig. 7) to the left of the tool and rotate the wheel clockwise making sure that the bead is inside the rim channel.

PROBLEMS	CAUSES	REMEDIES
<ul style="list-style-type: none"> - If you have problems while the gear box head is going up and down. - If you have problems during the locking head movements. - If you have problems during the movements of tyre changer table. 	<ul style="list-style-type: none"> - The pressure valve may be blocked. (Figure 1 / Valve 1) - The pressure valve may be blocked. (Figure 1 / Valve 2) - The pressure valve may be blocked. (Figure 1 / Valve 3) 	<ul style="list-style-type: none"> - Open the valve cover and by using pim of max Ø5 mm diameter unblock the valve.(Figure 1)
<ul style="list-style-type: none"> - The engine is working but the locking head is not turning. 	<ul style="list-style-type: none"> - The engine belt may be untightened. 	<ul style="list-style-type: none"> - Check the engine belt.
<ul style="list-style-type: none"> - There is not enough pressure in the hydraulic unit 	<ul style="list-style-type: none"> - The direction of the hydraulic unit may be reverse. - There may be lack of oil in the hydraulic unit. 	<ul style="list-style-type: none"> - Change the cables vice in the connection. - Put oil till the level of the insdicator.
<ul style="list-style-type: none"> - The locking head is not working. 	<ul style="list-style-type: none"> - The o-rings of the locking valve may be damaged. - The enter o-ring may be damaged. 	<ul style="list-style-type: none"> - Change the o-rings. - Call our technical service.
<ul style="list-style-type: none"> - The locking head is not turnig to the right or left - The gear box body is not moving up and down. - Tyre carrying table is not moving. 	<ul style="list-style-type: none"> - There may be a problem with the electrical connections. 	<ul style="list-style-type: none"> - Call our technical service.

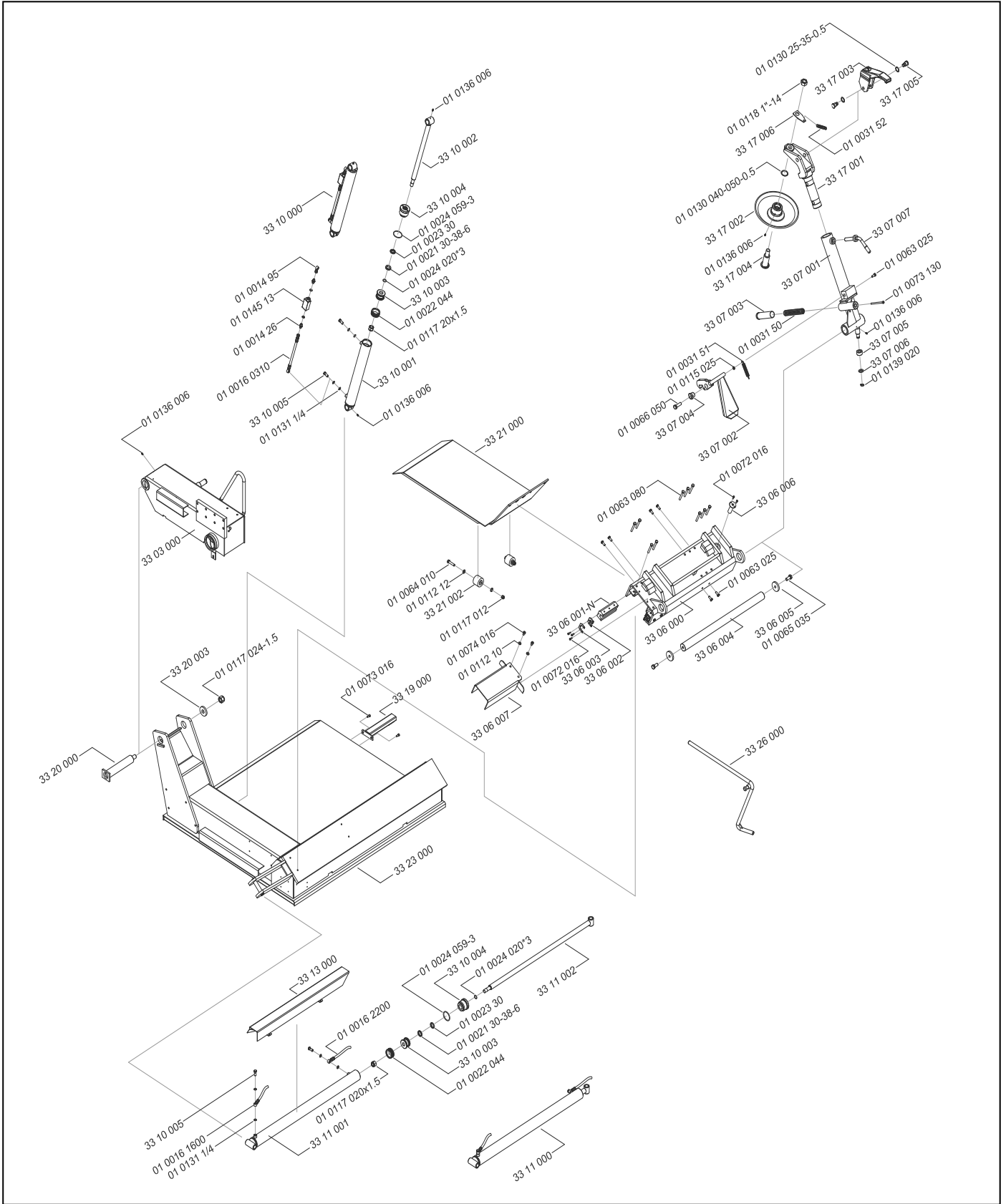
Figure : 1

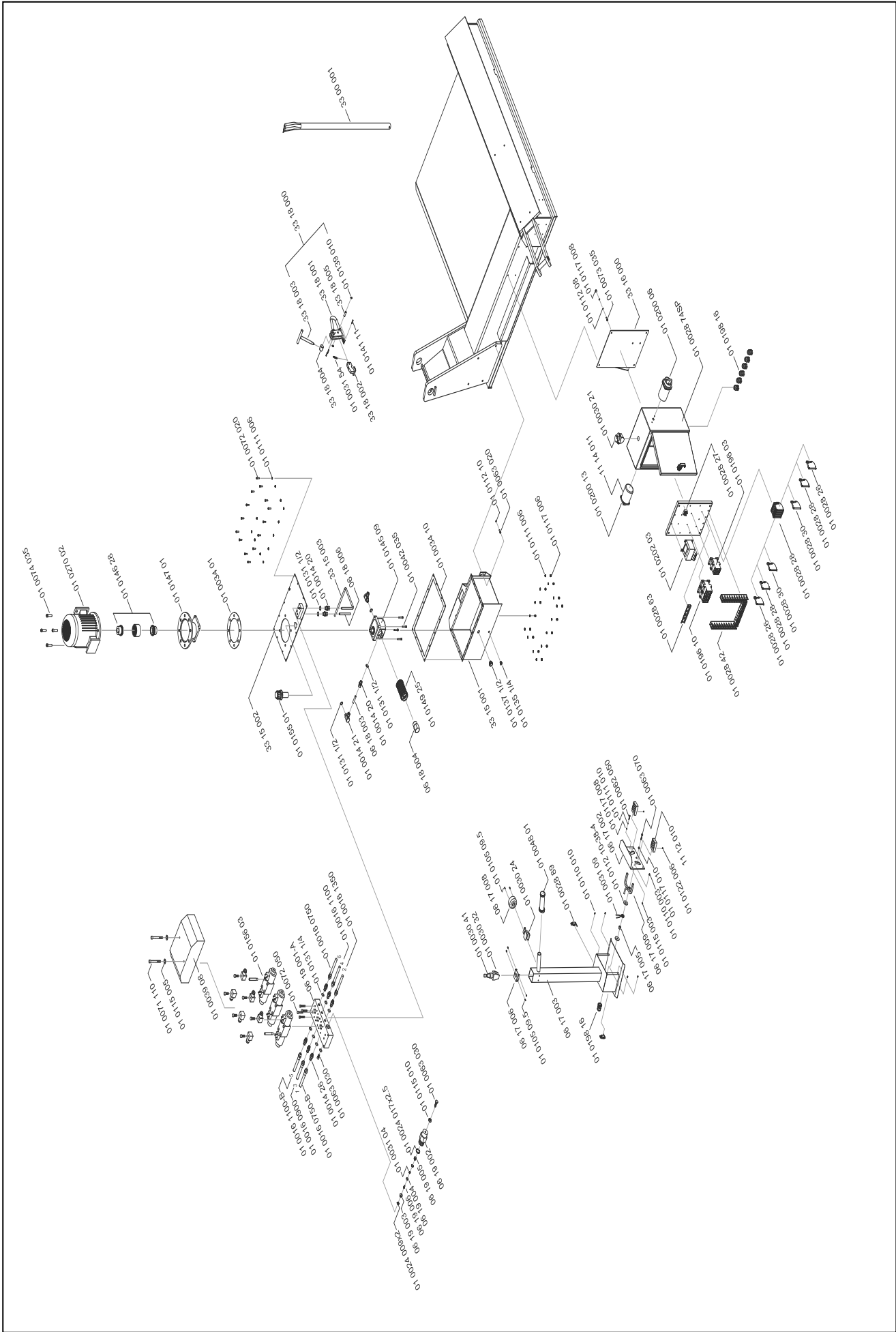


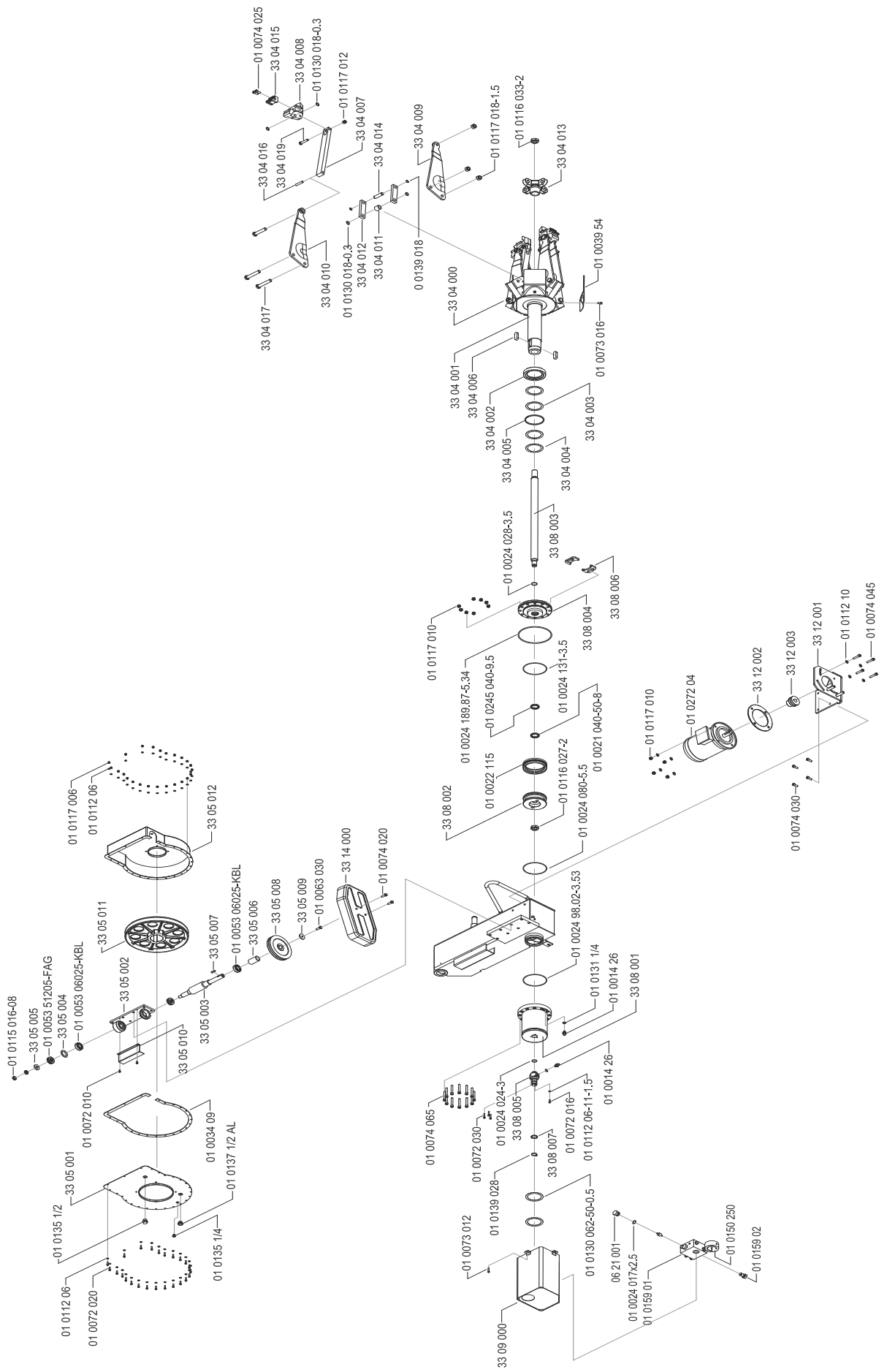
ELEKTRICAL PLAN



DEMONTAGE PLAN







SPARE PARTS LIST FOR AT - 56		
ITEM NO	ITEM/CODE NUMBER	DESCRIPTION
1	33 23 000	BOTTOM BODY GROUP
2	33 20 000	REDUCTION CONNECTION MILE
3	33 20 003	WASHER
4	01 0117 024-1.5	FIBER NUT
5	33 03 000	REDUCTION BODY GROUP
6	01 0136 006	GREASE FITTING
7	33 19 000	RAMP PROFILE GROUP
8	01 0073 016	CYLINDER HEAD SCREW
9	33 13 000	SLIDE SHEET GROUP
10	33 11 000	SLIDE PISTON GROUP
11	33 11 001	CYLINDER GROUP
12	01 0016 1600	SLIDE FRONT HOSE
13	01 0131 1/4	WASHER
14	01 0117 020x1.5	FIBER NUT
15	01 0016 2200	SLIDE BACK HOSE
16	01 0022 044	COMPACT SET
17	33 10 003	TYRE HEAD
18	01 0021 30-38-6	NUTRING
19	01 0023 30	FELT
20	01 0024 059-3	O-RING
21	33 10 004	FRONT COVER
22	01 0024 020x3	O-RING
23	33 11 002	PISTON GROUP
24	33 06 000	SLIDE GROUP
25	33 06 001-N	SLIDE RAIL LAMA
26	33 06 002	FELT
27	33 06 003	FELT PRESS TO SHEET
28	01 0072 016	CYLINDER HEAD SCREW
29	33 06 004	SLIDE MILE
30	33 06 005	WASHER
31	01 0065 035	SCREW
32	01 0063 025	SCREW
33	01 0063 080	SCREW
34	33 06 006	SILDE PISTIN GROUP
35	33 06 007	PISTON PROTECTION GROUP
36	01 0112 10	WASHER
37	01 0074 016	CYLINDER HEAD SCREW
38	33 21 000	RAMP GROUP
39	01 0064 010	SCREW
40	01 0112 12	WASHER
41	33 21 002	TYRE
42	01 0117 012	FIBER NUT
43	33 10 000	HEAD UP PISTON GROUP
44	33 10 001	CYLINDER GROUP
45	01 0117 20x1.5	FIBER NUT
46	33 10 003	TYRE HEAD
47	33 10 004	FRONT COVER
48	33 10 002	PISTON GROUP
49	33 10 005	CONNECTION RECORD
50	01 0016 0310	LOCK VALF HOSE
51	01 0014 26	RECORD
52	01 0145 13	LOCK VALF
53	01 0014 95	HOSE RECORD
54	33 07 001	CHANGER GROUP
55	33 07 003	BEEHIVE PISTON GROUP
56	33 07 007	CONNECTION MILE GROUP
57	33 07 005	PULLEY
58	33 07 006	PULLEY WASHER
59	33 07 002	PEDAL GROUP
60	33 07 004	MILE TO SET
61	01 0066 050	SCREW
62	01 0115 025	NUT
63	01 0031 51	PEDAL ARCH
64	01 0031 50	BEEHIVE ARCH
65	01 0073 130	SCREW
66	01 0139 020	MILE SEGMENT
67	33 17 001	BODY GROUP
68	33 17 002	FLANGE GROUP
69	33 17 003	GROUP TO PULL
70	33 17 004	CENTRE MILE
71	33 17 005	CONNECTION MILES
72	01 0031 52	ARCH TO PULL
73	01 0130 25-35-0.5	WASHER
74	33 17 006	ARCH CONNECTION SHEET
75	01 0118 1"-1/4	NUT

SPARE PARTS LIST FOR AT - 56		
ITEM NO	ITEM / CODE NUMBER	DESCRIPTION
76	01 0130 040-050-0.5	WASHER
77	33 15 001	OIL GROUP
78	01 0137 1/2	LEVEL INDICATOR
79	01 0135 1/4	STOPPER
80	01 0111 006	WASHER
81	01 0117 006	FIBER NUT
82	01 0112 10	WASHER
83	01 0063 020	SCREW
84	01 0034 10	DEPOT CLOSURE
85	01 0042 035	CYLINDER HEAD SCREW
86	01 0145 09	PUMP
87	06 18 004	FILTER RECORD
88	01 0149 25	FILTER
89	01 0131 1/2	WASHER
90	01 0014 20	RECORD
91	06 18 003	FILTER CONNECTION HOSE
92	01 0014 21	RECORD
93	06 18 006	DEPOT PIPE
94	33 15 003	PUMP PIPE
95	01 0072 020	CYLINDER HEAD SCREW
96	01 0155 01	DEPOT COVER
97	33 15 002	CAULDRON COVER
98	01 0034 01	ENGINE CLOSURE
99	01 0147 01	BELL
100	01 0146 28	HYDRAULIC PUMP CLUTCH
101	01 0270 02	ENGINE
102	01 0074 35	CYLINDER HEAD SCREW
103	06 19 001-A	OIL WEDGE
104	01 0072 050	CYLINDER HEAD SCREW
105	01 0016 0750	HOSE
106	01 0016 1100	HOSE
107	01 0016 1350	HOSE
108	01 0156 03	VALF
109	01 0039 08	VALF CONNECTION COVER
110	01 0115 005	WASHER
111	01 0071 110	CYLINDER HEAD SCREW
112	01 0016 110-B	HOSE
113	01 0016 0900	HOSE
114	01 0016 0750-B	HOSE
115	01 0063 030	CYLINDER HEAD SCREW
116	06 19 002	PRESSURE SCREW
117	01 0115 010	NUT
118	06 19 005	PASSING FITTING
119	01 0024 017x2.5	O-RING
120	01 0031 04	ARCH
121	06 19 003	ARCH UP HAT
122	06 19 004	ARCH DOWN HAT
123	06 19 006	PRESSURE MILE
124	01 0024 009x2	O-RING
125	06 17 003	BODY PROFILE
126	06 17 006	PROFILE COVER
127	01 0030 41	SWITCH
128	01 0030 32	CONTACT
129	06 17 008	SWITCH PROTECTION
130	01 0105 09.5	SHEET METAL SCREW
131	01 0030 24	BUTON
132	01 0048 01	HANDLE
133	01 0198 16	RECORD (PLASTIC)
134	01 0028 89	SWITCH
135	01 0110 10	SCREW
136	06 17 005	SUPPORT BEEHIVE
137	01 0031 09	ARCH
138	06 17 009	CONTROL PEDAL GROUP
139	01 0112 10-38-4	WASHER
140	01 0115 003	NUT
141	06 17 002	COVER
142	01 0110 003	SCREW
143	01 0062 050	SCREW
144	01 0122 006	SET SCREW
145	11 12 010	PEDAL
146	01 0063 070	SCREW
147	33 00 001	LEVER
148	01 0112 08	WASHER
149	33 16 000	CONTROL CONNECTION BODY
150	11 14 011	POWER SWITCH PROTECTION

SPARE PARTS LIST FOR AT - 56

ITEM NO	ITEM / CODE NUMBER	DESCRIPTION
151	01 0200 13	POWER SWITCH
152	01 0030 21	EMERGENCY BUTTON
153	01 0200 06	POWER SWITCH
154	01 0028 74SP	ELECTRICAL PANEL
155	01 0198 16	RECORD (PLASTIC)
156	01 0202 03	TRANSFORMER
157	01 0028 27	BRIDGE
158	01 0196 03	CONTACT
159	01 0028 63	RAIL
160	01 0196 10	CONTACT
161	01 0028 42	CABLE CANEL
162	01 0028 26	KLEMENS STOP
163	01 0028 28	KLEMENS GROUND
164	01 0028 30	KLEMENS
165	33 18 000	GROUP TO PRESS
166	33 18 001	BODY GROUP
167	33 18 002	PRESS GROUP
168	33 18 003	PRESS ARM
169	33 18 004	PRESS ARM CONNECTION MILE
170	33 15 005	CONNECTION LAMA
171	01 0031 54	PRESS ARCH
172	01 0139 010	SEGMENT
173	01 0141 11	PIN
174	33 08 001	BODY GROUP
175	01 0074 065	CYLINDER HEAD SCREW
176	01 0024 024-3	O-RING
177	33 08 005	LOCK VALF BEEHIVE
178	38 08 007	LOCK VALF WASHER
179	01 0112 06-11-1.5	WASHER
180	01 0139 028	SEGMENT
181	01 0130 062-50-0.5	WASHER
182	01 0073 012	CYLINDER HEAD SCREW
183	33 09 000	CYLINDER CABIN
184	06 21 001	PRESSURE SCREW
185	01 0024 017x2.5	O-RING
186	01 0159 01	LOCK VALF
187	01 0150 250	PRESSURE CLOCK
188	01 0159 02	LOCK VALF KITE
189	01 0024 98.02-3.53	O-RING
190	01 0024 080-5.5	O-RING
191	01 0116 027-2	NUT
192	01 0021 040-050-8	NUTRING
193	01 0272 04	ENGINE
194	33 12 002	ENGINE WASHER
195	33 12 003	ENGINE PULLEY
196	33 12 001	ENGINE CONNECTION GROUP
197	33 08 002	TYRE HEAD
198	01 0022 115	COMPACT SET
199	01 0245 040-9.5	FELT
200	01 0024 189.87-5.34	O-RING
201	01 0024 131-3.5	O-RING
202	33 08 004	CYLINDER COVER
203	33 08 006	DAGGER GROUP
204	01 0024 028-3.5	O-RING
205	33 08 003	PISTON
206	33 04 004	WASHER
207	33 04 003	WASHER
208	33 04 005	FELT TO UNLEAK
209	33 04 002	SUPPORT BRACELET
210	33 04 006	DAGGER
211	33 04 001	MIRROR GROUP
212	33 04 000	MIRROR CYLINDER GROUP
213	01 0073 016	CYLINDER GROUP
214	01 0039 54	PROTECTION
215	33 04 013	CROSS
216	01 0116 033-2	NUT
217	01 0117 018-1.5	FIBER NUT
218	33 04 009	LENGTHENING ARM GROUP
219	01 0198 018	SEGMENT
220	33 04 014	ARM CONNECTION PIN
221	33 04 011	DISTANCE BEEHIVE
222	33 04 012	DISTANCE LENGTHENING MILE
223	33 04 010	LENGTHENING ARM GROUP
224	33 04 017	SCREW
225	33 04 007	PRESS TO LAMA
226	33 04 019	SCREW

SPARE PARTS LIST FOR AT - 56		
ITEM NO	ITEM / CODE NUMBER	DESCRIPTION
227	33 04 016	CONNECTION MILE
228	01 0130 018-0.3	WASHER
229	33 04 008	FOOT TO PRESS
230	33 04 015	PRESS TO NAIL
231	01 0074 020	CYLINDER HEAD SCREW
232	33 14 000	PULLEY PROTECTION
233	01 0063 030	SCREW
234	33 05 009	BIG PULLEY WASHER
235	33 05 008	BIG PULLEY
236	33 05 006	PULLEY SUPPORT BEEHIVE
237	01 0053 06025-KBL	BEARING
238	33 05 007	DAGGER
239	33 05 003	SCREW RESPONSE MILE
240	33 05 002	SOLE CONNECTION LAMA
241	33 05 004	BEARING SUPPORT WASHER
242	01 0053 51205-FAG	BEARING
243	33 05 005	BEARING BACK SUPPORT WASHER
244	01 0115 016-08	NUT
245	33 05 011	SCREW RESPONSE TOOT HED
246	33 05 012	REDUCTION BODY COVER
247	01 0072 010	CYLINDER HEAD SCREW
248	01 0034 09	REDUCTION CLOSURE
249	33 05 001	REDUCTION CABIN GROUP
250	01 0135 1/2	STOPPER
251	01 0137 1/2 AL	LEVEL INDICATOR
252	01 0112 06	WASHER
253	33 26 000	TRACTOR LEVER GROUP