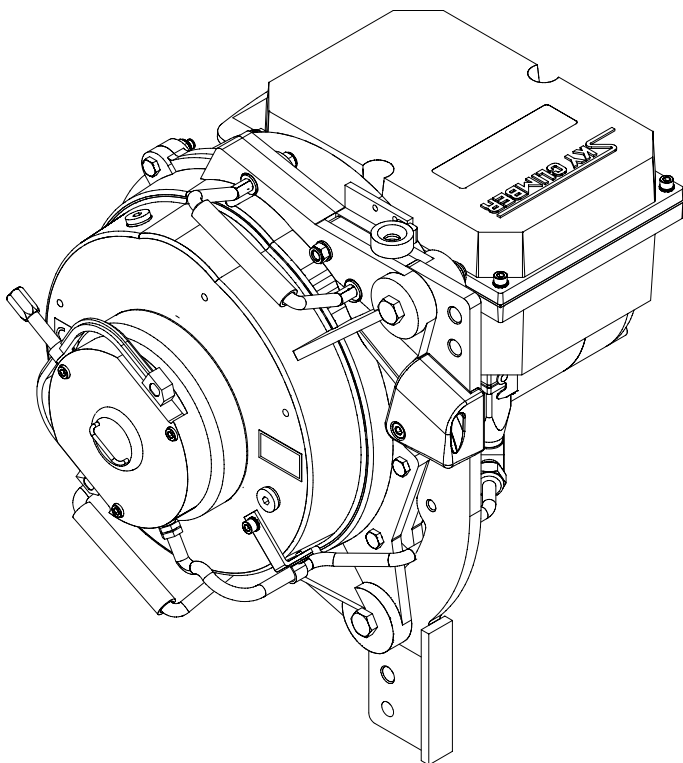


SKY CLIMBER

ED. 2003
ENGLISH

ASSEMBLY MANUAL



ALPHA 1500

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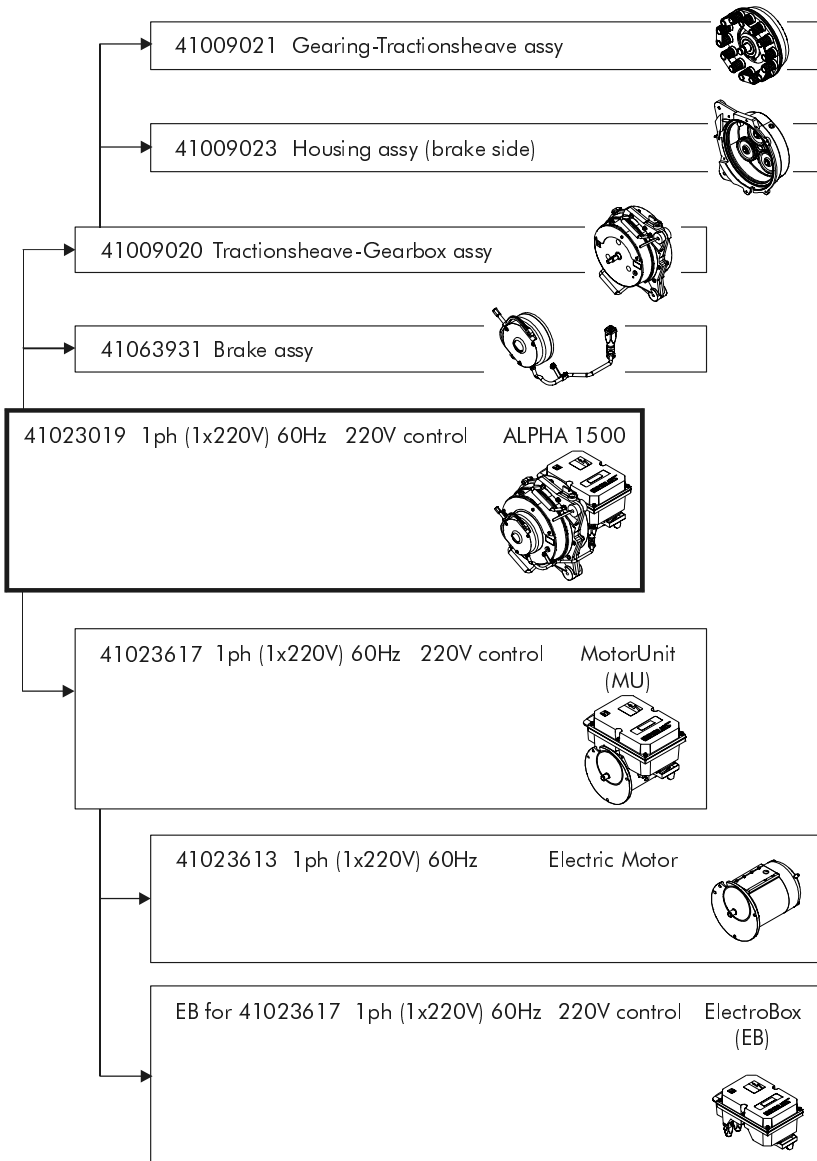
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REVIEW



RECOMMENDED

STEEL WIRE ROPE LUBRICANTS

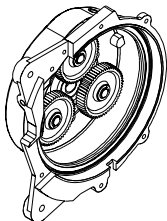
Steel Wire Rope

The steel wire rope (partn° 51008301) is conform to the ISO 2408 and the NBN 04-001 standards and in accordance with the following specifications:

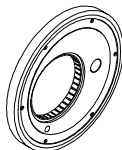
- Rope diameter 9mm
- Construction 4x36WS, polyprop core
- Type and direction of lay Right hand, regular lay, preformed
- Surface finish of the wires Galvanised
- Tensile strength 2160N/mm²
- Theoretical breaking load 78,5kN
- Actual breaking load 66,1kN
- Lubrication Lightly greased



Lubricants

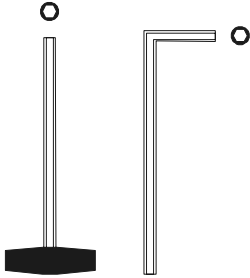


SAE 20W30 OIL
(partn°12009503)
is used for the gearbox.

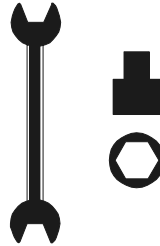


MOLYKOTE GREASE BR 2
(partn° 12009502)
is used for the lubrication
of the excenter assy.

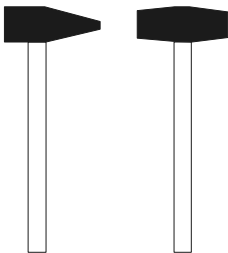
RECOMMENDED TOOLS



Size: 3 - 5 - 6



Size: 13 - 19 - 22

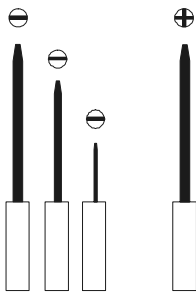


Paring-chisel
Normal chisel



Medium

Small
Large

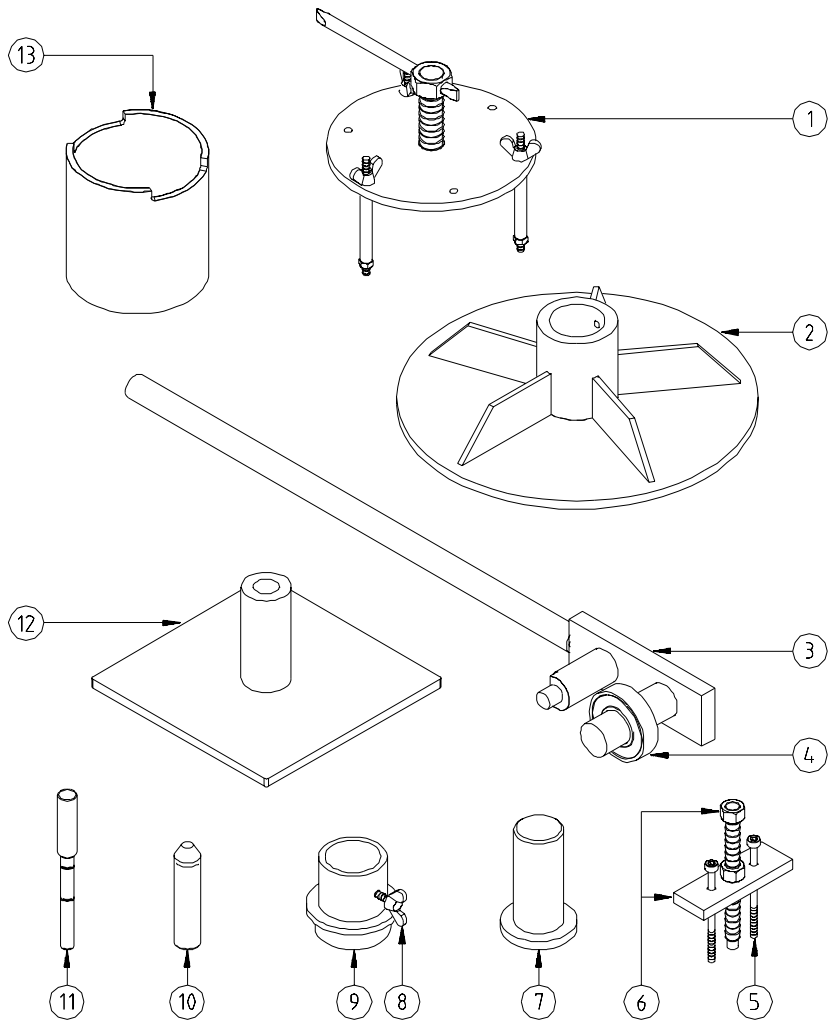


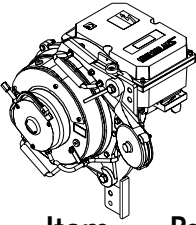
Clip on Amp.-meter

LIMITED TOOLSET

Item	Partn°	Qty	Description
1	23009001	1	Puller (casting brake side)
2	23008016	1	Mounting plate (big oil seal)
3	23008012	1	Tester (excenter)
4	26008529	1	Ball bearing
5	11002290	2	Bolt
6	23008014	1	Puller (reductor gear wheel)
7	23008011	1	Mounting piece (ball bearing)
8	11007220	1	Wingbolt
9	23008015	1	Press tube (oil seal)
10	23008004	1	Protector tube (seal)
11	23008023	1	Checking device (departure guide)
12	23008013	1	Workshop carrier for shaft (tractionsheave)
13	23008018	1	Tube (airmoter assembler)

23009004

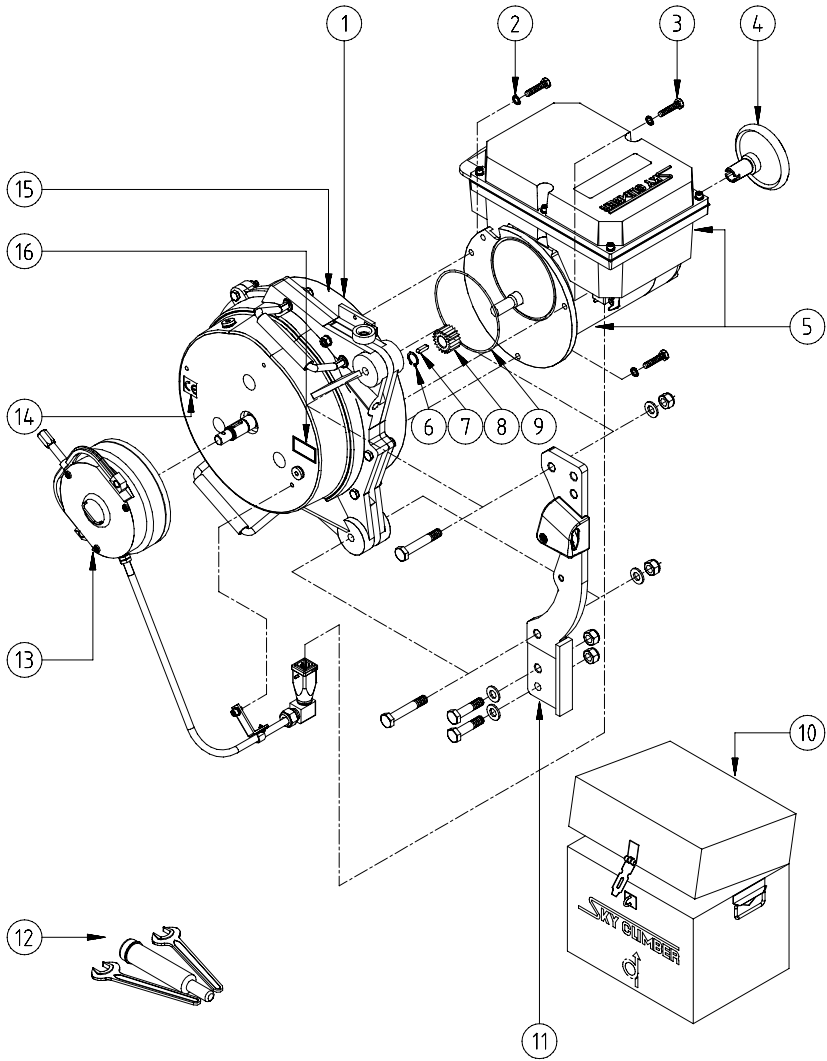


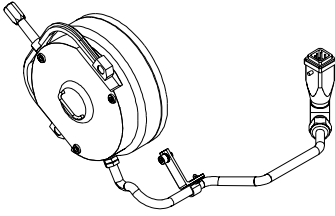


ALPHA 1500

Item	Partn°	Qty	Description
1	41009020	1	Tractionsheave-Gearbox assy
2	12000408	3	Serrated lock washer
3	11000335	3	Screw
4	42009858	1	Emergency handwheel assy
5	41023617	1	MU*1ph (1x220V) 60Hz 220V control
6	12002017	1	Retaining ring
7	14004120	1	Key
8	41008100	1	Pinion (motor shaft)
9	52008271	1	O-ring
10	41008073	1	Steelbox
11	41009003	1	Stirrup strap assy for end stirrup
12	41009019	1	Toolkit
13	41063931	1	Brake assy
14	12009101	1	Decal 'CE'
15	41008094	1	Nameplate
16	12009222	1	Decal 3/8''

* MU MotorUnit.



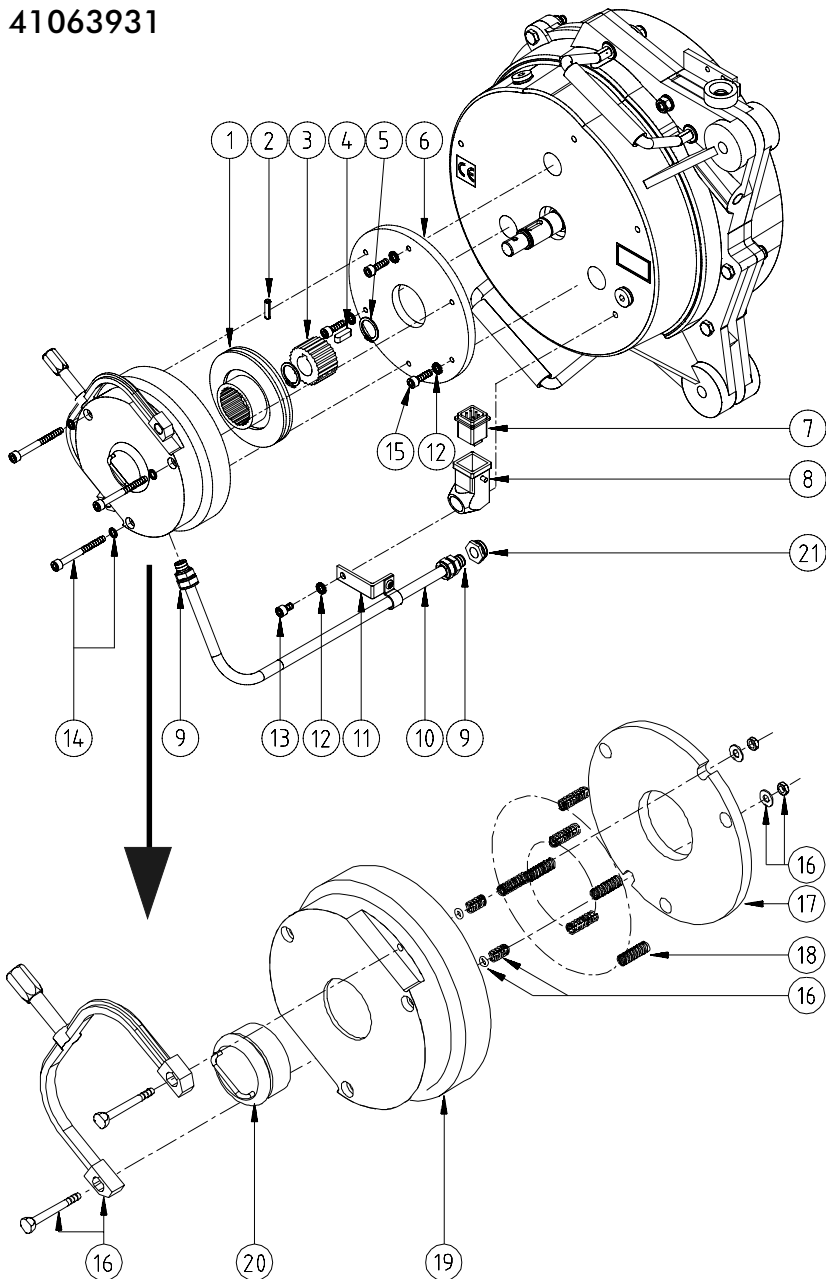


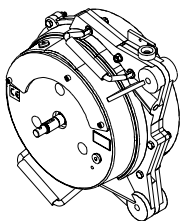
BRAKE ASSY

Item	Partn°	Qty	Description
1 A	41008127	1	Rotor/friction disc
2	12003520	1	Spring pin
3 A	41008128	1	Hub
4	14003220	1	Key
5	12002020	2	Retaining ring
6 A	41008206	1	Brake disc
7	53008699	1	Male plug
8	53008688	1	Male plughousing 90°
9	53008172	2	Cable gland
10	52008004	36cm	Insulation tube
11	41008065	1	Cable retainer
12	12000406	4	Serrated lock washer
13	11002210	1	Screw
14 A	41008219	1	Set of mounting screws
15	11002220	3	Screw
16 A	41008218	1	Release handle assy
17 A	41008202	1	Core disc
18 A	41008205	7	Spring
19 A	41008201	1	Coil assy
20 A	41008217	1	End plug
21	53008169	1	Reduction nipple

A Available as an assembly: 41009147.

41063931

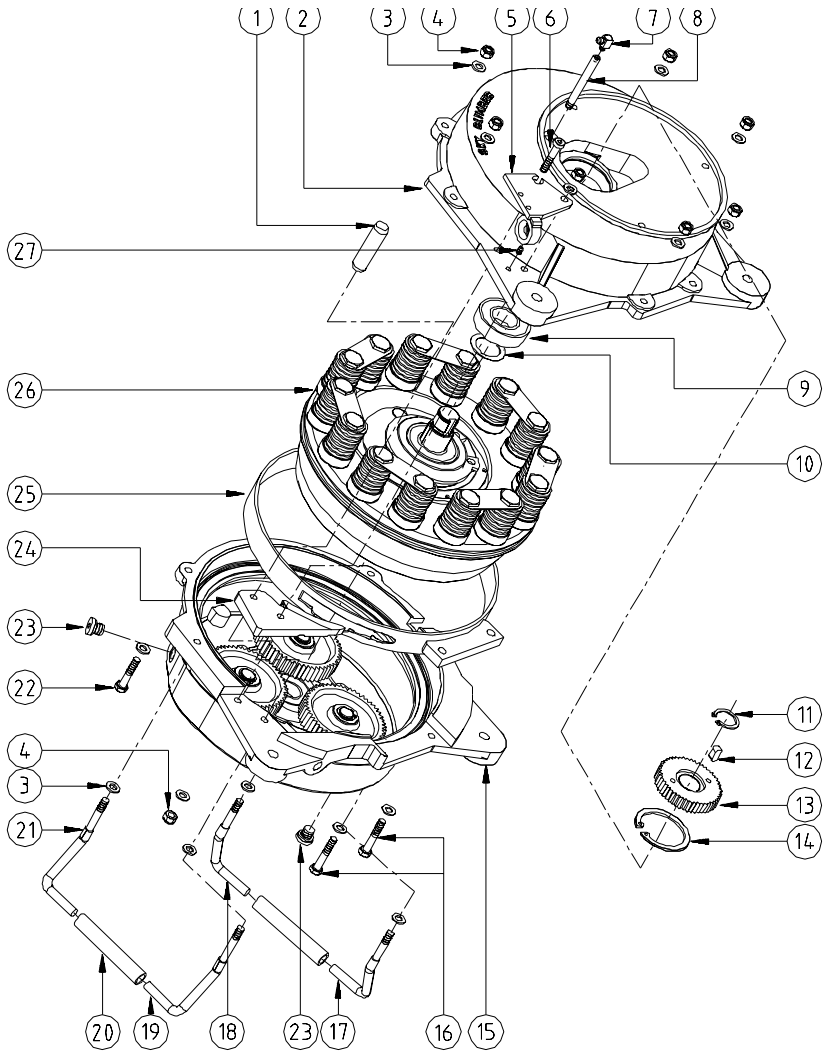


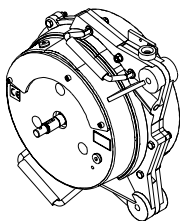


TRACTIONSHEAVE-GEARBOX ASSY

Item	Partn°	Qty	Description
1	41008048	1	Shaft (excenter)
2	41008009	1	Housing (motor side)
3	12000008	15	Washer
4	12005508	8	Selflocking nut
5	41008083	1	Entry guide
6	13000048	1	Screw
7	12009062	1	Grease nipple
8	41008016	1	Grease tube
9	26008529	1	Ball bearing
10	13000087	1	Ring
11	12002025	1	Retaining ring
12	14004318	1	Key
13	41008047	1	Gear wheel
14	12002162	1	Retaining ring
15	41009023	1	Housing assy (brake side)
16	11001345	2	Bolt
17	41008061	1	Handgrip
18	41008060	1	Handgrip
19	41008063	1	Handgrip
20	41008062	2	Tube for handgrip
21	41008086	1	Handgrip
22	11001340	1	Bolt
23	12009072	2	Oil plug with seal
24	41008020	1	Departure guide
25	41008019	1	Rope guide ring
26	41009021	1	Gearing-Tractionsheave assy
27	13000504	1	Screw

41009020

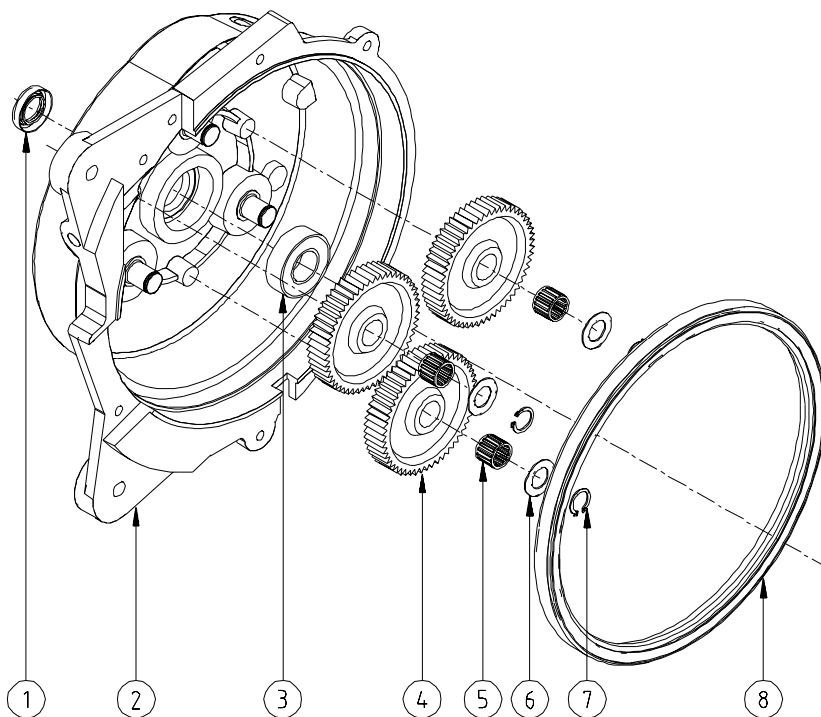


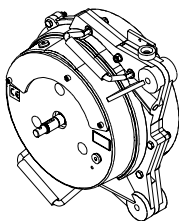


HOUSING ASSY (BRAKE SIDE)

41009023

Item	Partn°	Qty	Description
1	52008265	1	Seal
2	41009060	1	Housing with shafts
3	26008548	1	Ball bearing
4	41008038	3	Planet gear wheel
5	26008535	3	Needle bearing
6	26008538	3	Washer
7	12002017	3	Retaining ring
8	52008266	1	Seal

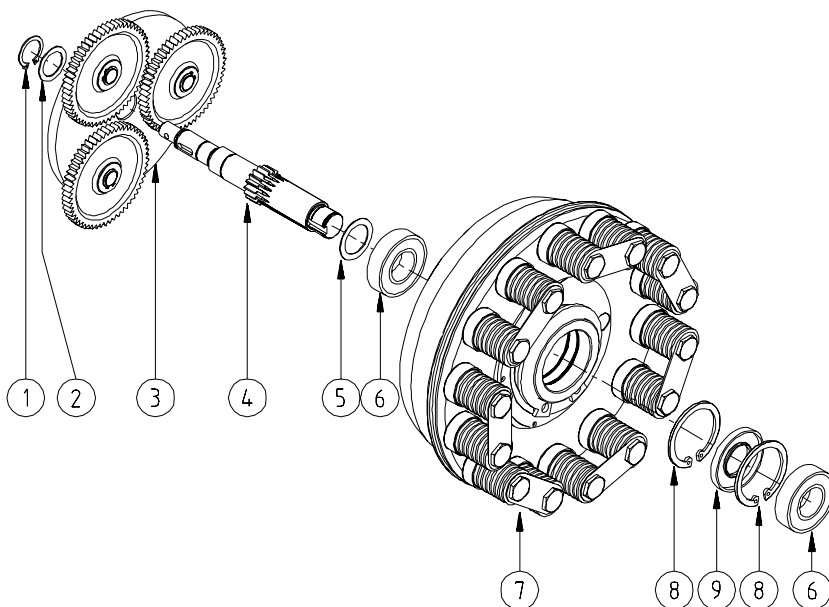


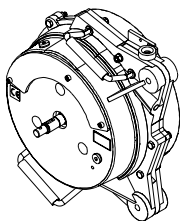


GEARING-TRACTIONSHEAVE ASSY

41009021

Item	Partn°	Qty	Description
1	12002025	1	Retaining ring
2	13000086	1	Ring
3	41009011	1	Planet carrier assy
4	41008026	1	Main shaft
5	13000087	1	Ring
6	26008529	2	Ball bearing
7	41009022	1	Tractionsheave assy
8	12002162	2	Retaining ring
9	52008277	1	Seal

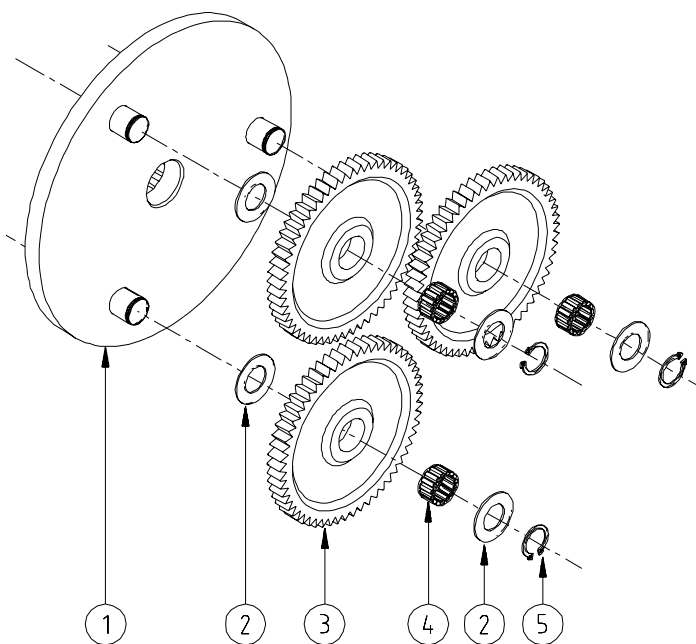


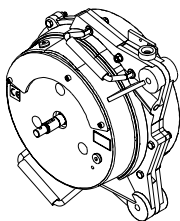


PLANET CARRIER ASSY

41009011

Item	Partn°	Qty	Description
1	41009050	1	Planet carrier with shafts
2	26008537	6	Washer
3	41008050	3	Planet gear wheel
4	26008536	3	Needle bearing
5	12002015	3	Retaining ring

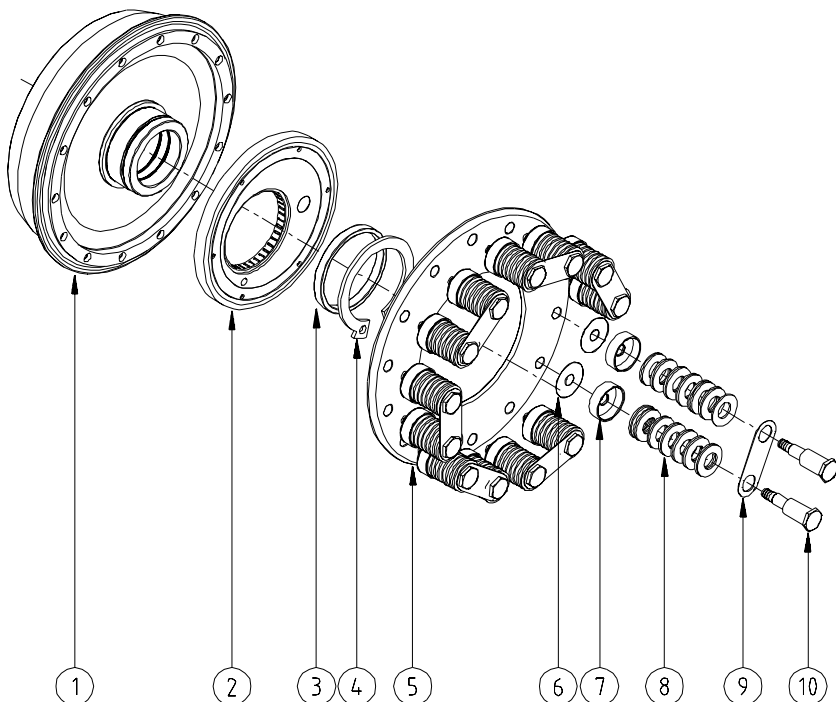


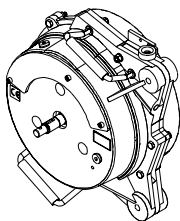


TRACTIONSHEAVE ASSY

41009022

Item	Partn°	Qty	Description
1	41008001	1	Drive disc
2	41009012	1	Excenter assy
3	41008014	1	Distance ring
4	12002085	1	Retaining ring
5	41008002	1	Pressure disc
6	41008044	14	Washer
7	41008049	14	Spring guide
8	12000518	196	Spring
9	41008017	7	Locking plate
10	41008003	14	Pressure bolt

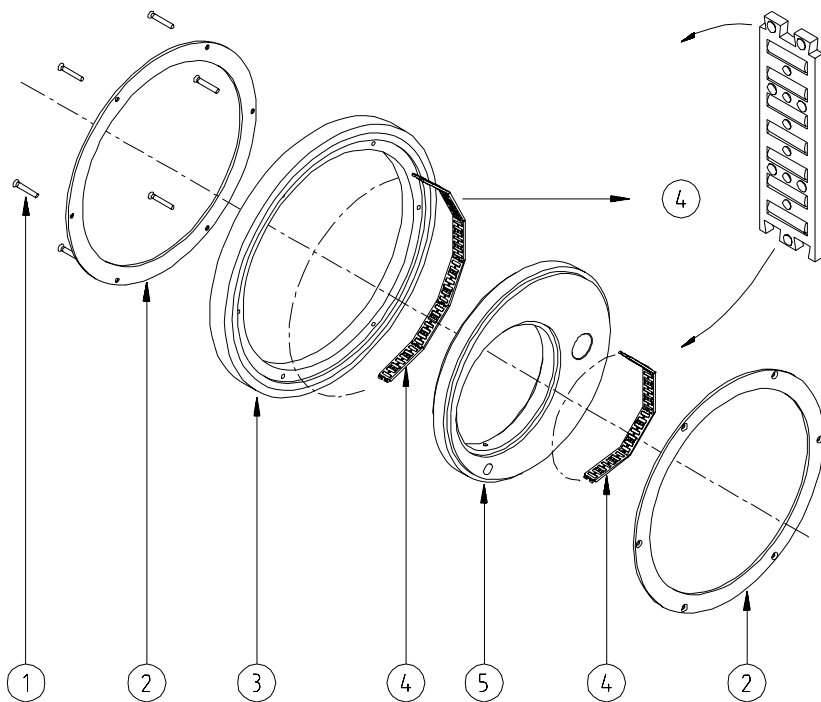


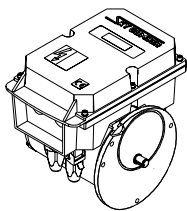


EXCENTER ASSY

41009012

Item	Partn°	Qty	Description
1	12008004	6	Rivet
2	41008018	2	Bearing shield
3	41008006	1	Spread ring
4	26008524	23,5	Needle roller
5	41008007	1	Excenter

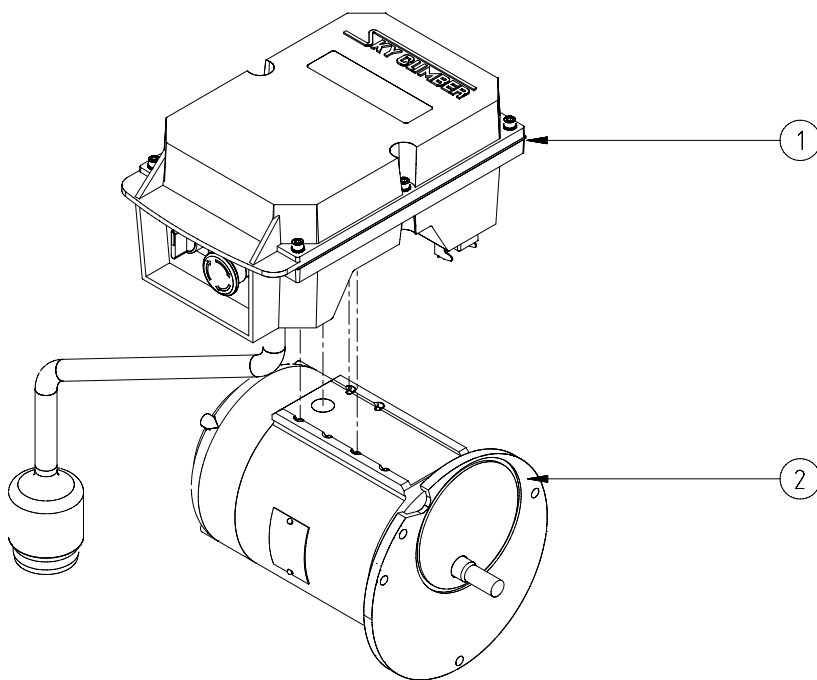




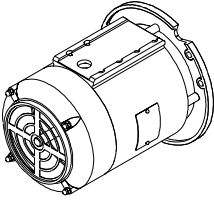
MOTORUNIT

41023617

Item	Partn°	Qty	Description
1 *	-	1	Electrobox
2	41023613	1	Electric motor: 1ph (1x220V) 60Hz



* To order electrobox place partnumber of corresponding motorunit (cf. p.3) in reference.

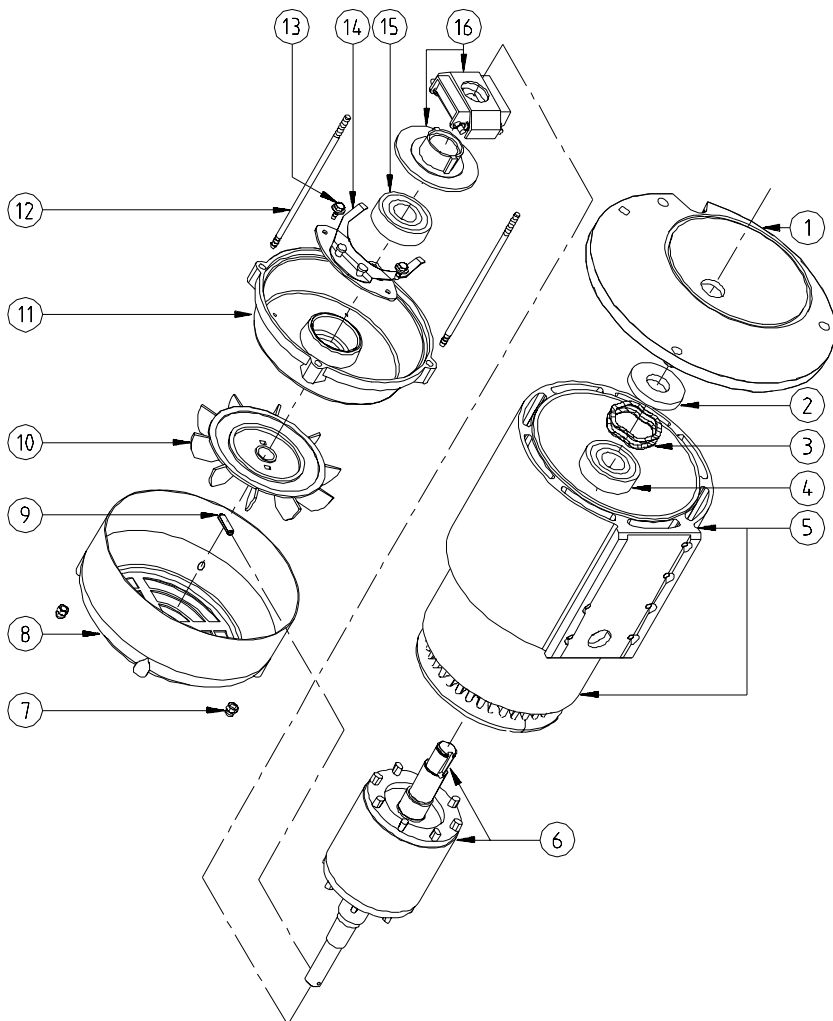


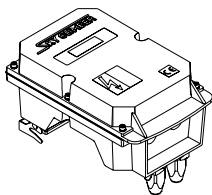
ELECTRIC MOTOR

41023613

Item	Partn°	Qty	Description
1	41008116	1	Front flange
2	52008280	1	Seal
3	41008115	2	Spring washer
4	26008556	1	Ball bearing
5 *	-	1	Frame with stator
6	41009143	1	Rotor on shaft
7	12005405	4	Nut
8	41008135	1	Cover cooling fan (blue)
9	12003520	1	Spring pin
10	41008168	1	Cooling fan assy (aluminium)
11	41008160	1	Cover (motor)
12	41008174	4	Through bolt
13	13000044	2	Screw
14	42009105	1	Centrifugal switch - fixed part
15	26008556	1	Ball bearing
16	41009121	1	Centrifugal mechanism - rotary part

* To order 'frame with stator' place partnumber of corresponding motor (cf. p.3) in reference.

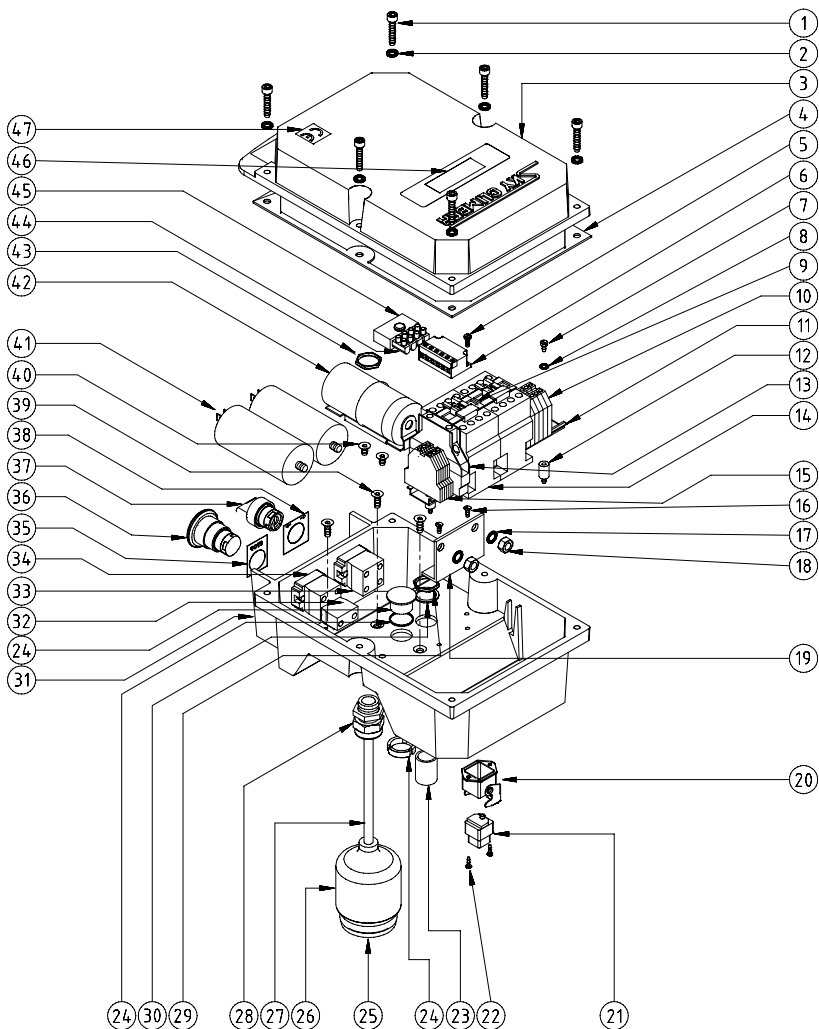


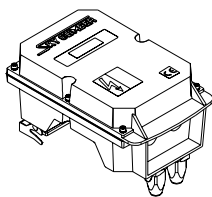


ELECTROBOX FOR MOTORUNIT

Item	Partn°	Qty	Description
1	11002230	6	Screw
2	12000406	6	Serrated lock washer
3	53008202	1	Cover (electrobox)
4	42008105	1	Gasket (electrobox)
5	11004010	1	Screw
6	53008847	1	Rectifier and spark surpresser
7	11004008	2	Screw
8	12000404	2	Serrated lock washer
9	53008522	1	Mechanical interlock
10	53008536	7	Viking clamp
11	53008219	18cm	Din-rail
12	53008150	2	Stud-spacer
13	53008307	1	Additional contactor
14	53008303	2	Contactora 220V
15	53008780	3	Viking clamp (yellow/green)
16	11005010	2	Screw
17	12000408	2	Serrated lock washer
18	12005008	2	Nut
19	53008446	1	Capacitor support
20	53008701	1	Female plughousing
21	53008700	1	Female plug
22	13000016	2	Screw

1 phase (1x220V), 60Hz

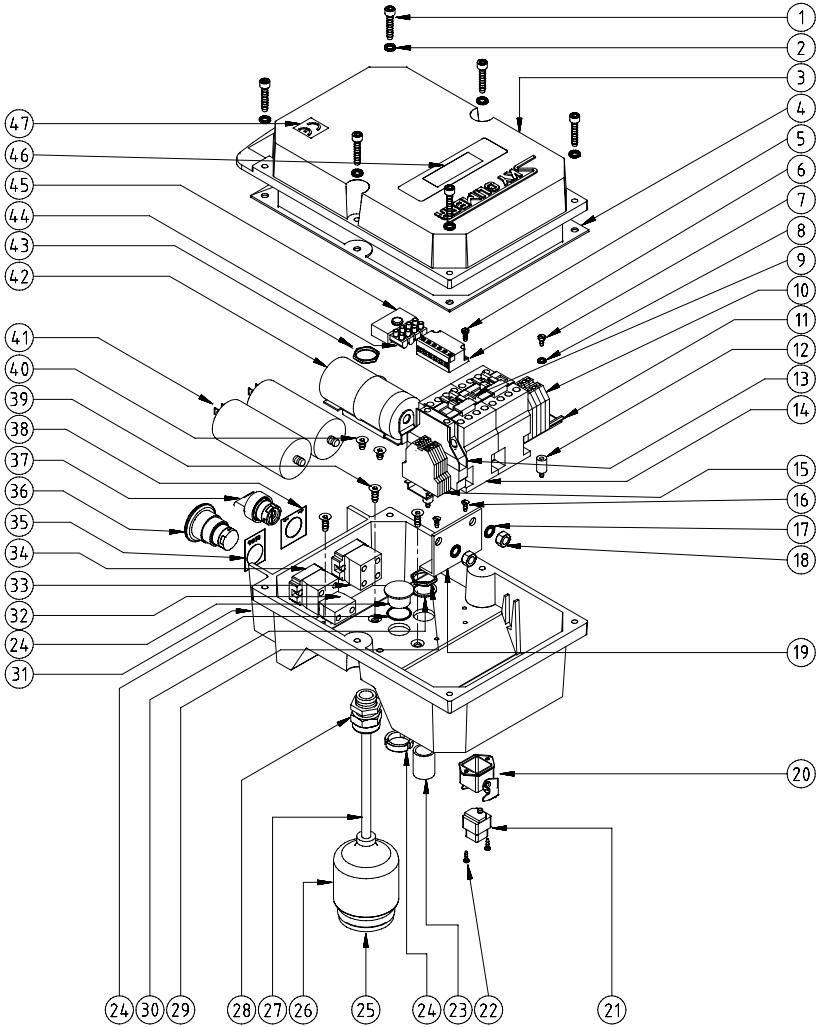


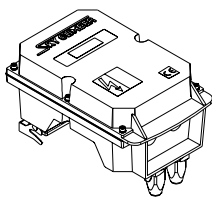


ELECTROBOX FOR MOTORUNIT

Item	Partn°	Qty	Description
23	53008926	1	Tube
24	53008767	1	Stop
25	102-92-1	1	Male plug
26	102-94-1	1	Plughousing
27	53008002	1m	Electric cable
28	53008185	1	Cable gland
29	53008153	1	Counternut
30	13000305	1	Seal
31	42008108	1	Bottom (electrobox)
32	53008674	2	Switch element
33	53008670	1	Reversing switch body
34	53008672	1	Reversing switch body
35	53008895	1	Nameplate 'stop'
36	53008671	1	Emergency push button
37	53008669	1	Selector switch
38	53008915	1	Nameplate 'up-down'
39	11008216	3	Screw
40	11008210	2	Screw
41	53008476	2	Capacitor
42	53008498	1	Startcapacitor
43	10200882	1	Counternut
44	53008518	1	Terminal bloc (4 connections)
45	53008848	1	Spark supressor
46	12009178	1	Decal '220-240V/60Hz'
47	12009101	1	Decal 'CE'
-	53005807	1	Wiring diagram enclosed

1 phase (1x220V), 60Hz

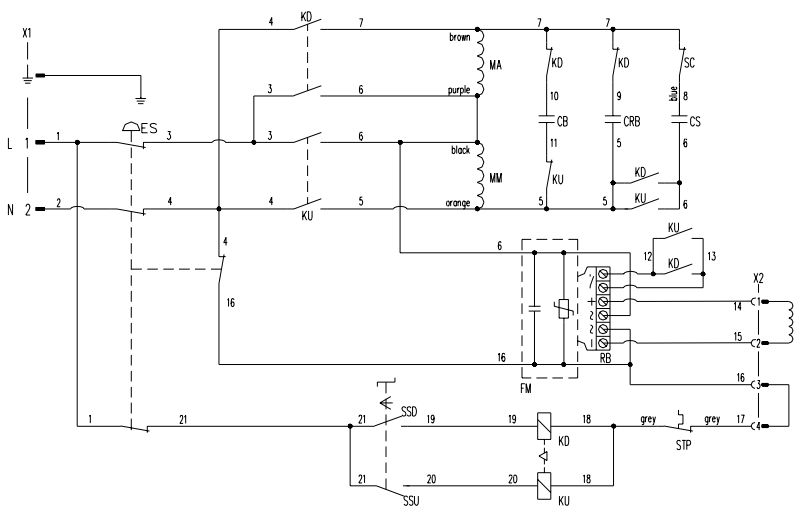




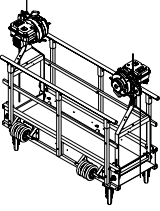
WIRING DIAGRAM

1 PHASE (1x220V) MOTORUNITS

53005807



- | | | | |
|-----|------------------------------------|-----|--------------------------------|
| CB | Brake capacitor 40 μ F | RB | Bridge rectifier 220Vac/190Vdc |
| CRB | Run and brake capacitor 30 μ F | Sc | Centrifugal switch in motor |
| CS | Startcapacitor 88-106 μ F | Stp | Thermal protection in motor |
| ES | Emergency Push button | SSD | Selector switch 'DOWN' |
| FM | Main filter | SSU | Selector switch 'UP' |
| KD | Contactor 'Down' | X1 | Supply plug (6+PE) |
| KU | Contactor 'Up' | X2 | Plug to brake |
| MA | Motor winding (auxiliary) | Y | Brake coil 190Vdc in motor |
| MM | Motor winding (main) | | |

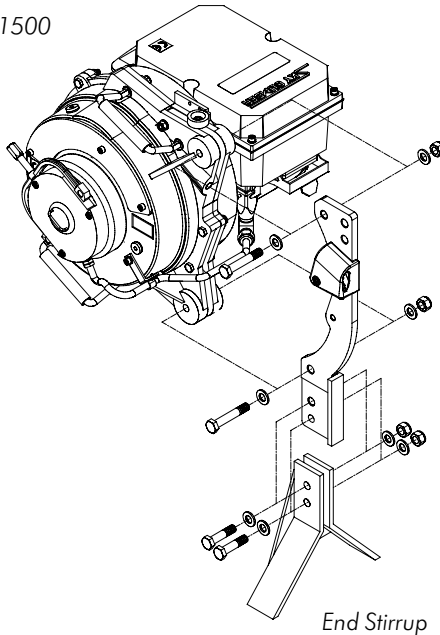


STIRRUP STRAP ASSY FOR END STIRRUP

41009003

Item	Partn°	Qty	Description
1	12005512	4	Selflocking nut
2	12000012	8	Washer
3	41008165	1	Stirrup strap
4	41008052	1	Exit Guide
5	13000527	2	Bolt
6	13000528	2	Bolt

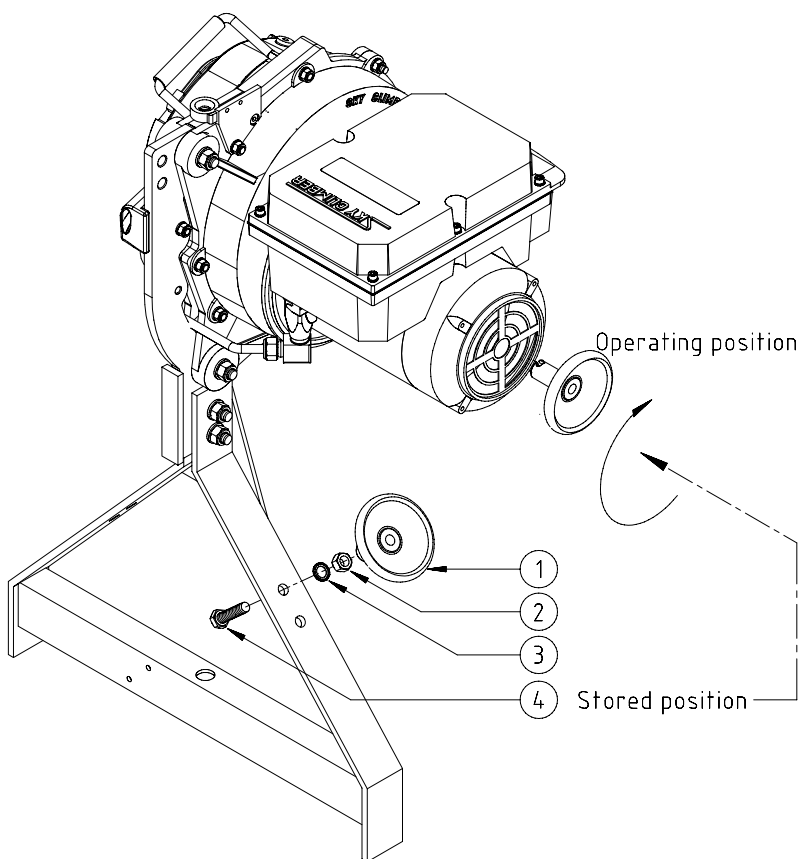
ALPHA 1500



EMERGENCY HANDWHEEL ASSY

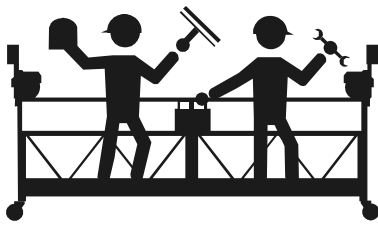
42009858

Item	Partn°	Qty	Description
1 *	41008828	1	Handwheel
2 *	12005012	1	Nut
3 *	12000412	1	Serrated lock washer
4 *	11000550	1	Screw



* Only available as an assembly.

REMARKS



SAFETY • SERVICE • SOLUTIONS