

Clarke[®] **METALWORKER**



METAL LATHE - CL430/CL500M
incl. MILL DRILL - CL500M

**PARTS LISTS
&
WIRING DIAGRAMS**



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PARTS & SERVICE CONTACTS

For Spare Parts and Service, please contact your nearest dealer,
or CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400

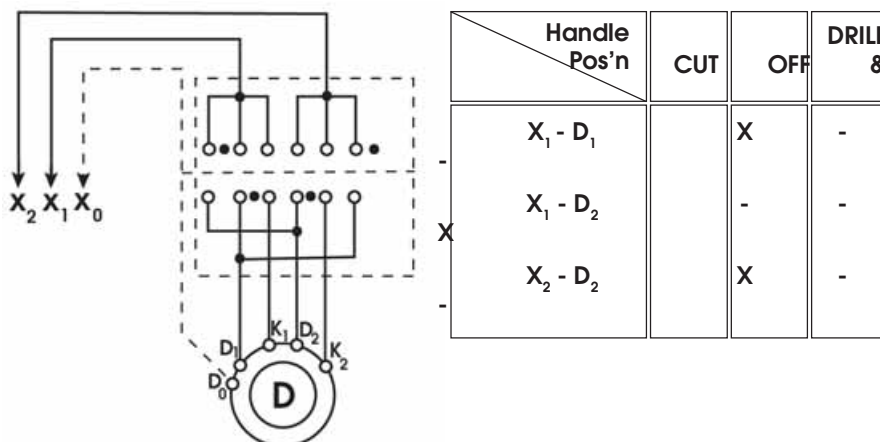
PARTS & SERVICE FAX: 020 8558 3622

or e-mail as follows:

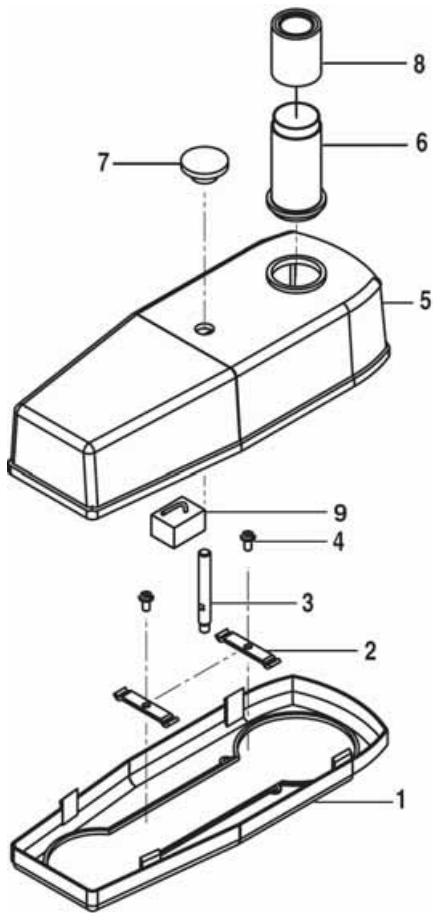
PARTS: Parts@clarkeinternational.com

SERVICE: Service@clarkeinternational.com

Switchbox Wiring Diagram

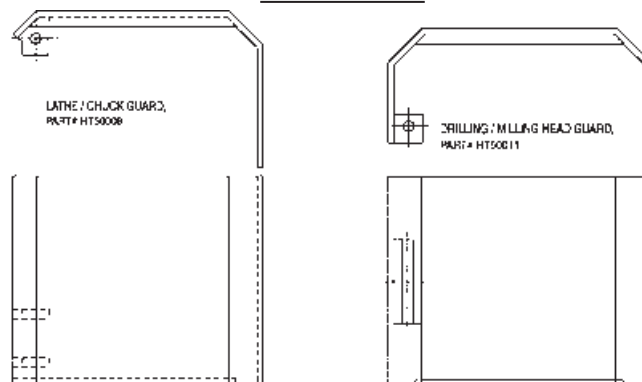


MILL HEAD PULLEYCOVERS



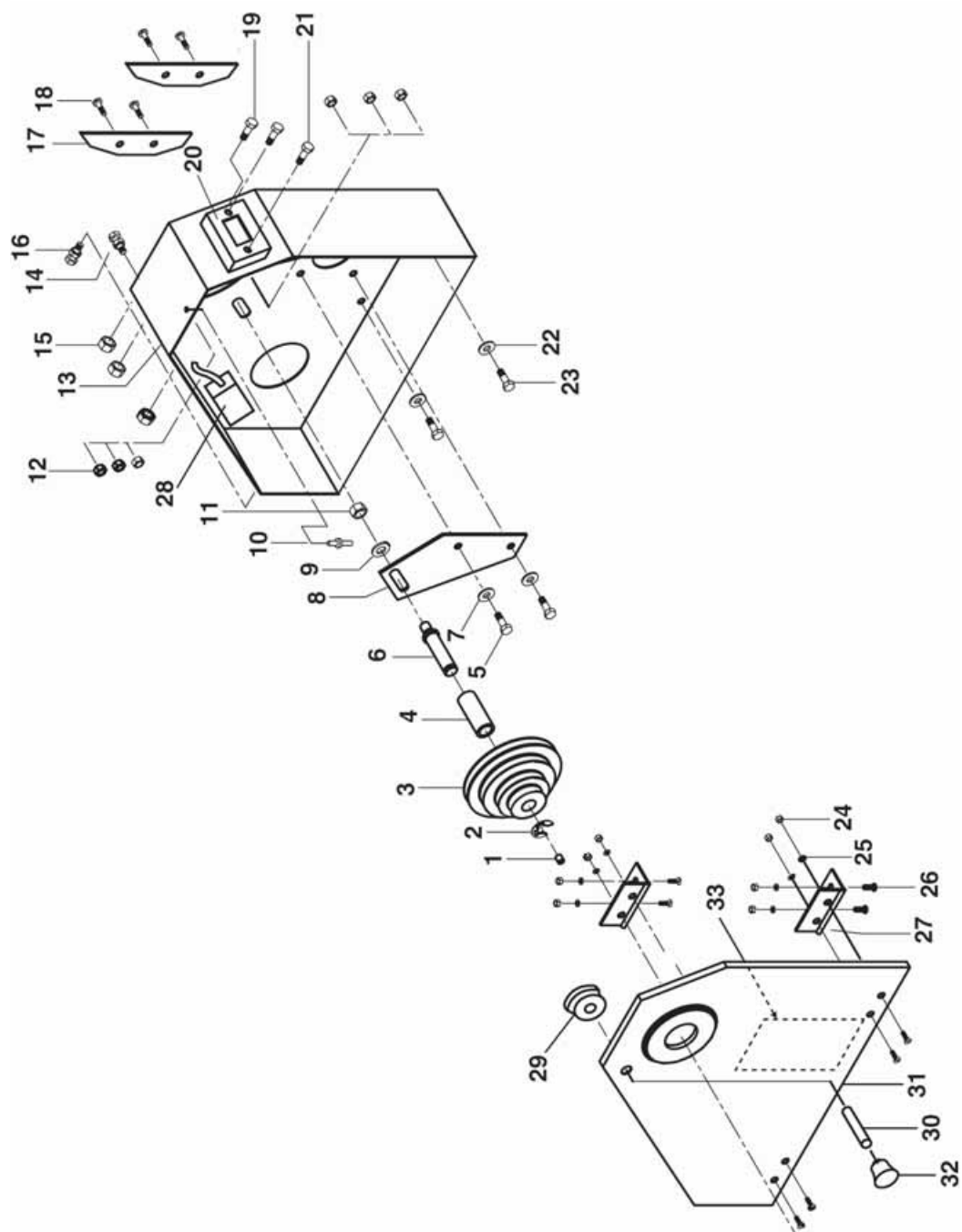
No.	Description	Part No.
1	Pulley shell bottom cap	HT300010101
2	Flange	HT300010102
3	Stud	HT300010103
4	Round head screw (M6X14)	HT300010104
5	Pulley shell top head	HT300010105
6	Upper cladding	HT300010106
7	Cone knob	HT300010107
8	Upper cladding cap	HT300010108
9	Microswitch	HT300010109

GUARDS



No.	Description	Part No.
	Chuck guard (lathe)	HT50008
	Milling/drilling head guard	HT50011

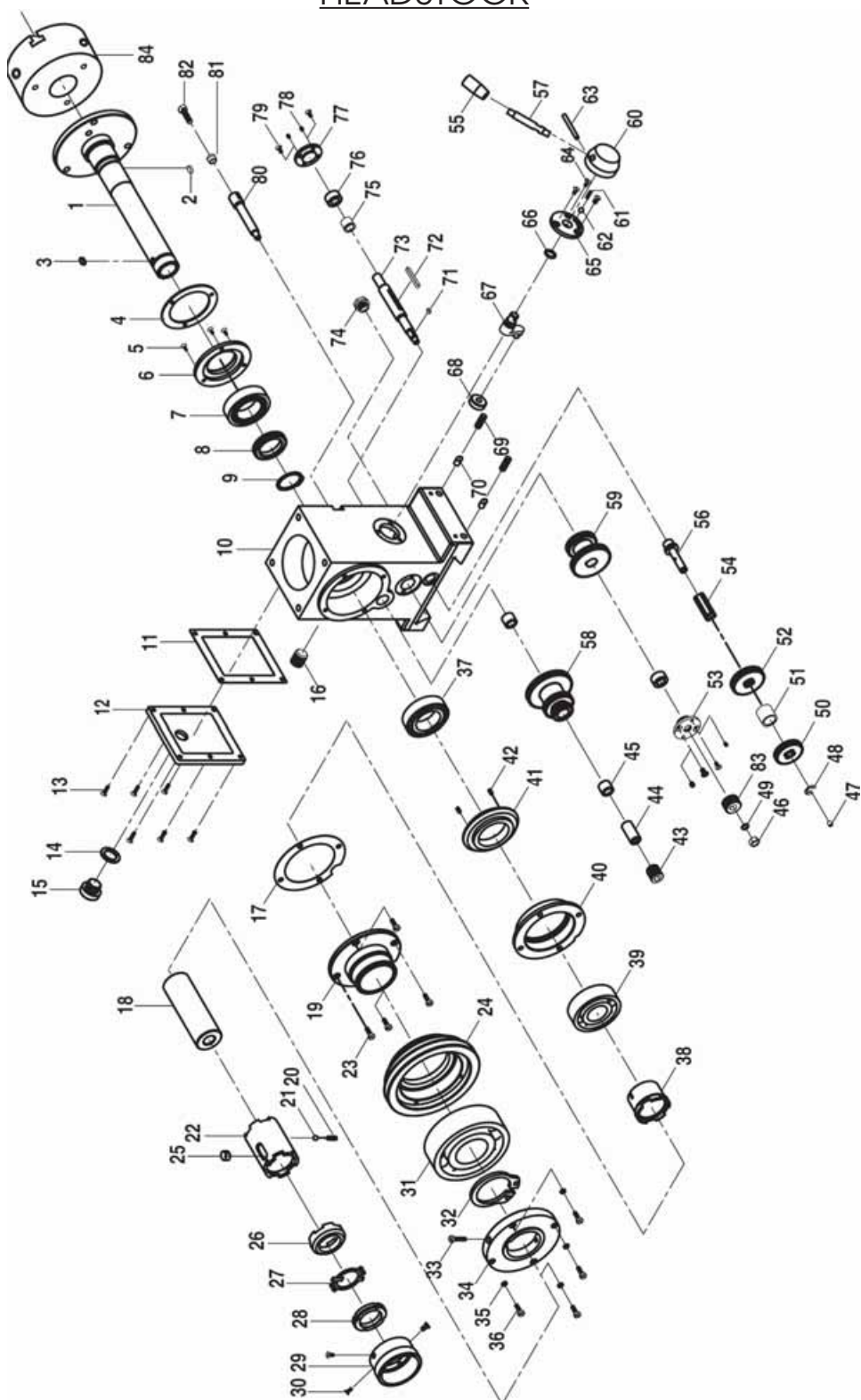
PULLEY COVER



PULLEY COVER

No.	Description	Part No.
1	Oil cup	HT3000501
2	E-shaped snap ring	HT3000502
3	Middle pulley	HT3000503
4	Oil-impregnated bearing	HT3000504
5	Hexagon head bolt (M8X15)	HT3000505
6	Pulley shaft	HT3000506
7	Spring washer	HT3000507
8	Fascia	HT3000508
9	Washer	HT3000509
10	Stabilizer	HT3000510
11	Hexagon nut (M12)	HT3000511
12	Hex nut(M4)	HT3000512
13	Box	HT3000513
14	Pipe connection (M20)	HT3000514
15	Hexagon nut (M4)	HT3000515
16	Pipe connection (M16)	HT3000516
17	Cover Plate	HT3000517
18	Cross head screw (M4X6)	HT3000518
19	Cross head screw, M4X20	HT3000519
20	Electrical switch box	HT3000520
21	Cross head screw (M4X25)	HT3000521
22	Spring washer	HT3000522
23	Hexagon head bolt (M8X15)	HT3000523
24	Hexagon nut(M4)	HT3000524
25	Spring washer	HT3000525
26	Cross head screw (M4X10)	HT3000526
27	Butt hinge	HT3000527
31	Box Cover	HT3000531
36	Microswitch	HT3000536
37	Locking Segment	HT3000537
38	Pin	HT3000538
39	Knob	HT3000539
40	Label	HT3000540

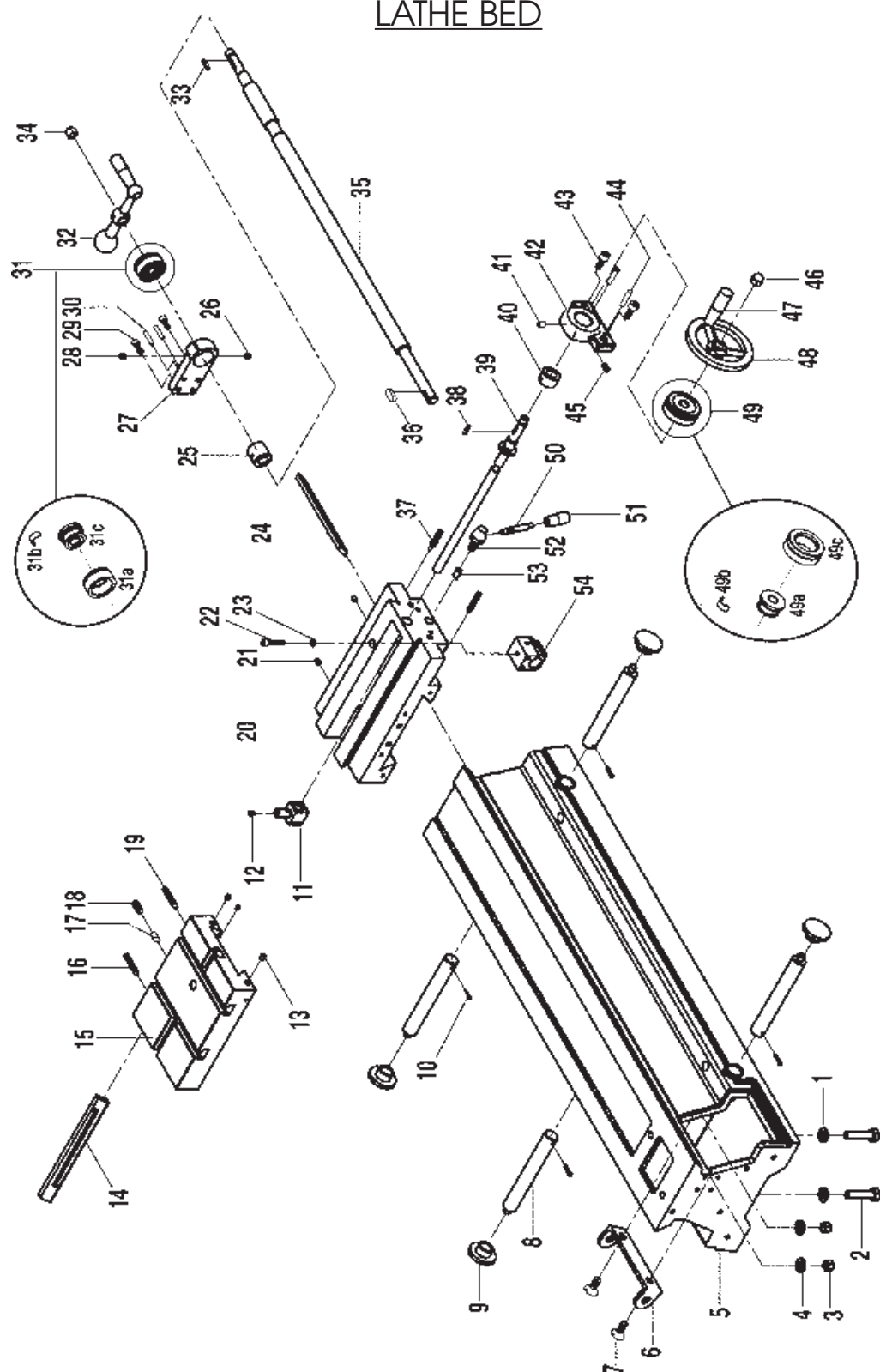
HEADSTOCK



HEADSTOCK

No.	Description	Part No.	No.	Description	Part No.
1	Lathe spindle	HT3000401	45	Oil-impregnated bearing	HT3000445
2	Thin flat key	HT3000402	46	Hexagon nut	HT3000446
3	Thin flat key	HT3000403	47	Oil cup	HT3000447
4	Felt collar(47)	HT3000404	48	E-shaped snap ring	HT3000448
5	Countersunk head screw	HT3000405	49	Spring washer	HT3000449
6	Mainshaft bearing oil seal	HT3000406	50	Shaft sleeve	HT3000450
7	Roller bearing	HT3000407	50N	Change gear, Z=30	HT3000450(N)
8	Gear (Z=50)	HT3000408	51	Sleeve	HT3000451
9	External snap ring	HT3000409	52	Gear, Z=50	HT3000452
10	Lathe head	HT3000410	53	End cap	HT3000453
11	Packing paper	HT3000411	54	Set screw with cone	HT3000454
12	Blind flange	HT3000412	54	Shaft sleeve	HT3000454(N)
13	Countersunk head screw	HT3000413	55	Long sleeve knob	HT3000455
14	Rubber ring (30X20X2)	HT3000414	56	Shaft	HT3000456
15	Plug screw (M20x1.5)	HT3000415	57	Handle Stem	HT3000457
16	Headless hex. skt set screw	HT3000416	58	Triple gear	HT3000458
17	Seal gasket	HT3000417	59	Duplex gear	HT3000459
18	Shaft sleeve	HT3000418	60	Handle seat(12X50)	HT3000460
19	Pulley seat	HT3000419	61	Spring (0.8X5X25)	HT3000461
20	Spring (0.6X5X15)	HT3000420	62	Steel ball (6.5)	HT3000462
21	Steel ball	HT3000421	63	Taper pin	HT3000463
22	Jaw clutch	HT3000422	64	Countersunk head screw	HT3000464
23	Fillister head screw(M6X20)	HT3000423	65	Location plate	HT3000465
24	Input pulley	HT3000424	66	O-Ring (15X2.4)	HT3000466
25	Plain parallel key	HT3000425	67	Shifting yoke	HT3000467
26	Left jaw clutch	HT3000426	68	Loose piece	HT3000468
27	Lock washer	HT3000427	69	Hexagon socket set screw	HT3000469
28	Round nut (M35X1.5)	HT3000428	70	Locking pin	HT3000470
29	Clutch sleeve	HT3000429	71	Plain parallel key	HT3000471
30	Screw (M4X10)	HT3000430	72	Plain parallel key	HT3000472
31	Single-row ball bearing	HT3000431	73	Output shaft	HT3000473
32	Extenal snap ring	HT3000432	74	Oil Sight Glass	HT3000474
33	Screw(M5X30)	HT3000433	75	Spacer	HT3000475
34	Bearing cap	HT3000434	76	Oil-impregnated bearing	HT3000476
35	Spring washer	HT3000435	77	End cap	HT3000477
36	Screw(M5X18)	HT3000436	78	Set screw with flat point	HT3000478
37	Tapered roller bearing	HT3000437	79	Countersunk head screw	HT3000479
38	Clutch Sleeve	HT3000438	80	Middle shaft	HT3000480
39	Single-row ball bearing	HT3000439	81	Shaft nose	HT3000481
40	Bearing seat	HT3000440	82	Cheese head screw	HT3000482
41	Bevel gear	HT3000441	83	Gear, Z=24	HT3000483
42	Set screw with cone point	HT3000442	84	3-Jaw Chuck	HT30020911/301
43	Headless hex skt set screw	HT3000443	-	Chuck Key	HT30020911B
44	Sleeve	HT3000444			

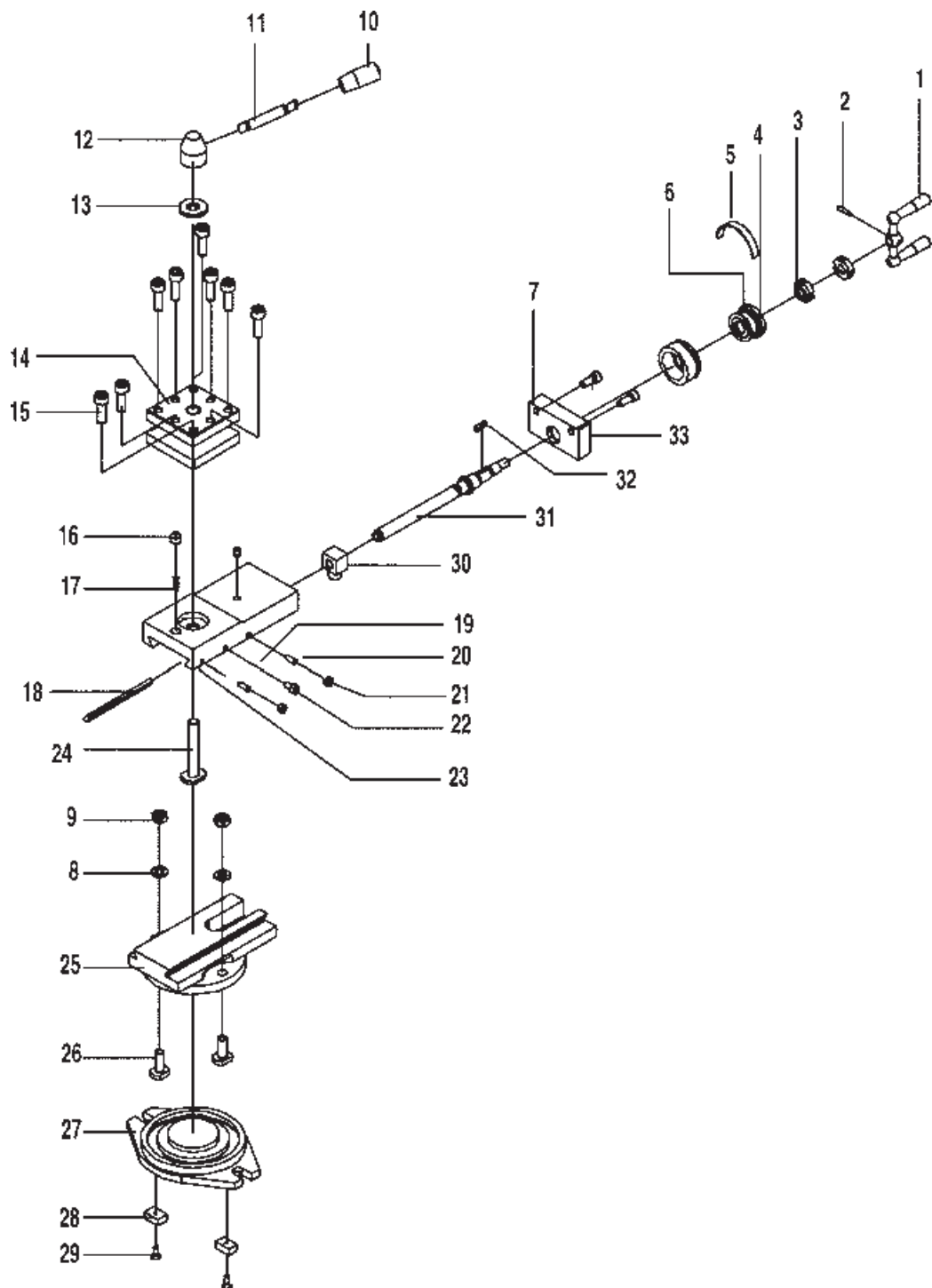
LATHE BED



LATHE BED

No.	Description	Part No.	No.	Description	Part No.
1	Spring washer	HT300030300101	31a	Scale	HT300030300131A
2	Hex. head bolt	HT300030300102	31b	Spring lamination	HT300030300131B
3	Hexagon nut	HT300030300103	31c	Sleeve	HT300030300131C
4	Spring washer	HT300030300104	32	Ball-crank handle	HT300030300132
5	Bed	HT300030300105	33	Plain parallel key(4X18)	HT300030300133
6	Pedestal	HT300030300106	34	Domed cap nut	HT300030300134
7	Csk head screw	HT300030300107	35	Longitudinal feed screw	HT300030300135
8	Dead-load lever	HT300030300108	36	Plain parallel key (5X20)	HT300030300136
9	Cone knob	HT300030300109	37	Hex skt set screw M8X35)	HT300030300137
10	Split pin(3X25)	HT300030300110	38	Plain parallel key (4X18)	HT300030300138
11	Nut	HT300030300111	39	Cross feed screw	HT300030300139
12	Oil cup	HT300030300112	40	Bush bearing	HT300030300140
13	Oil cup	HT300030300113	41	Oil cup	HT300030300141
14	Chock	HT300030300114	42	Cross feed screw seat	HT300030300142
15	Workbench	HT300030300115	43	Hex skt head screw	HT300030300143
16	Hex. socket set screw	HT300030300116	44	Taper pin (5X20)	HT300030300144
17	Locking pin	HT300030300117	45	Set screw (M6X12)	HT300030300145
18	Hex. socket set screw	HT300030300118	46	Domed cap nut (M10)	HT300030300146
19	Set screw	HT300030300119	47	Handle & sleeve (M8X65)	HT300030300147
20	Carriage	HT300030300120	48	Handwheel (12X125)	HT3000348303001
21	Oil cup	HT300030300121	49a	Sleeve	HT300030300149A
22	Hex skt head screw	HT300030300122	49b	Spring lamination	HT300030300149B
23	Washer	HT300030300123	49c	Scale	HT300030300149C
24	Chock	HT300030300124	50	Handle lever (M6X40)	HT300030300150
25	Bush bearing	HT300030300125	51	Long sleeve knob	HT300030300151
26	Set screw	HT300030300126	52	Locking handle seat	HT300030300152
27	Trestle	HT300030300127	53	Locking pin	HT300030300153
28	Oil cup	HT300030300128	54	Longitudinal feed nut	HT300030300154
29	Hex skt head screw	HT300030300129	55	Leading screw cover	HT300030300155
30	Taper pin	HT300030300130			

TOOLPOST



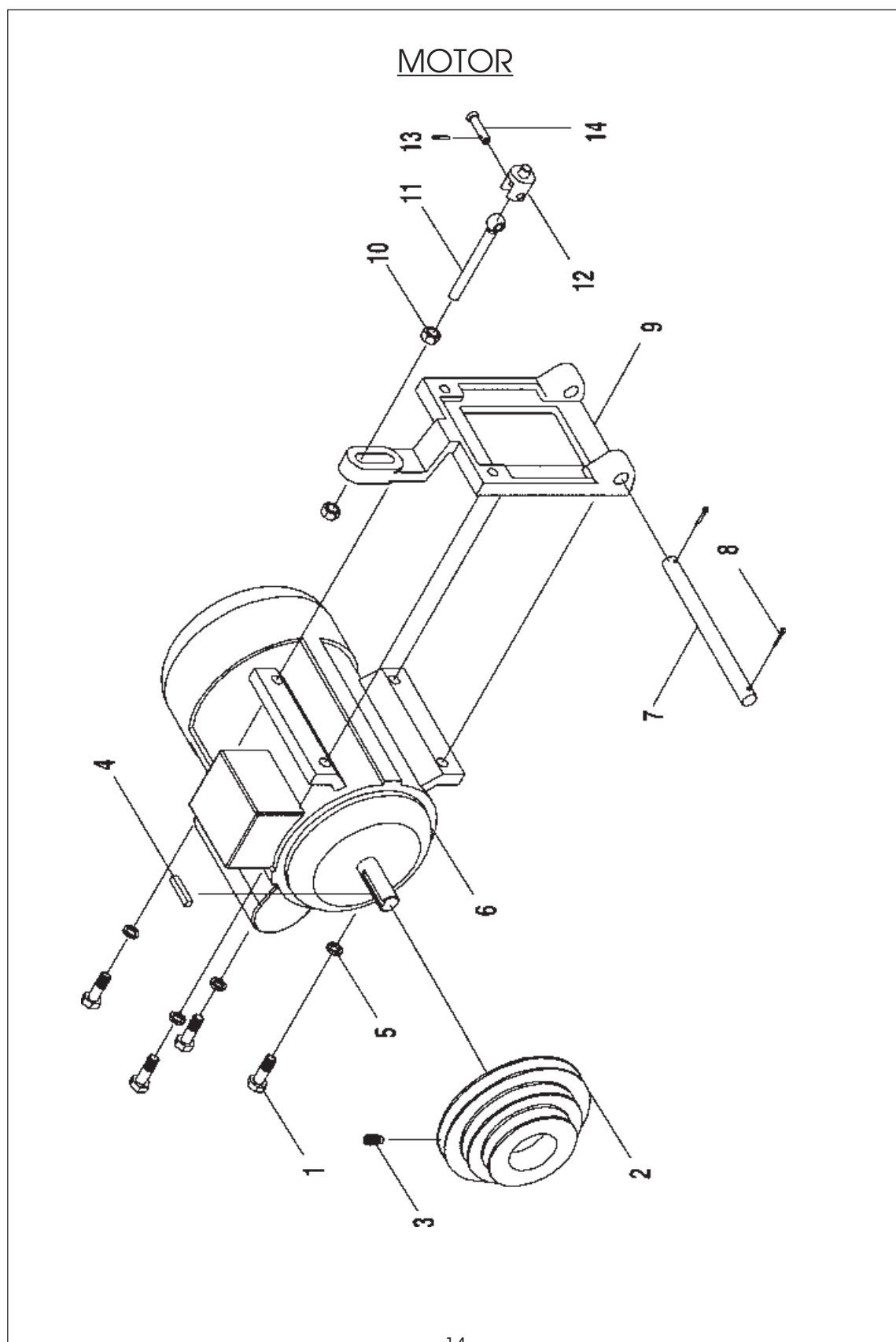
TOOLPOST

No.	Description	Part No.
1	Handle	HT300451001
2	Taper pin	HT300451002
3	Spanner nut	HT300451003
4	Sleeve	HT300451004
5	Spring lamination	HT300451005
6	Hex socket head screw	HT300451006
7	Hanger	HT300451007
8	Washer	HT300451008
9	Hexagon nut	HT300451009
10	Knob Long Sleeve	HT300451010
11	Handle lever	HT300451011
12	Handle bed	HT300451012
13	Washer	HT300451013
14	Toolpost	HT300451014
15	Hex. socket head screw	HT300451015
16	Locating sleeve	HT300451016
17	Spring	HT300451017
18	Chock	HT300451018
19	Locking pin	HT300451019
20	Hex. socket set screw	HT300451020
21	Hex. nut	HT300451021
22	Hex. socket set screw	HT300451022
23	Small carriage	HT300451023
24	Blot. hex head	HT300451024
25	Dovetail bed	HT300451025
26	T blot	HT300451026
27	Revolving bed	HT300451027
28	Locking piece	HT300451028
29	Countersunk head screw	HT300451029
30	Nut	HT300451030
31	Screw	HT300451031
32	Plain parallel key	HT300451032
33	Dial	HT300451033
-	Tool post assy.	HT3000615A

This exploded view diagram illustrates the assembly of a mechanical device, likely a pump or a valve actuator. The components are numbered 1 through 33. The main assembly consists of a base (1) with a central vertical support (20) and a horizontal arm (21). A large cylindrical component (11) is attached to the side of the base. A series of components, including a large wheel (32) and a smaller pulley (30), are mounted on the right side. The diagram shows the relative positions and assembly sequence of the parts, with dashed lines indicating the alignment of the components.

TAILSTOCK

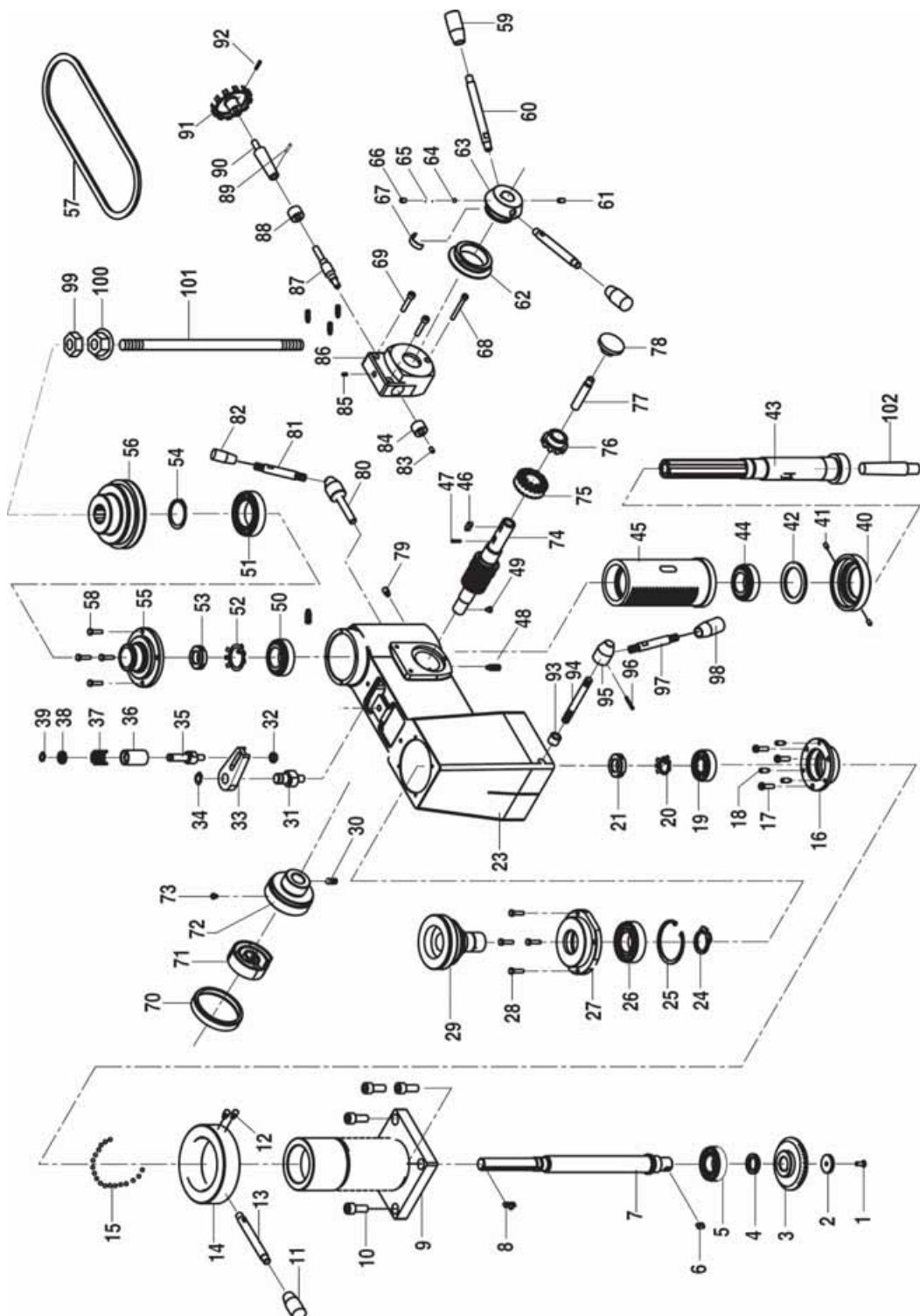
No.	Description	Part No.
1	Chock	HT30002101
2	Locking handle seat	HT30002102
3	Handle lever	HT30002103
4	Long sleeve knobs	HT30002104
5	Locking pin	HT30002105
6	Hex socket set screw	HT30002106
7	Tailstock carriage	HT30002107
8	Nuts (02-118)	HT30002108
9	T-Key	HT30002109
10	Hex socket head screw	HT30002110
11	Tailstock sleeve	HT30002111
12	Long sleeve knob	HT30002112
13	Handle levers	HT30002113
14	Taper knobs	HT30002114
15	Tallstock nut	HT30002115
16	Locking sleeve	HT30002116
17	Set screw	HT30002117
18	Hexagon head bolts	HT30002118
19	Plain washers	HT30002119
20	Tailstock	HT30002120
N/A	Tailstock centre MT3	HT30002120A
21	Oil cup	HT30002121
22	Set screw	HT.30002122
23	Locking nuts	HT30002123
24	Spigot	HT30002124
25	Tailstock lead screw	HT30002125
26	Plain parallel key	HT30002126
27	Sleeve	HT30002127
28	Dial	HT30002128
29	Spring lamination	HT30002129
30	Sleeve	HT30002130
31	Hand wheels	HT30002131
32	Domed cap nuts	HT30002132
33	Handles with sleeve	HT30002133



MOTOR

No.	Description	Part No.
1	Hexagon head bolt (M8X20)	HT3000300301
2	Motor pulley	HT3000300302
3	Set screw (M8XI0)	HT3000300303
4	Plain parallel key	HT3000300304
5	Spring washer	HT3000300305
6	Motor (0.55KW 240V 50Hz)	HT3000300306
7	Straight pin	HT3000300307
8	Split pin (3X16)	HT3000300308
9	Back plane of motor	HT3000300309
10	Hexagon nut (M8)	HT3000300310
11	Dog bolt	HT3000300311
12	Forked standard	HT3000300312
13	Split pin (2X12)	HT3000300313
14	Pivot in M6	HT3000300314

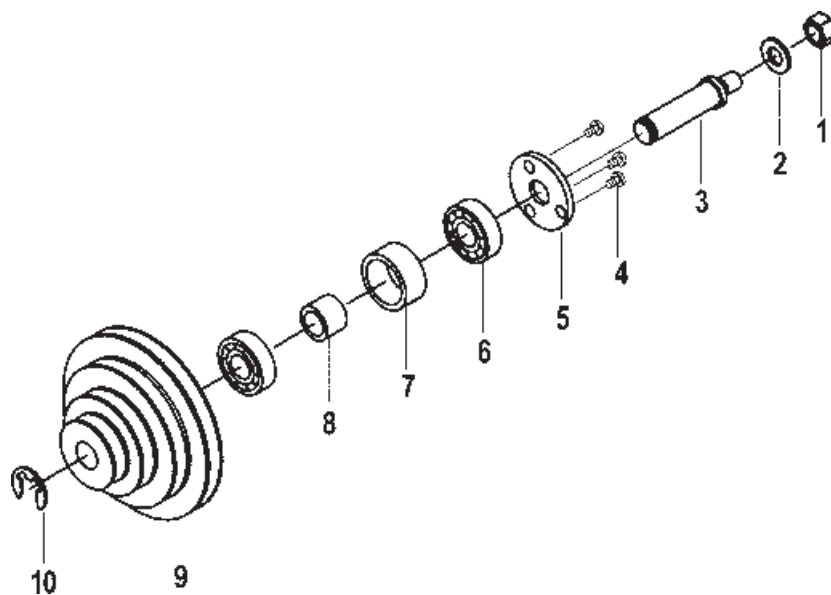
MILL HEAD



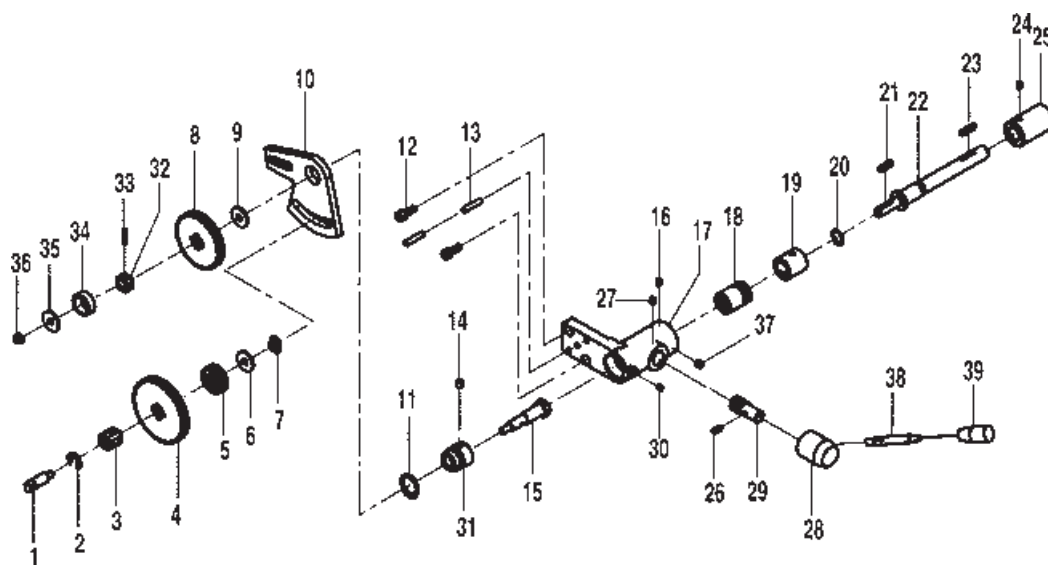
MILL HEAD

No.	Description	Part No.	No.	Description	Part No.
1	Countersunk head screw	HT3000101	52	Lock washer for circular nut	HT3000152
2	Retaining ring	HT3000102	53	Round nut	HT3000153
3	Bevel gear	HT3000103	54	External snap ring	HT3000154
4	Washer	HT3000104	55	Bearing seat	HT3000155
5	Radial ball bearing	HT3000105	56	Large pulley	HT3000156
6	Plain parallel key	HT3000106	57	V-belt	HT3000157
7	Driving shaft	HT3000107	58	Hex. Head bolt, M5x20	HT3000158
8	T-key	HT3000108	59	Long sleeve knob, M10x50	HT3000159
9	Upright column	HT3000109	60	Handle lever	HT3000160
10	Hex. Socket head screw	HT3000110	61	Set screw with cone point	HT3000161
11	Long sleeve knob, M10x50	HT3000111	62	Micro adjustment dial	HT3000162
12	Hex. Socket set screw,	HT3000112	63	Handle seat	HT3000163
13	Handle lever, M10x100	HT3000113	64	Steel ball	HT3000164
14	Elevating nut	HT3000114	65	Spring	HT3000165
15	Steel ball	HT3000115	66	Set screw with flat point	HT3000166
16	Bearing seat	HT3000116	67	Spring lamination	HT3000167
17	Cross head screw, M6x20	HT3000117	68	Hex. Socket head screw	HT3000168
18	Set screw	HT3000118	69	Hex. Socket head screw	HT3000169
19	Radial ball bearing	HT3000119	70	Spring cap	HT3000170
20	Lock washer, circular nut	HT3000120	71	Spring lamination	HT3000171
21	Round nut, M20x1.5	HT3000121	72	Spring seat	HT3000172
22	Hex. Socket head screw	HT3000122	73	Round head screw	HT3000173
23	Drilling-milling head box	HT3000123	74	Gear shaft	HT3000174
24	External snap ring	HT3000124	75	Worm gear	HT3000175
25	Circlet for holes	HT3000125	76	Clutch sleeve	HT3000176
26	Radial ball bearing	HT3000126	77	Small shaft	HT3000177
27	Bearing seat	HT3000127	78	Cone knob	HT3000178
28	Hex. Head bolt	HT3000128	79	Set screw	HT3000179
29	Small pulley	HT3000129	80	Handle seat	HT3000180
30	Hex. Socket set screw	HT3000130	81	Handle lever, M6x40	HT3000181
31	Fulcrum	HT3000131	82	Long sleeve knob, M6x36	HT3000182
32	Hex. Nut, M8	HT3000132	83	Set screw	HT3000183
33	Tension pulley trestle	HT3000133	84	Sleeve	HT3000184
34	External snap ring	HT3000134	85	Oil cup	HT3000185
35	Axle	HT3000135	86	Worm seat	HT3000186
36	Sleeve	HT3000136	87	Worm	HT3000187
37	Roller	HT3000137	88	Sleeve	HT3000188
38	Spacer ring	HT3000138	89	Taper pin	HT3000189
39	External snap ring	HT3000139	90	Joint lever	HT3000190
40	Bearing cap	HT3000140	91	Microadj. hand wheel	HT3000191
41	Set screw with cone point	HT3000141	92	Taper pin	HT3000192
42	Felt collar	HT3000142	93	Sleeve	HT3000193
43	Drill-mill spindle	HT3000143	94	Stud	HT3000194
44	Tapered roller bearing	HT3000144	95	Handle seats	HT3000195
45	Spindle sleeve	HT3000145	96	Taper pin	HT3000196
46	Plain parallel key	HT3000146	97	Handle levers	HT3000197
47	Straight pin	HT3000147	98	Long Sleeve knobs	HT3000198
48	Hex. Socket set screw	HT3000148	99	Draw Bar Head Nut	HT3000703
49	Round head screw	HT3000149	100	Draw Bar Lock Nut	HT3000702
50	Tapered roller bearing	HT3000150	101	Draw Bar	HT3000701
51	Radial ball bearing	HT3000151	102	Arbor	HT50012

IDLER PULLEY ASSEMBLY



GEAR TRAIN



IDLER PULLEY ASSEMBLY

No.	Description	Part No.
1	Hex. Nuts (M12)	HT30005101
2	Plain Washer	HT30005102
3	Pulley Shaft	HT30005103
4	Cross head screw (M3X6)	HT30005104
5	Bearing Cap	HT30005105
6	Ball Bearing	HT30005106
7	Outer Ring Spacer	HT30005107
8	Inner Ring Spacer	HT30005108
9	Idler Pulley	HT30005109
10	Snap Ring	HT30005110

GEAR TRAIN

No.	Description	Part No.	No.	Description	Part No.
1	Change Gear Shaft	HT3000300201	20	External Snap Ring	HT3000300220
2	Snap Ring	HT3000300202	21	Plain Parallel Key	HT3000300221
3	Spline housing	HT3000300203	22	Shaft	HT3000300222
4	Gear Z=63	HT3000300204	23	Plain Parallel Key	HT3000300223
5	Gear Z=27	HT3000300205	24	Set Screw	HT3000300224
6	Washer	HT3000300206	25	Coupling	HT3000300225
7	T-Nut	HT3000300207	26	Set Screw - Cone point	HT3000300226
8	Gear Z=60	HT3000300208	27	Set Screw - Dog Point	HT3000300227
9	Washer	HT3000300209	28	Handle Bar	HT3000300228
10	Plate	HT3000300210	29	Eccentric axis	HT3000300229
11	External Snap Ring	HT3000300211	30	Set Screw - cone Point	HT3000300230
12	Hex. Skt Hd Screw (M6x16)	HT3000300112	31	Shaft Sleeve	HT3000300231
13	Taper Pin	HT3000300113	32	Spline Housing	HT3000300232
14	Oil Cup	HT3000300114	33	Pin	HT3000300233
15	Clutch Shaft	HT3000300115	34	Pressure Sleeve	HT3000300234
16	Set Screw	HT3000300116	35	Washer	HT3000300235
17	Housing	HT3000300117	36	Nut (M6)	HT3000300236
18	Hex Socket Sliding Bush	HT3000300118	37	Oil Cup	HT3000300237
19	Bush Roller	HT3000300119			

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