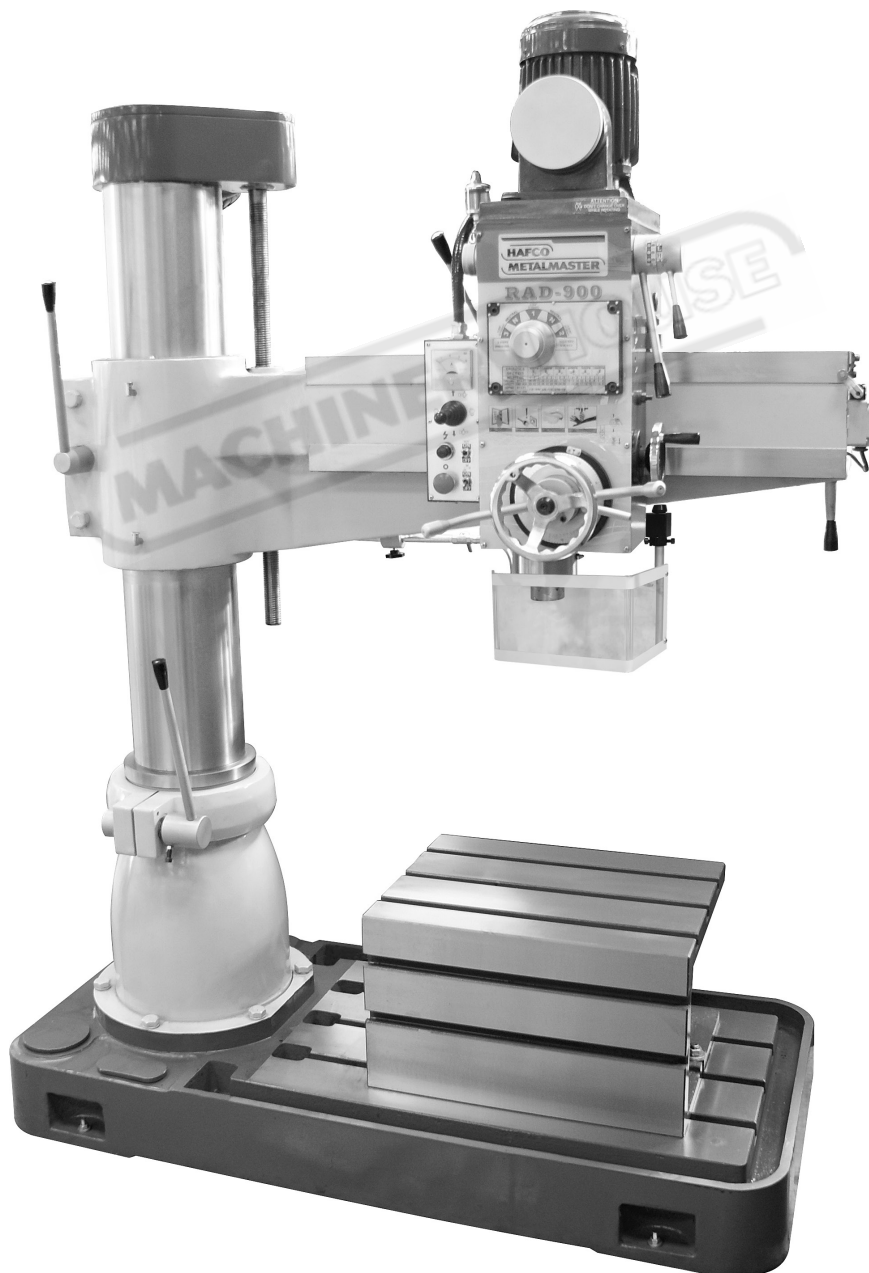


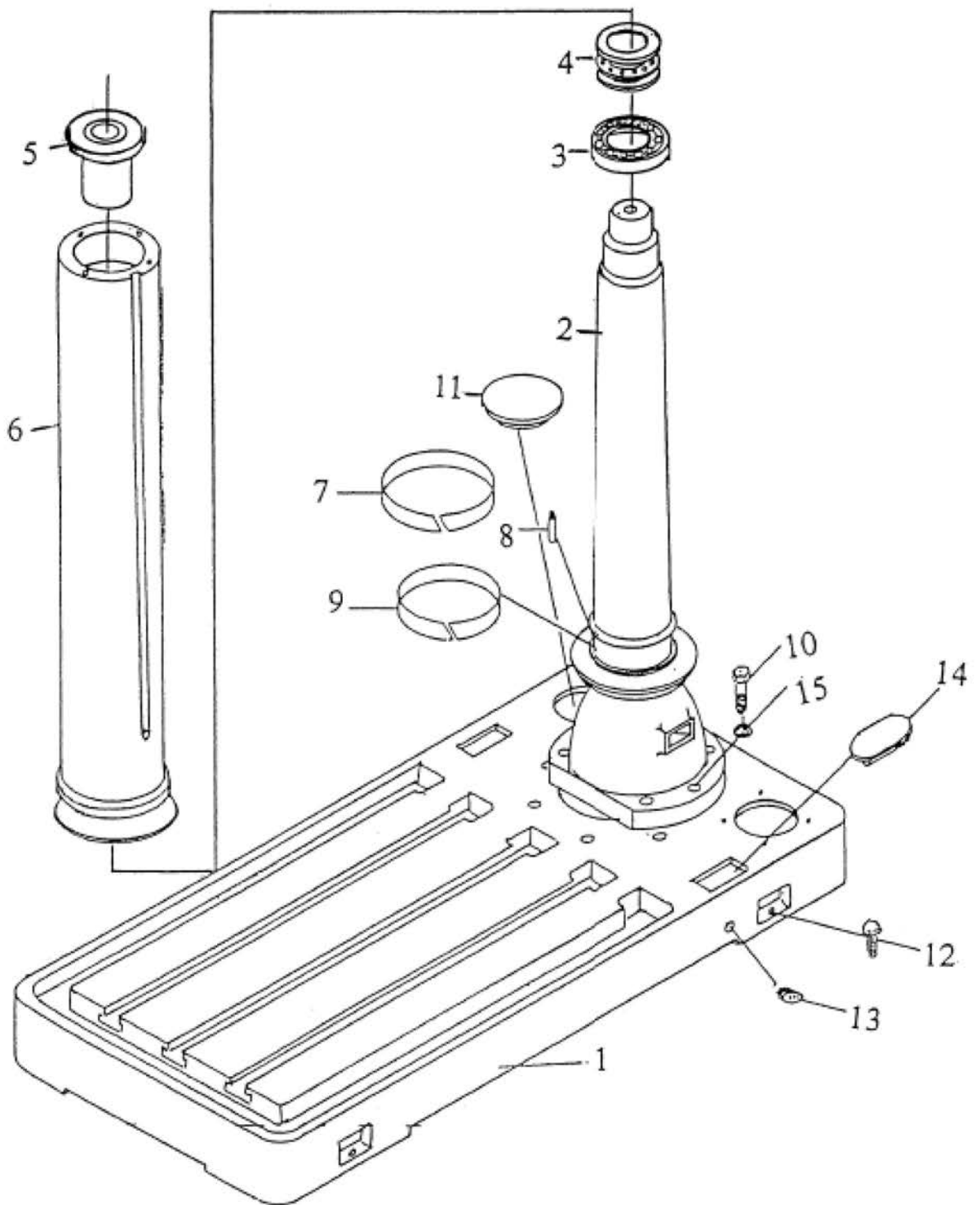
INSTRUCTION MANUAL

RAD-900 Radial Arm Drill (415V) 38mm Drilling Capacity



D165

COLUMN

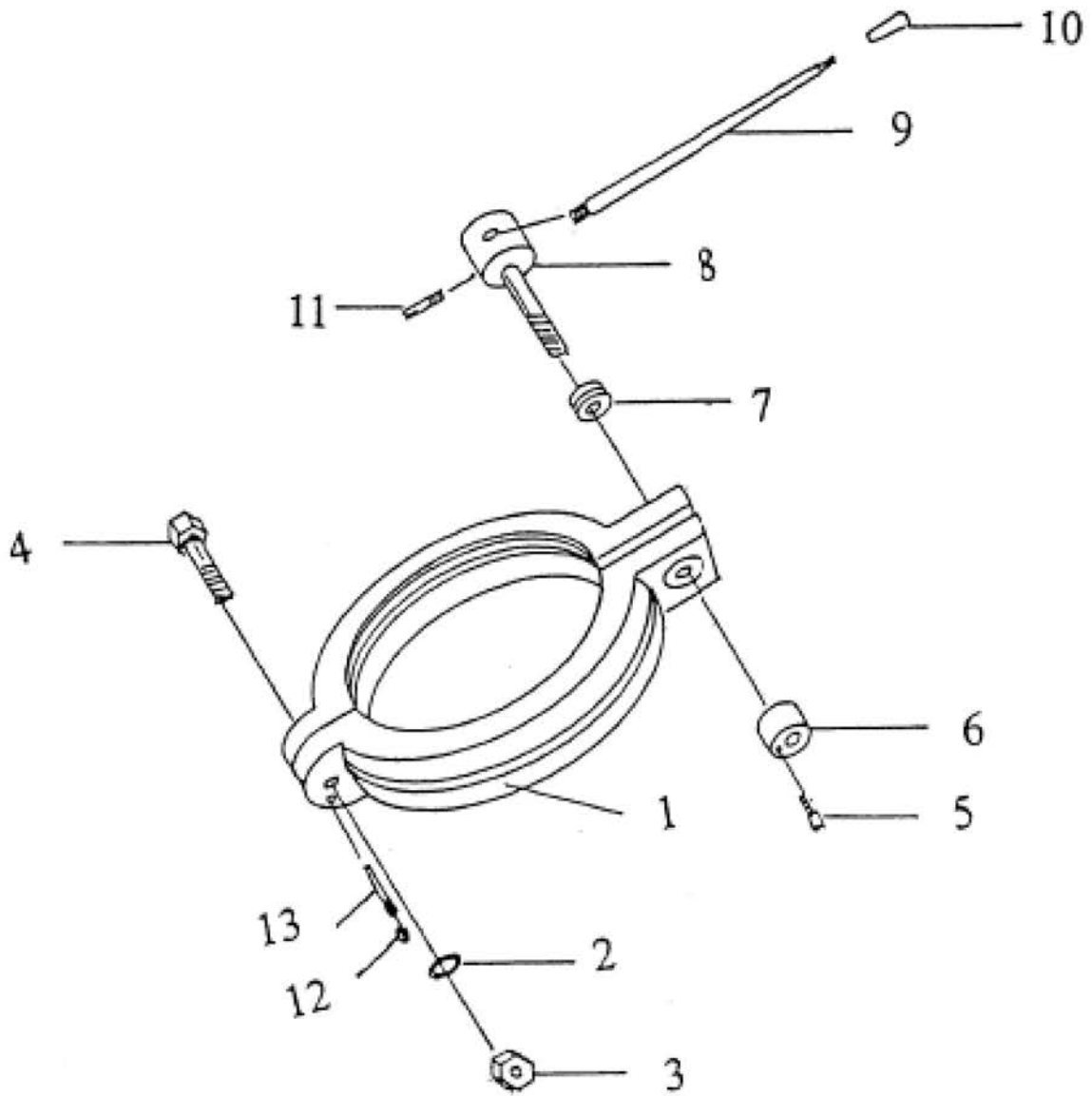


COLUMN

CLAMP

Index No.	Parts Name	Units	Parts No.	Remarks
1	Clamp	1	1104	
2	Spring Washer	1		3/4"
3	Nut	1		3/4"-10NC
4	Bolt	1		3/4"X100L
5	Bolt	1		M6x25L
6	Nut	1	142	
7	Thrust bearing	1		#51105
8	Locking Screw	1	144	
9	Handle	1	1110	
10	Handle	1	1111	
11	Bolt	1	1236-2	
12	Nut	1		M8
13	Pin	1		#6x70L

CLAMP

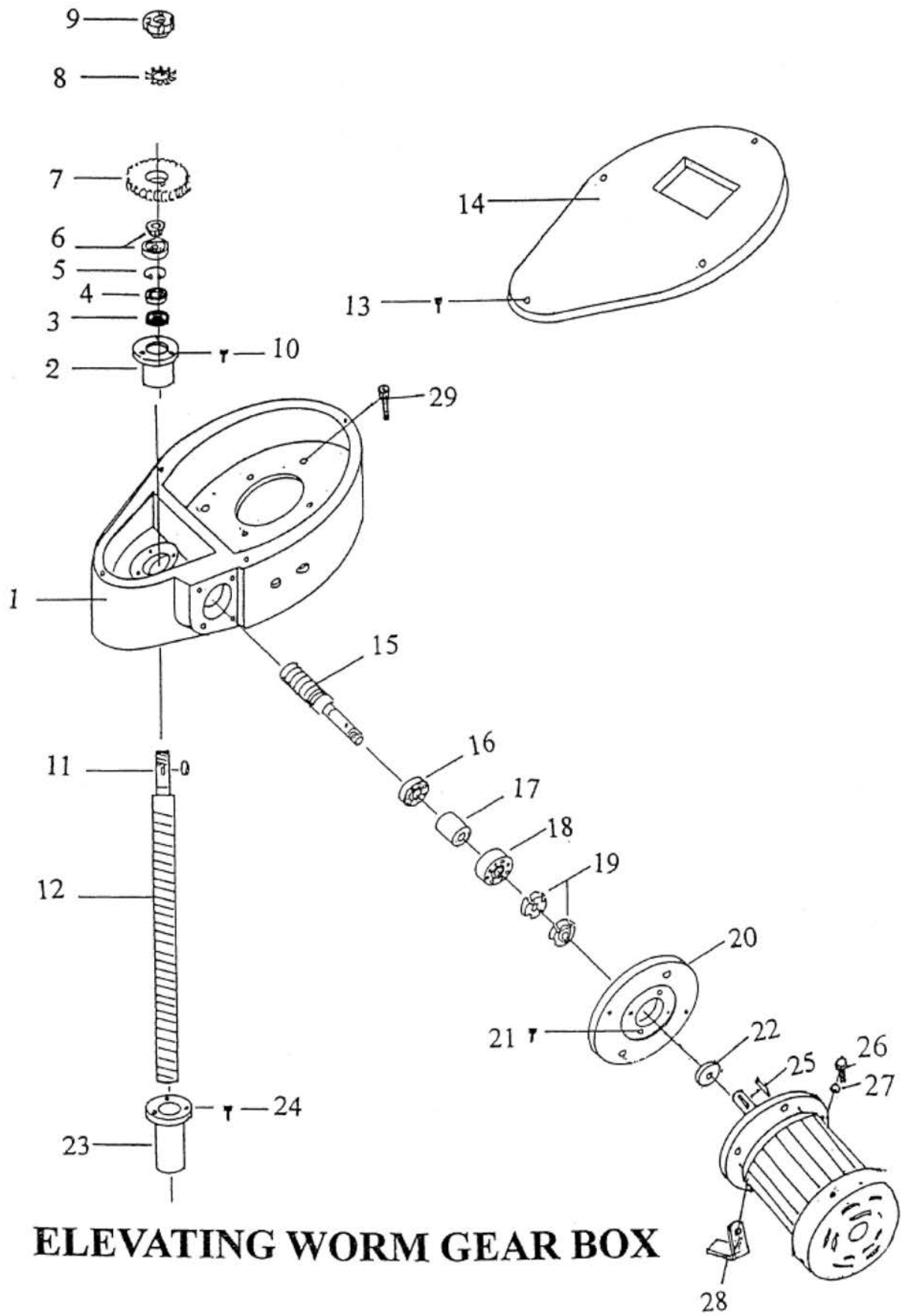


CLAMP

ELEVATING WORM GEAR BOX

Index No.	Parts Name	Units	Parts No.	Remarks
1	Gear Box	1	1119	
2	Seat	1	1132	
3	Oil Seal	1		TC305458
4	Roller Bearing	1		# 6005Z
5	C Snap Ring	1		R47
6	Taper Roller Bearing	1		# 30205
7	Worm Gear	1	1124	
8	Collar	1		AWO5
9	Nut	1	1133	
10	Bolt	3		M6x20L
11	Key	1		6x6x18L
12	Elevating Screw	1	1121	
13	Bolt	4		M8x25L
14	Cover	1	1120	
15	Bolt	1	1125	
16	Roller Bearing	1		# 6006Z
17	Bolt Bushing	1	1127	
18	Roller Bearing	1		# 6206
19	Nut	2	1126	
20	Motor Base	1	1128	
21	Bolt	4		M8x20L
22	Oil Seal	1		TC28488
23	Nut	1	1122	
24	Bolt	3		M6x25L
25	Motor	1		1HP/4P
26	Bolt	4		3/8"x1L"
27	Spring Washer	4		3/8"
28	Stop Seat	1	1501	
29	Bolt	7		M10x50L

ELEVATING WORM GEAR BOX



ELEVATING WORM GEAR BOX

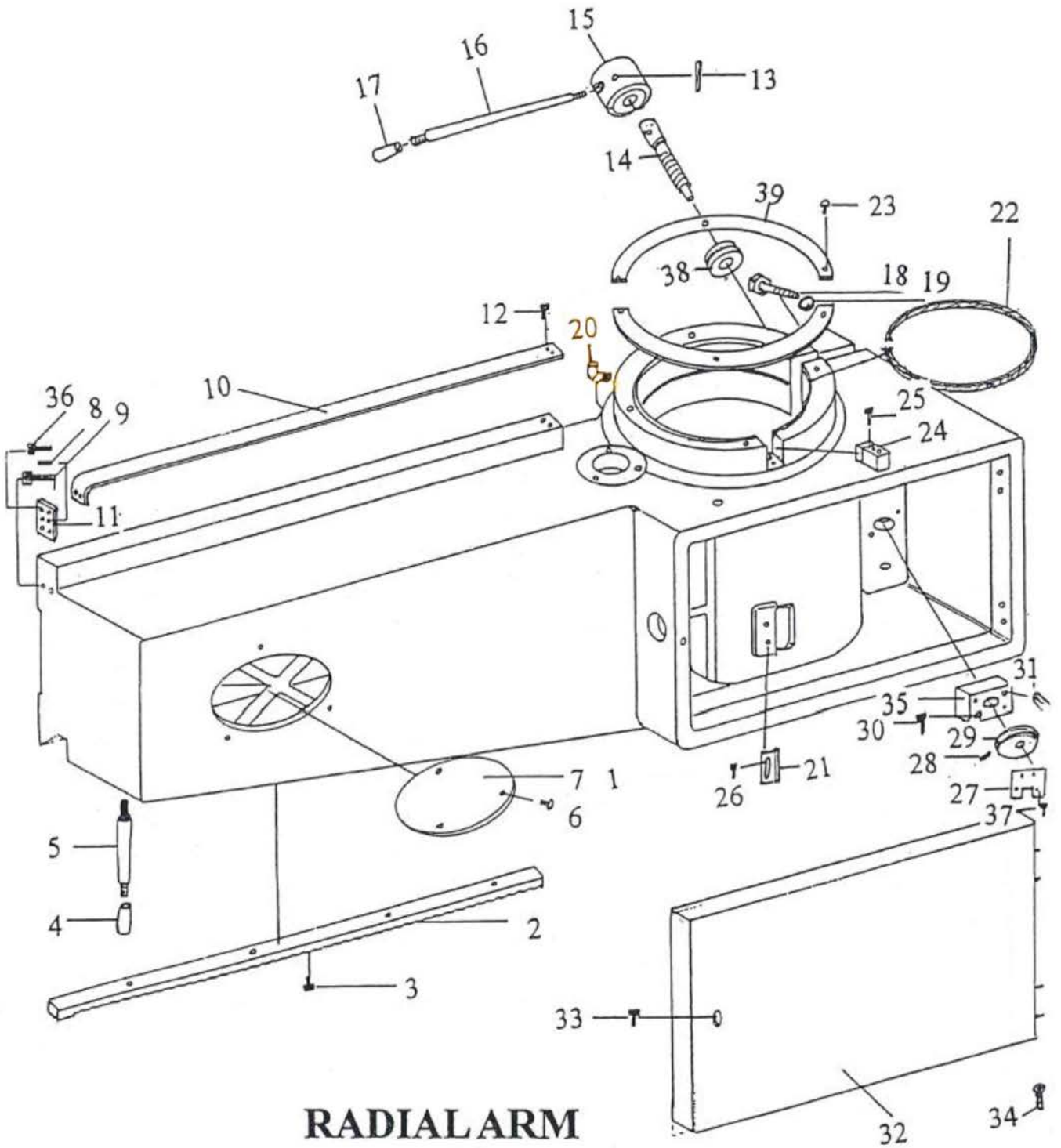
RADIAL ARM

Index No.	Parts Name	Units	Parts No.	Remarks
1	Radial Arm	1	1105	
2	Rack	1	1417	
3	Bolt	4		M6x16L
4	Handle	1	1111	
5	Handle	1	1112	
6	Bolt	3		M6x10
7	Cover	1	304	
8	Bolt	2		Set6x16
9	Bolt	2		6x10
10	Steel Efflorescent	1	1152	
11	Adjustment seat	1	1107	
12	Bolt	2		M6x12
13	Pin	1		#4x50L
14	Locking bolt	1	1136	
15	Joint	1	1108	
16	Handle	1	1110	
17	Handle	1	1111	Plastic
18	Bolt	2		3/4"x4"
19	Spring Washer	2		3/4"
20	Oil Cup	2		PT1/8"
21	Micro Seat	1	314	
22	Oil Ligature	2	1153	
23	Bolt	10		M6x12L
24	Key	1	251	
25	Bolt	2		M6x25
26	Bolt	2		M6x12L
27	Micro Seat	1	313	
28	Bolt	1		Set 6x10L
29	Collar	1	1117	
30	Bolt	1		M6x25L
31	Pin	1		M5x50L
32	Cover of Electricity	1	302	
33	Bolt	1		M6x10L

RADIAL ARM

Index No.	Parts Name	Units	Parts No.	Remarks
34	Bolt	4		M6x10L
35	Handel Joint Nut	1	1135	
36	Bolt	2		M6x10L
37	Bolt	2		3/16"x 3/8"L
38	Thrust Bearing	1		#51104
39	Arm cover	4	306	

RADIAL ARM

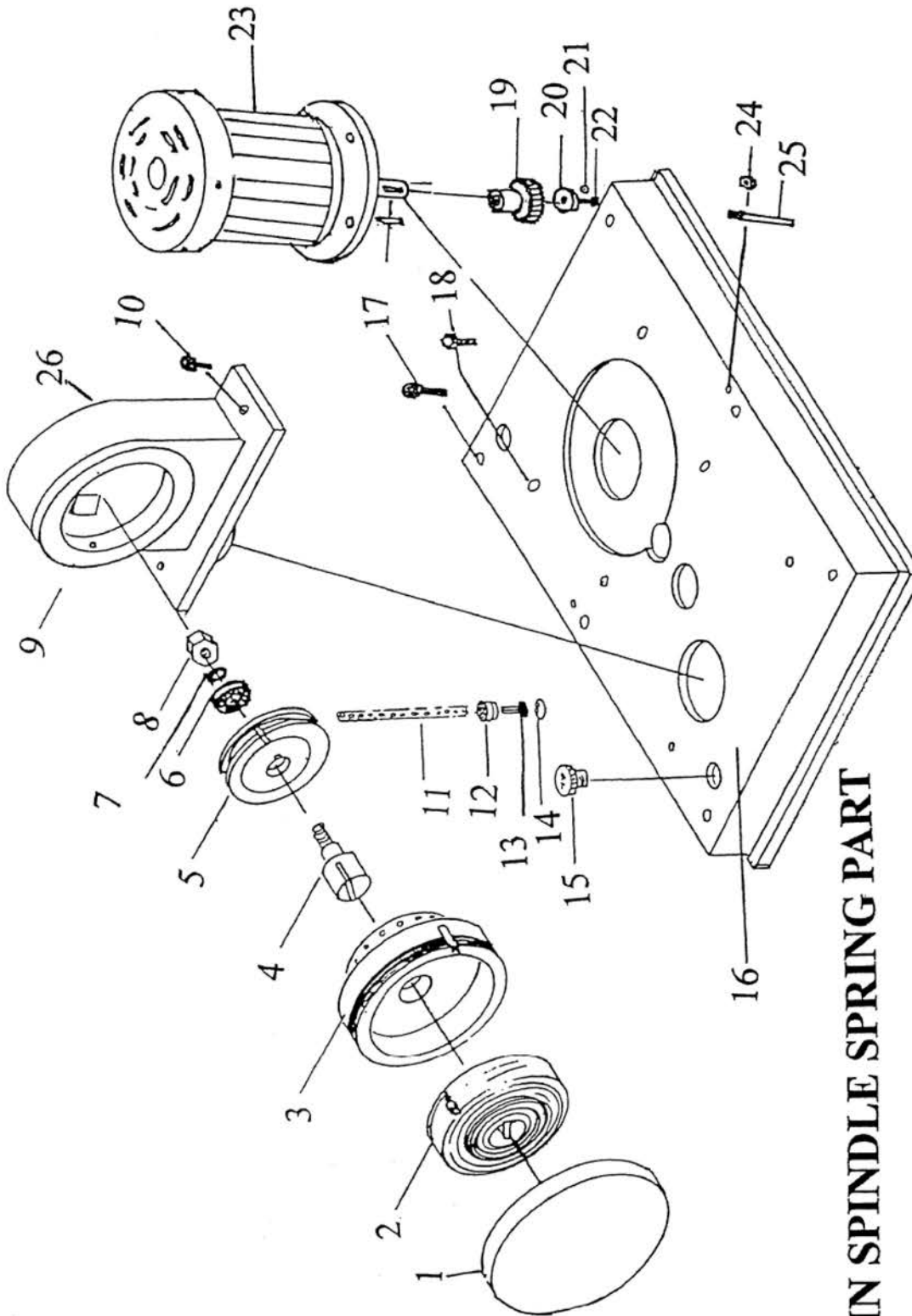


RADIAL ARM

MAIN SPINDLE SPRING PART

Index No.	Parts Name	Units	Parts No.	Remarks
1	Spring Cover	1	1215	
2	Spring	1	1503	
3	Spring Fix Seat	1	1214	
4	Spring Fix Bolt	1	1217	
5	Spring Adjusting seat	1	1216	
6	Bearing	1		# 6204
7	Spring Washer	1		1/2"
8	Nut	1		1/2"
9	Bolt	1		SetM8x30L
10	Bolt	2		M6x25L
11	Chain	1	1504	P=6.35
12	Bearing	2		# 696ZZ
13	Chain Connector	1	1224	
14	C Snap Ring	1		R15
15	Oil Bolt	1		3/4"xUNF16
16	Gear Box Cover	1	1202	
17	Bolt	6		M8x50L
18	Bolt	4		3/8"x1"
19	Motor Gear	1	1203	
20	Fixed Sleeve	1	1327	
21	Spring Washer	1		M5
22	Bolt	1		M5x25L
23	Motor	1		2HP. 4P
24	Nut	1		M8
25	Pin	1		#4x50L
26	Spring Seat	1	1213	

MAIN SPINDLE SPRING PART



MAIN SPINDLE SPRING PART

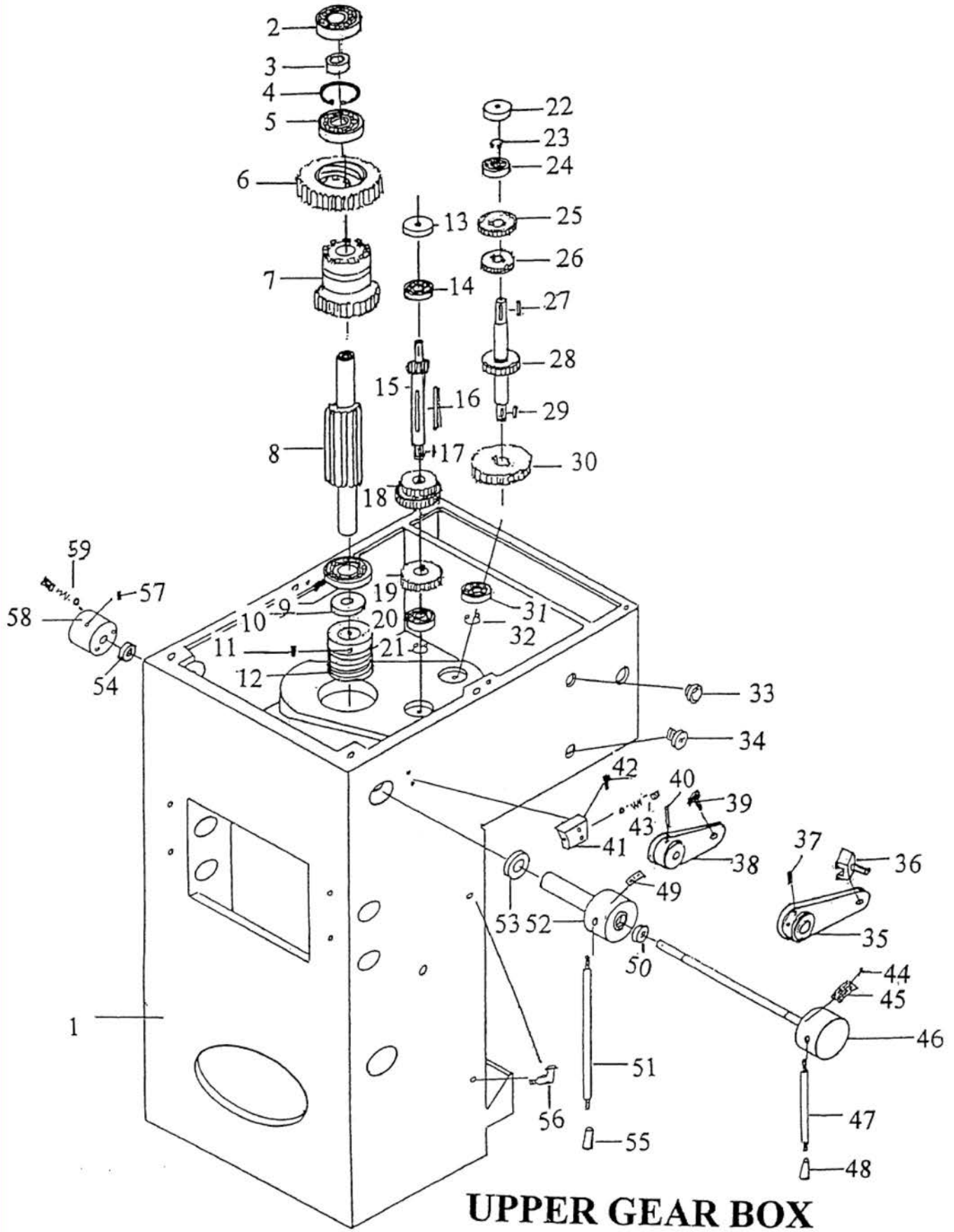
UPPER GEAR BOX

Index No.	Parts Name	Units	Parts No.	Remarks
1	Gear box	1	1201	
2	Bearing	1		# 6007Z
3	Bearing Shim	1	1218	
4	C Snap Ring	1		R62
5	Bearing	1		# 6007Z
6	Gear A	1	1219	
7	Gear B	1	1220	
8	Spindle shaft	1	1221	
9	Bearing	1		# 6007Z
10	Oil Seal	1		TC35x55x8
11	Bolt	2		Set M6x10
12	Set Screw	1	1222	
13	Cover	1	1205	
14	Bearing	1		# 6004Z
15	Gear Shaft	1	1210	
16	Key	2		M6x50L
17	Key	2		M6x12L
18	Gear	1	1211-1-2-3	
19	Gear	1	1212	
20	Bearing	1		#6004Z
21	C Snap Ring	1		S20
22	Cover	1	1209	
23	C Snap Ring	1		S20
24	Bearing	1		# 6004Z
25	Gear	1	1204	
26	Gear	1	1207	
27	Key	2		M6x20L
28	Shaft	1	1206	
29	Key	2		M6x16L
30	Gear	1	1208	
31	Bearing	1		# 6004Z
32	C Snap Ring	1		S24
33	Oil glass	1		1/2"

UPPER GEAR BOX

Index No.	Parts Name	Units	Parts No.	Remarks
34	Oil Bolt	1		3/4" xUNF16
35	Change Seat	1	1305	
36	Copper Seat	1	1306	
37	Bolt	2		M8x20L
38	Casting Seat	1	1308	
39	Steel Change Seat	1	1309	
40	Pin	1		M5x50L
41	Fixed Seat	1	1304-1	
42	Bolt	2		M5x25L
43	Ball& Spring Seat	1Set		1/4"xM8xM8
44	Motor Bolt	4		M2
45	Plate	1		6 Speed
46	Connector	1	1302	
47	Handle	1	1301	
48	Plastic Handel	1	1111	Plastic
49	Plate	1		H.L
50	Oil Seal	1		TC16x26x7
51	Handle	1	1303	
52	Seat	1	1304	
53	Oil Seal	1		TC30x45x8
54	Oil Seal	1		TC16x26x7
55	Plastic Handel	1	1111	
56	L. Oil Cup	2		PT1/8
57	Bolt	1		SetM8x30
58	Change Seat	1	1310	
59	Ball &Spring Seat	2Set		5/16"xM6.8xM8

UPPER GEAR BOX



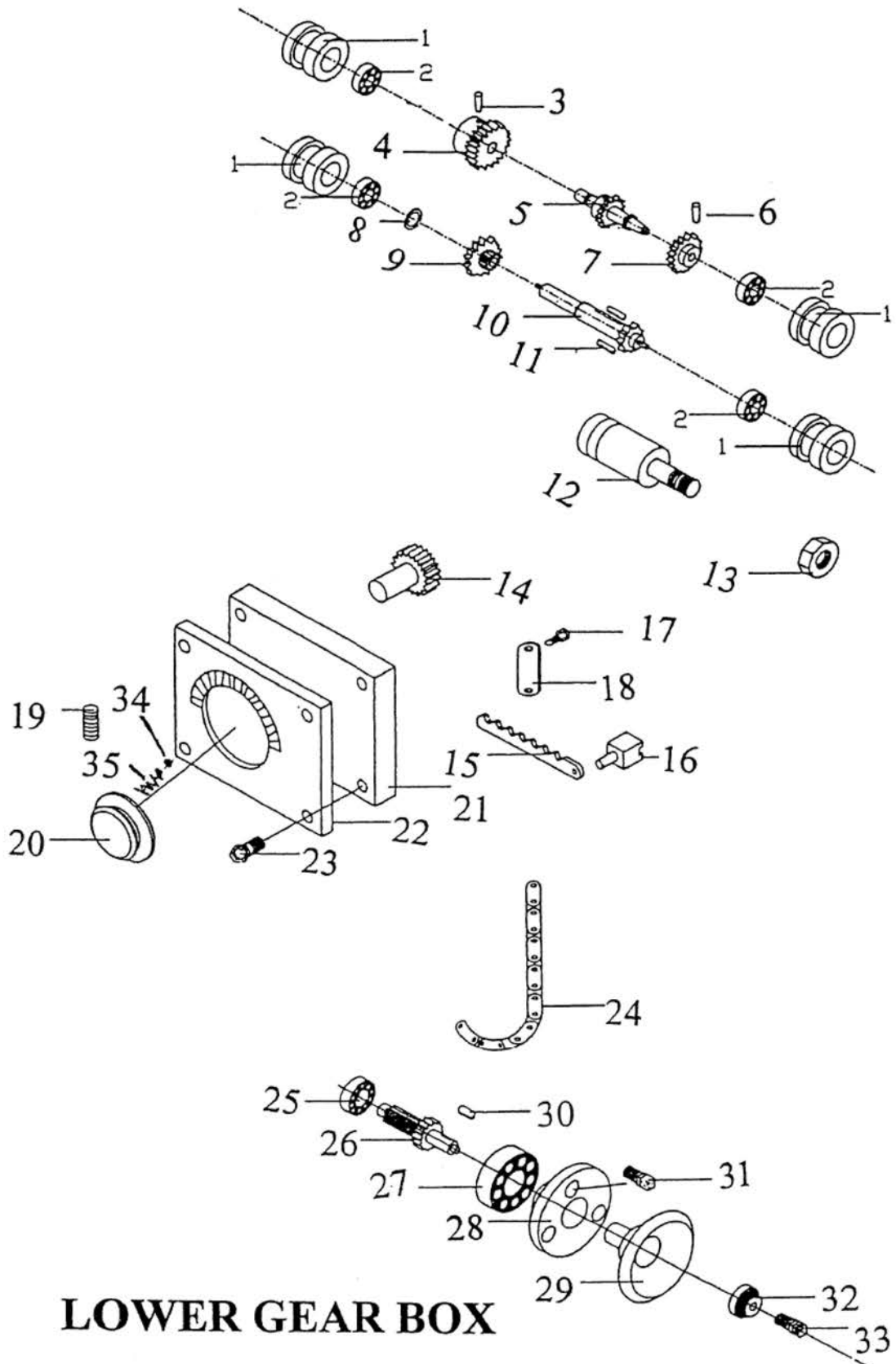
LOWER GEAR BOX

Index No.	Parts Name	Units	Parts No.	Remarks
1	Bearing Block	4	1316	
2	Bearing	4		# 6002Z
3	Pin	1		# 4x50L
4	Worm Gear	1	1319	
5	Shaft	1	1317	
6	Pin	1		# 4x38L
7	Gear	1	1318	
8	C Snap Ring	1		S22
9	Gear	1	1322	
10	Shaft	1	1321	
11	Key	2		M6x50L
12	Idle Wheel	1	1323	
13	Nut	1		3/8"
14	Pinion	1	1313	
15	Rack	1	1314	
16	Fork	1	1315	
17	Bolt	2		3/16"x3/8
18	Plate	1	1505	
19	Bolt	1		M8x30L
20	Handel	1	1312	
21	Micro-Indfeed Base	1	1311	
22	Index Plate	1	1506	
23	Bolt	4		M8x20L
24	Chain	1		P=9.52
25	Bearing	1		# 6002Z
26	Shaft	1	1324	
27	Bearing	1		# 6204
28	Cover	1	1325	
29	Hand Wheel	1	1326	
30	Key	1		M5x12L
31	Bolt	3		M5x16L
32	Fixed Sleeve	1	1327	
33	Bolt	1		M5x30L

LOWER GEAR BOX

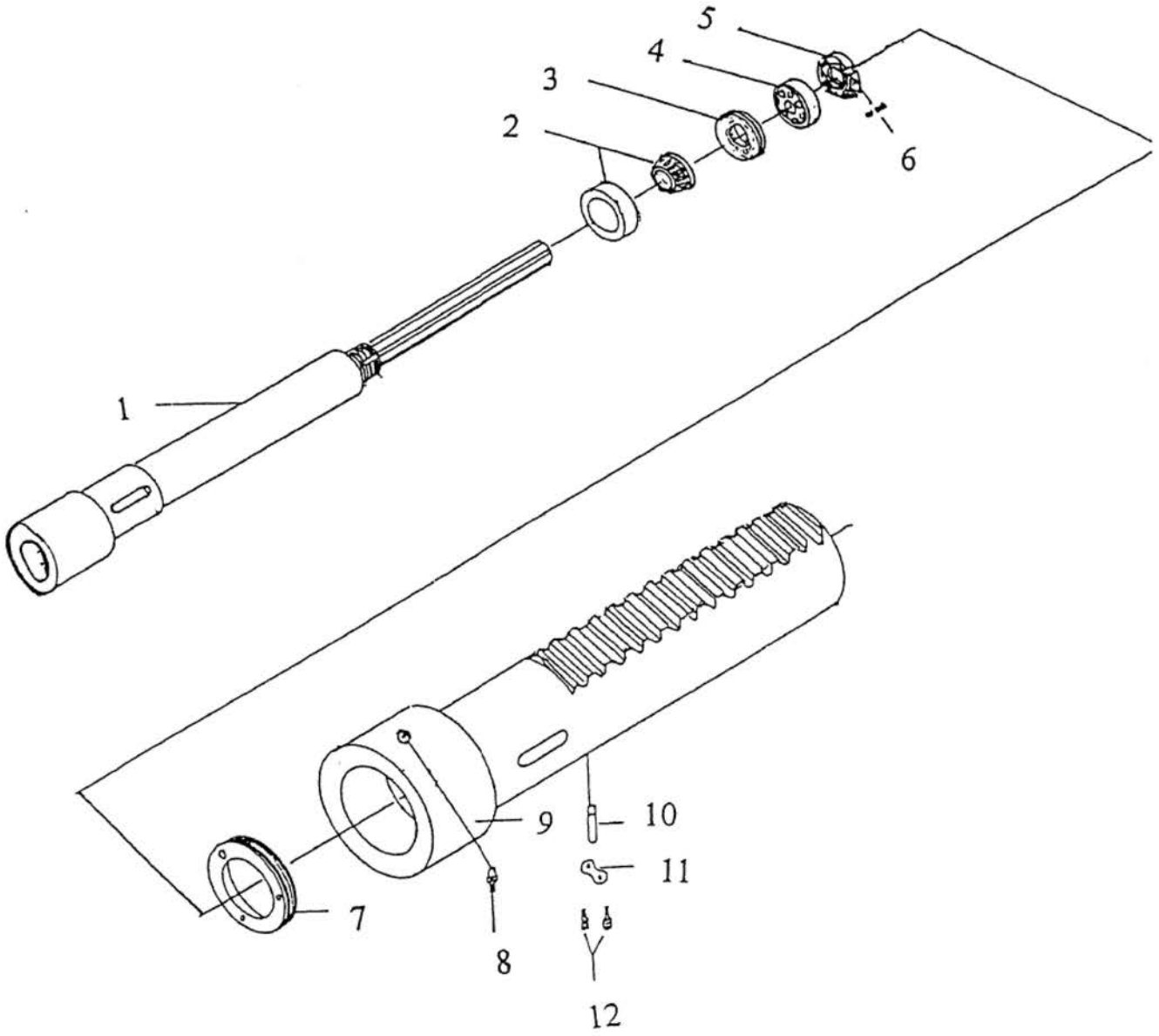
Index No.	Parts Name	Units	Parts No.	Remarks
34	Ball	1		5/16"
35	Spring	1		M4

LOWER GEAR BOX



LOWER GEAR BOX

MAIN SPINDLE

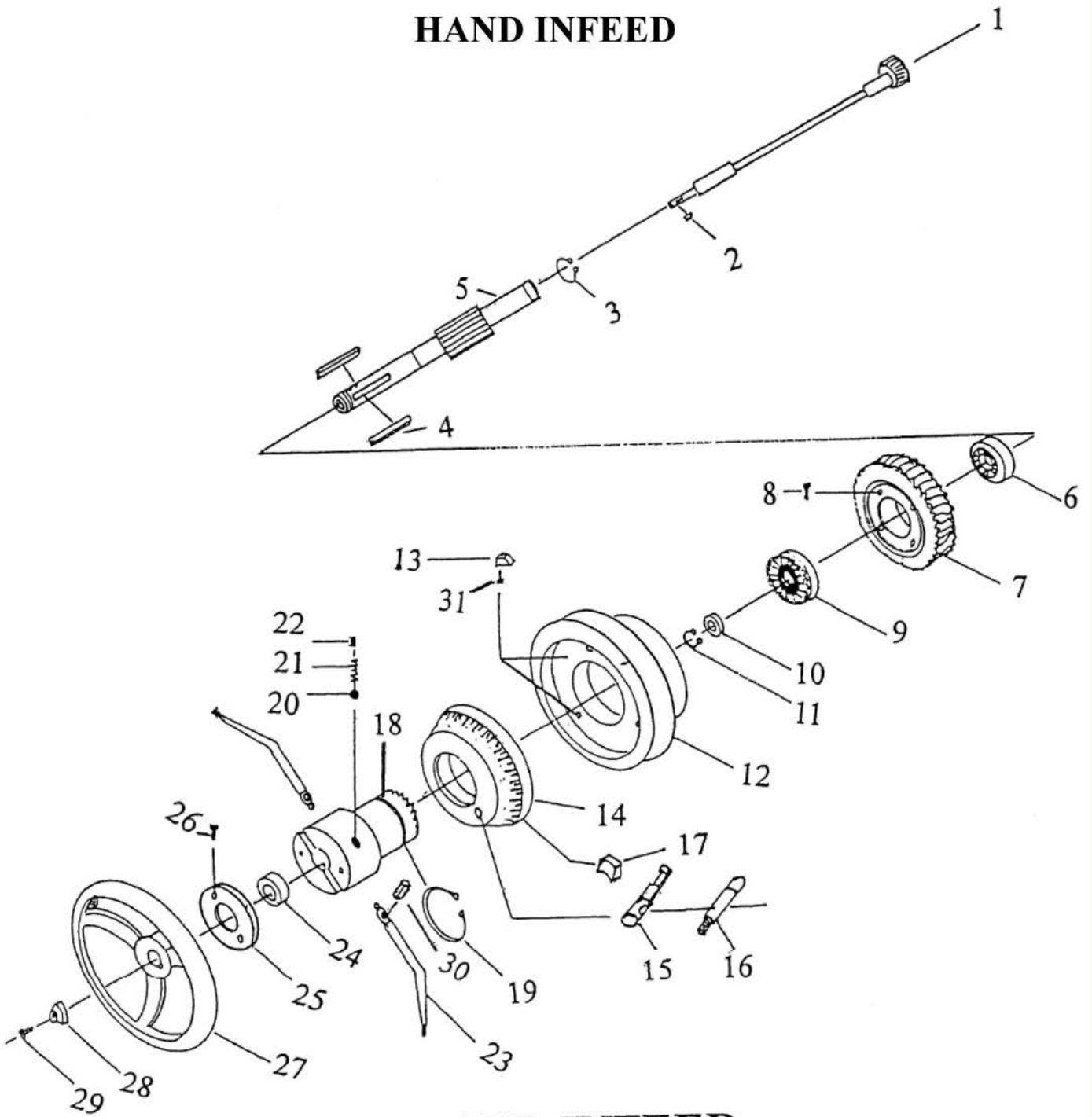


MAIN SPINDLE

HAND INFEED

Index No.	Parts Name	Units	Parts No.	Remarks
1	Gear Shaft	1	1415	
2	Key	1		M5x5x10
3	C Snap Ring	1		S24
4	Key	2		M6x6x50
5	Adjustment Wheel	1	1414	
6	Ball Bearing	1		# 6005Z
7	Worm Gear	1	1413	
8	Bolt	6		M5x12
9	Feed Gear	1	1408	
10	Covering	1	1412	
11	C Snap Ring	1		S25
12	Graduation Ring Base	1	1401	
13	Cam	1	1419	
14	Graduated Collar	1	1402	
15	Eccentric Lever	1	1410	
16	Handle	1	1410-1	
17	Block	1	1411	
18	Clutch	1	1405	
19	C Snap Ring	1		S68
20	Ball	1		1/4"
21	Spring	1		M8x20L
22	Bolt	1		Set8x10
23	Feed Handle	2	1406	
24	Locking Collar	1	1404	
25	Clutch Cover	1	1418	
26	Bolt	2		M5x12
27	Wheel	1	1403	
28	Fixed Sleeve	1	1327	
29	Bolt	1		M5x25
30	Pin	2		M8x50L
31	Bolt	4		M5x12L

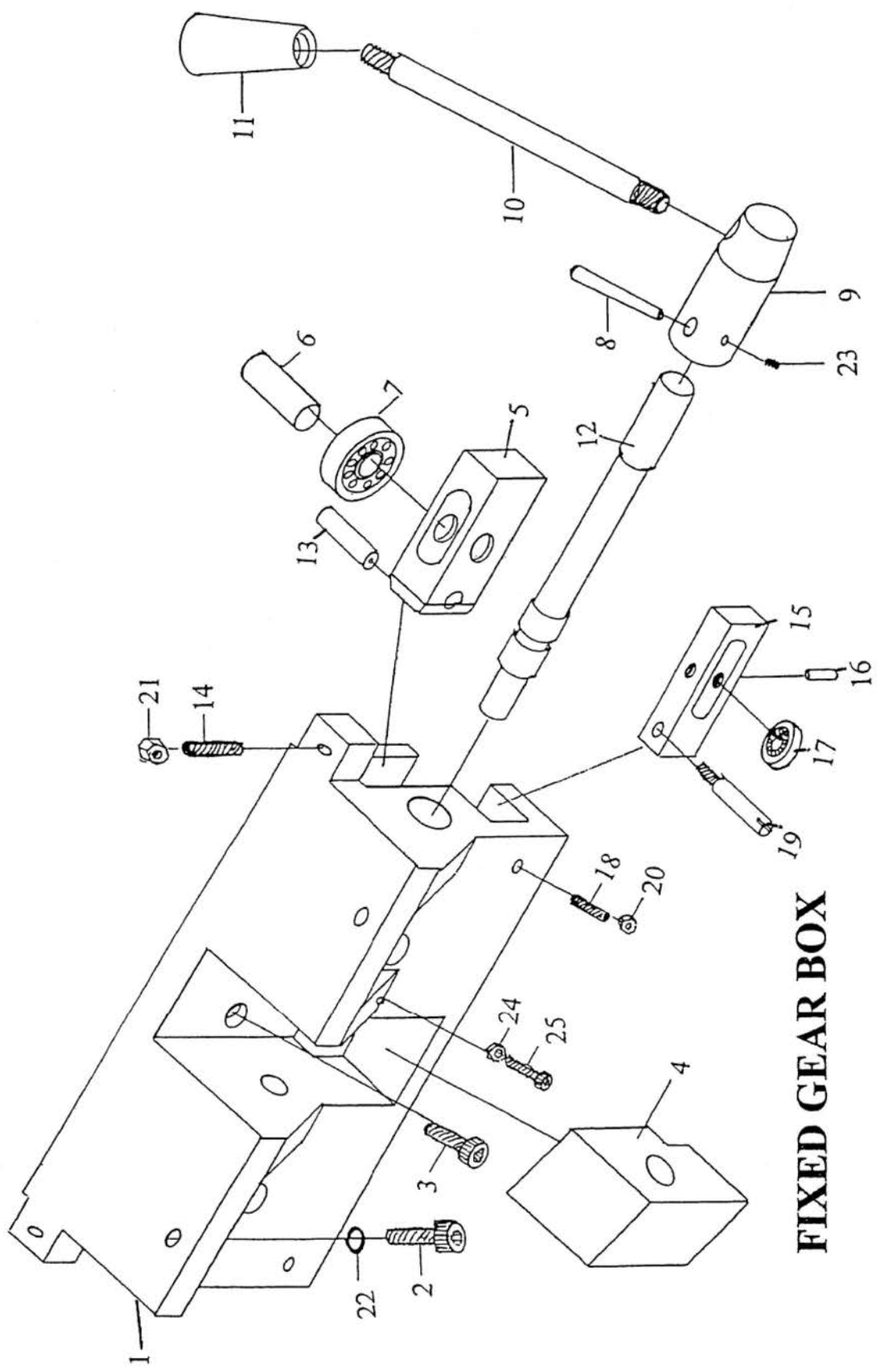
HAND INFEED



HAND INFEED

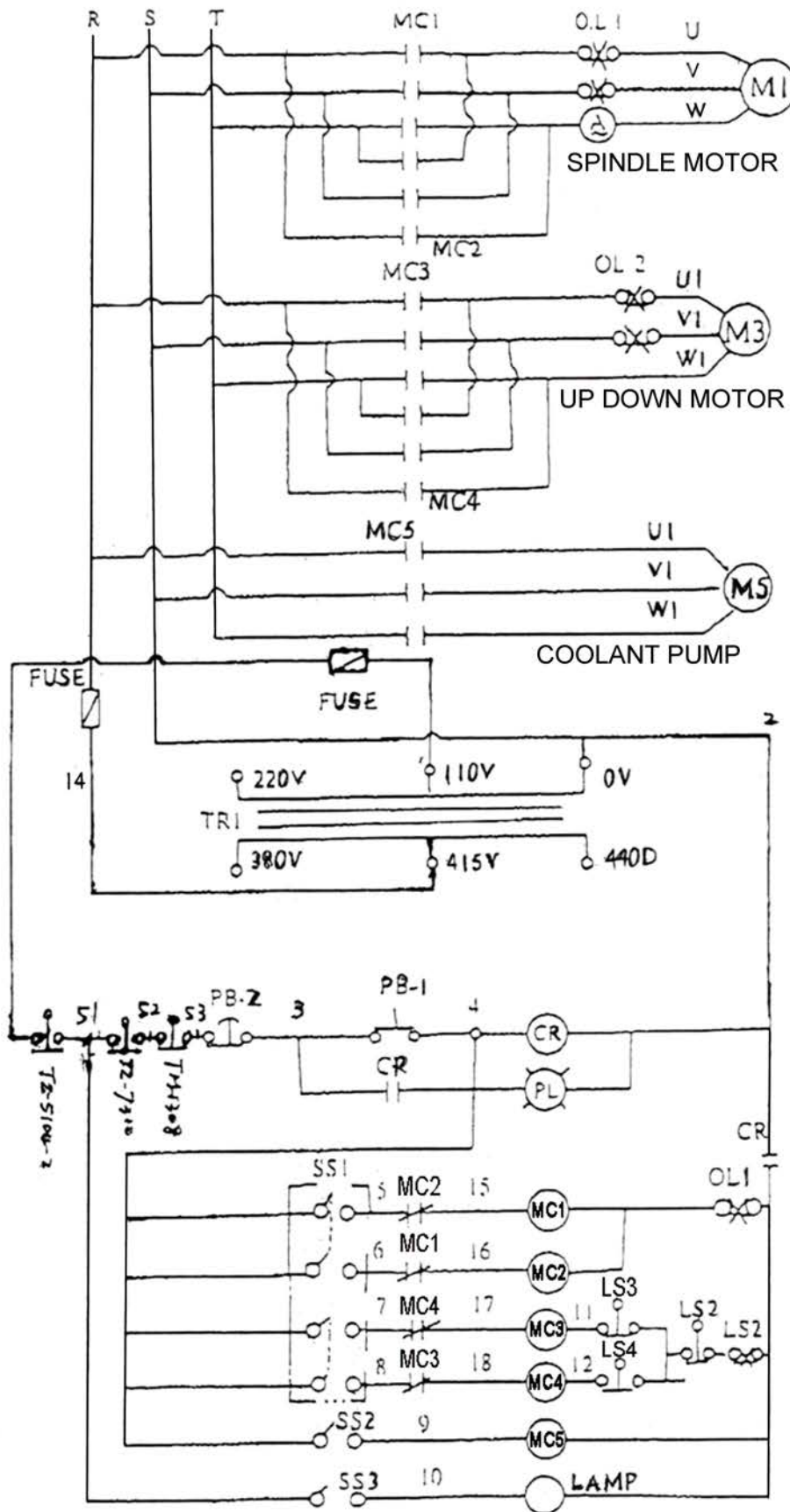
FIXED GEAR BOX

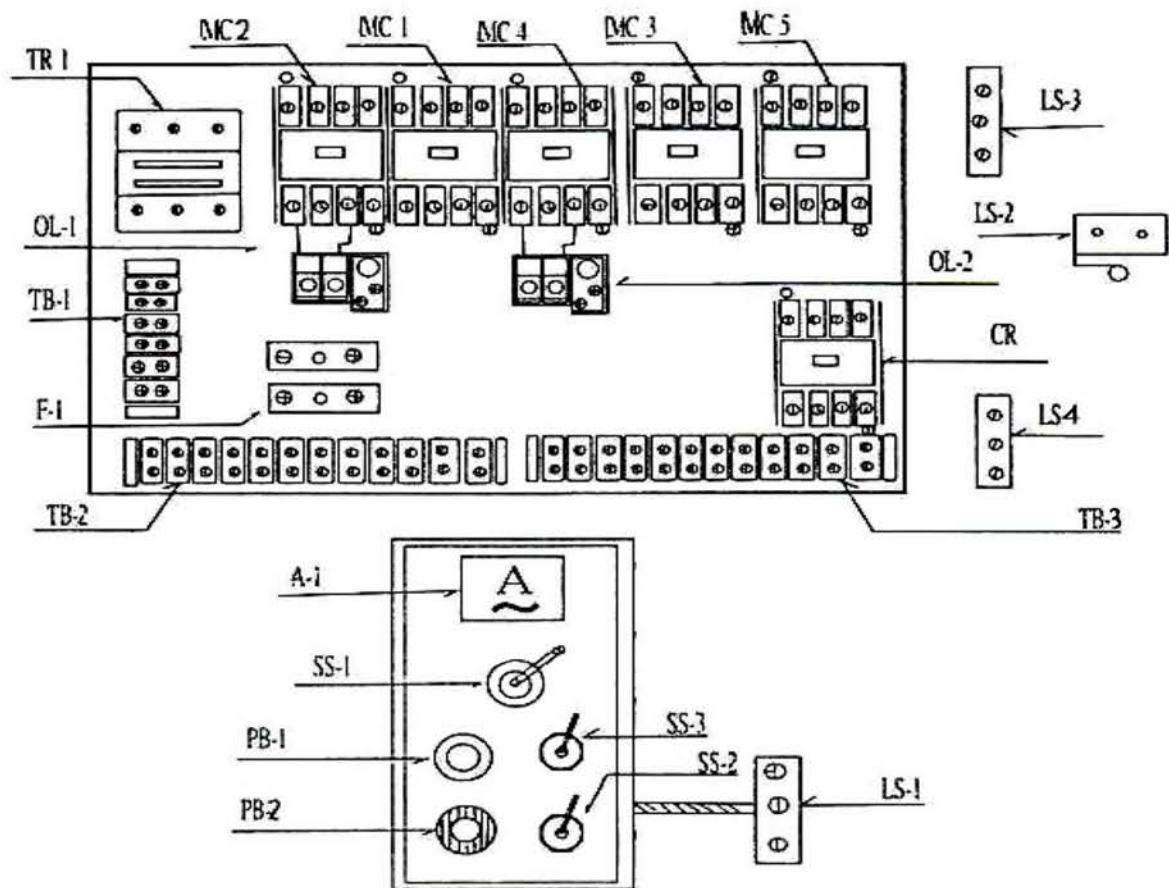
Index No.	Parts Name	Units	Parts No.	Remarks
1	Gear Box Fixed Seat	1	1229	
2	Bolt	2		M10x25L
3	Bolt	2		M8x25L
4	Lock Block	1	1232	
5	Bearing Seat	2	1230	
6	Bearing Shaft	2	1231	
7	Ball Bearing	2		#6202ZZ
8	Pin	1		#4x50L
9	Joint	1	1235	
10	Hand Lever	1	1303	
11	Handle	1	1111	Plastic
12	Eccentric Shaft	1	1234	
13	Fixed Bolt	2	1236	
14	Bolt	2		M8x25L
15	Bearing Seat	2	1233	
16	Bearing Shaft	2	1238	
17	Ball Bearing	2		#628ZZ
18	Bolt	2		M8x30L
19	Bearing Shaft	2	1236-2	
20	Nut	2		M8
21	Nut	2		M8
22	Spring Washer	2		M10
23	Bolt	1		Set M6x10
24	Nut	1		M6
25	Bolt	1		M6x25L



FIXED GEAR BOX

Electrical Diagram for 750 / 900





NO.	Item
MC1	Magnetic Contactor
MC2	Magnetic Contactor
MC3	Magnetic Contactor
MC4	Magnetic Contactor
MC5	Magnetic Contactor
CR	Magnetic Contactor
TR1	Transformer
TB-1	Wire Connect Table Board
TB-2	Wire Connect Table Board
TB-3	Wire Connect Table Board
OL-1	Load-Relay
OL-2	Load-Relay
F-1	Euse
A-1	Ammeter
PB-1	Starter
PB-2	Off-Switch
SS-1	4 Direction-Switch
SS-2	Coolant Switch
SS-3	Worklight On-off Switch
CS-1	Electrode Exchange
LS-1	Microswitch AM-1308
LS-2	Microswitch AM-1704
LS-3	Microswitch AM-1308
LS-4	Microswitch AM-1308