

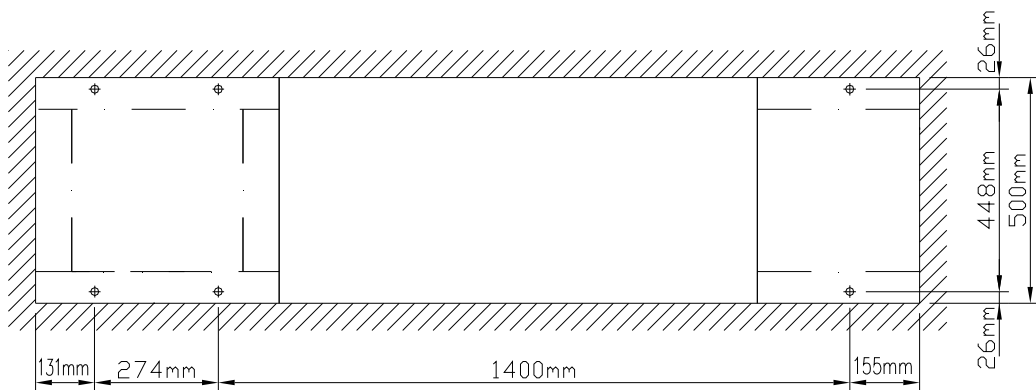
MODEL	KL1640 PLUS
Swing over bed	17.3"
Center height	8.6"
Swing over cross slide	9.4"
Distance between centers	39.3"
Width of bed	11.8"
Spindle speed	L:50-355 rpm, H:352-2500 rpm
Spindle number	2
Spindle nose	D1-6
Spindle nose taper	#6
Spindle bore	2 1/8"
Z axis	31.5"
X axis	8.1"
Tailstock quill diameter	2"
Tailstock quill travel	5.9"
Quill taper	#4
Spindle motor	7.5 HP
X lead screw	20xP5.0 C5
X axis motor	1 kW
Z lead screw	32xP5.0 C5
Z axis motor	1 kW
Coolant pump motor	1/8 HP
X/Z axis cutting feed rate	196 ipm
X/Z axis rapid traverse	590 ipm
Machine net weight	3080 lbs
Machine gross weight	3520 lbs

TRANSPORTATION / INSTALLATION

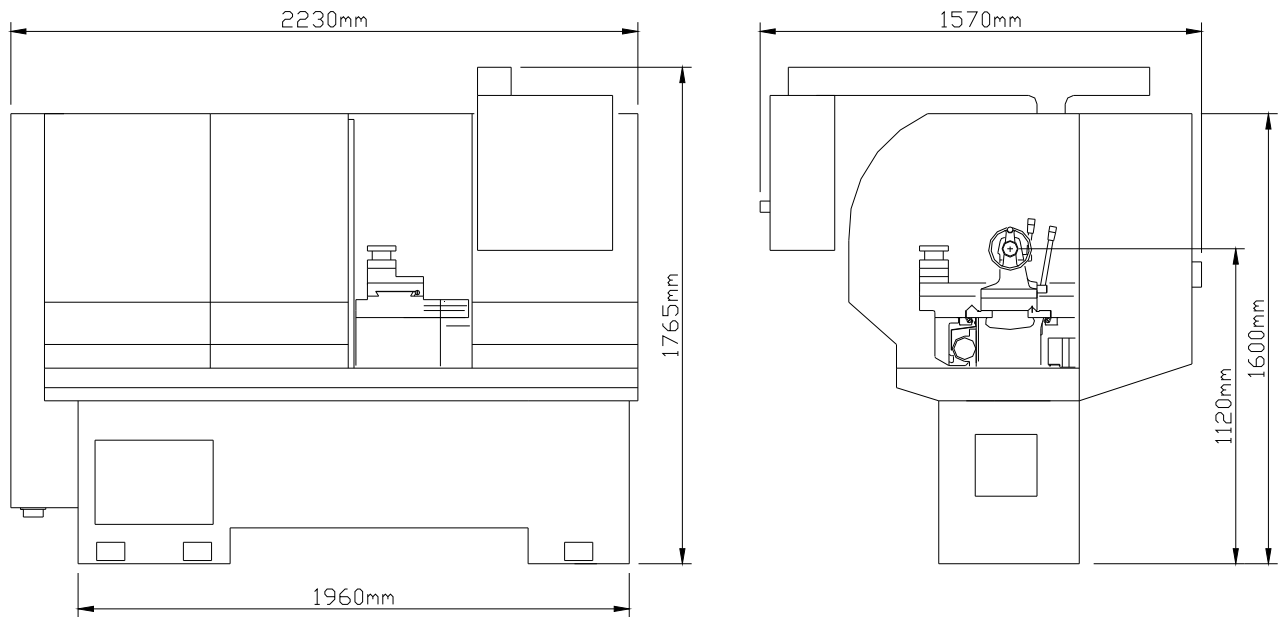
PREPARATION FOR USE

FOUNDATION

A SPECIAL FOUNDATION IS NOT ESSENTIAL FOR THIS MACHINE. HOWEVER, IT IS ADVISABLE TO PLACED ON A WOODEN FLOOR, CARE SHOULD BE TAKEN TO SEE THAT IT IS ADEQUATELY SUPORTED AND FREE FROM VIBRATION. IF THE MACHINE IS TO BE PLACED ON AN UPPER FLOOR, LOCATE IT DIRECTLY OVER A SUPPORTING BEAM OR GRINDER TO REDUCE ANY VIBRATION GENERATED BY NEARBY MACHINES.



FUNDATION DIAGRAM



SELECTING LOCATION FOR MACHINE

FOR BEST RESULTS FROM ANY LATHE, IT IS IMPORTANT THAT THE ZONE SELECTED FOR ITS ERECTION BE WELL-LIGHTED, AS DRY AS POSSIBLE, AND AS FREE AS POSSIBLE FROM VIBRATION.

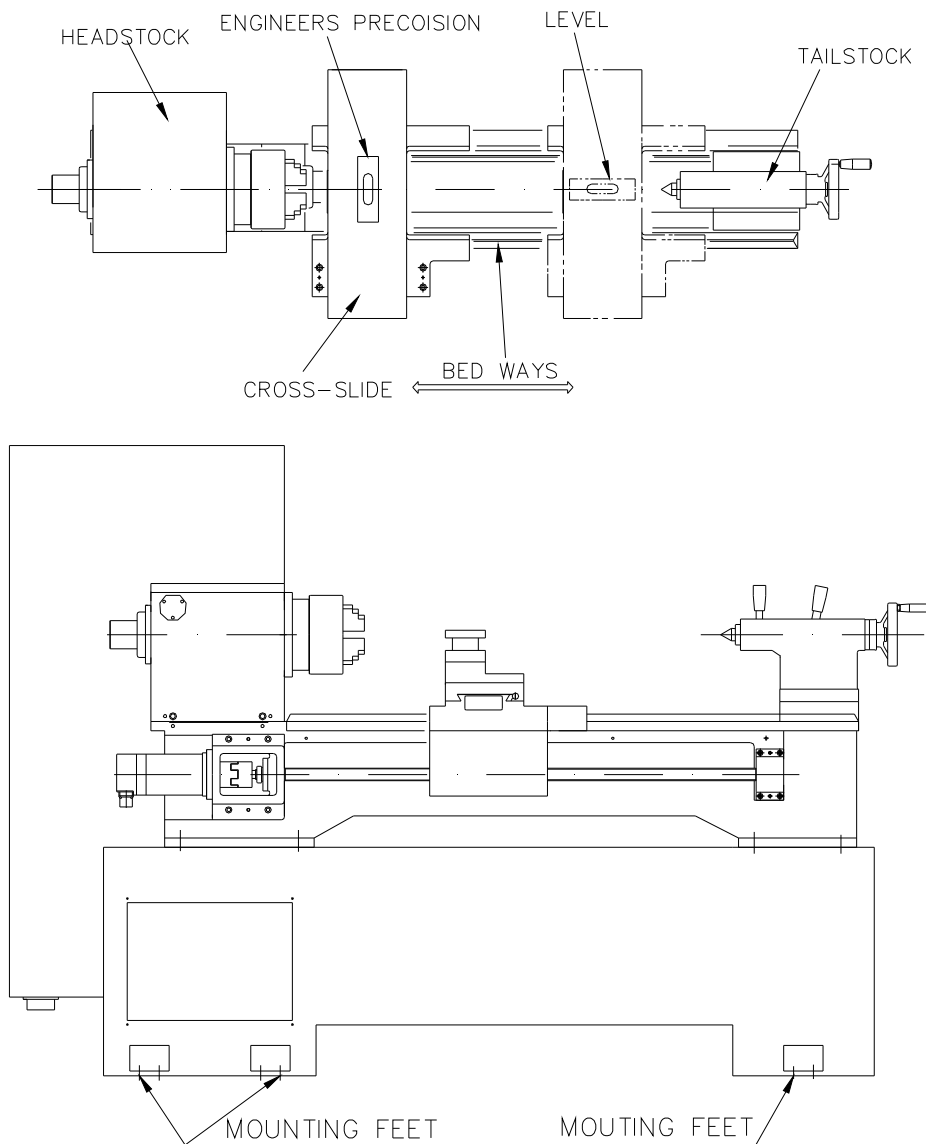
THE MACHINE SHOULD BE LOCATED SO THAT ADEQUATE SPACE IS PROVIDED FOR UTILISATION OF MAXIMUM RAUGES, AS WELL AS THE SPACE REQUIRED FOR MAKING ADJUSTMENTS. A MINIMUM OF 1100mm CLEARANCE SPACE SHOULD BE PROVIDED AT THE ENDS AND REAR OF THE LATHE AND AT LEAST 1000mm AT THE FRONT FOR THE OPERATOR.

INSTALLING

LOCATED THE MACHINE ON A SOLID FOUNDATION, ALLOWING SUFFICIENT AREA ALL ROUND FOR EASY WORKING AND MAINTENANCE(SEE FOUNDATION PLAN). THE LATHE MAY BE USED FREE-STANDING OR BOLTED TO THE FOUNDATION.

FREE-STANDING: POSITION LATHE ON FOUNDATION AND ADJUST EACH OF THE SIX MOUNTING FEET TO TAKE EQUAL SHARE OF THE LOAD. THEN USING AN ENGINEERS PRECISION LEVEL ON THE BEDWAYS ADJUST THE FEET TO LEVEL UP MACHINE. PERIODICALLY CHECK BED LEVEL TO ENSURE CONTINUED LATHE ACCURACY.

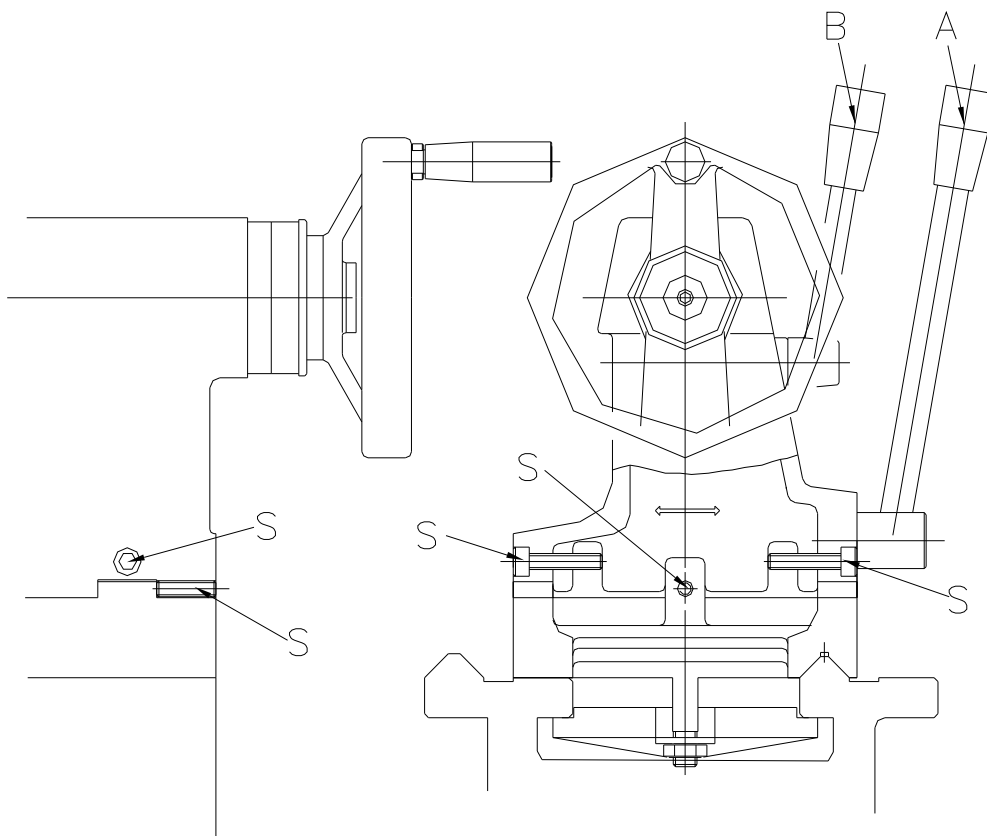
FIXED INSTALLATION: POSITION LATHE OVER SIX BOLTS(M16x50mm. DIAM.) SET INTO THE FOUNDATION TO CORRESPOND WITH HOLES IN THE MOUNTING FEET. ACCURATELY LEVEL THE MACHINE, THEN TIGHTEN HOLD-DOWN BOLTS. RE-CHECK BED LEVEL.

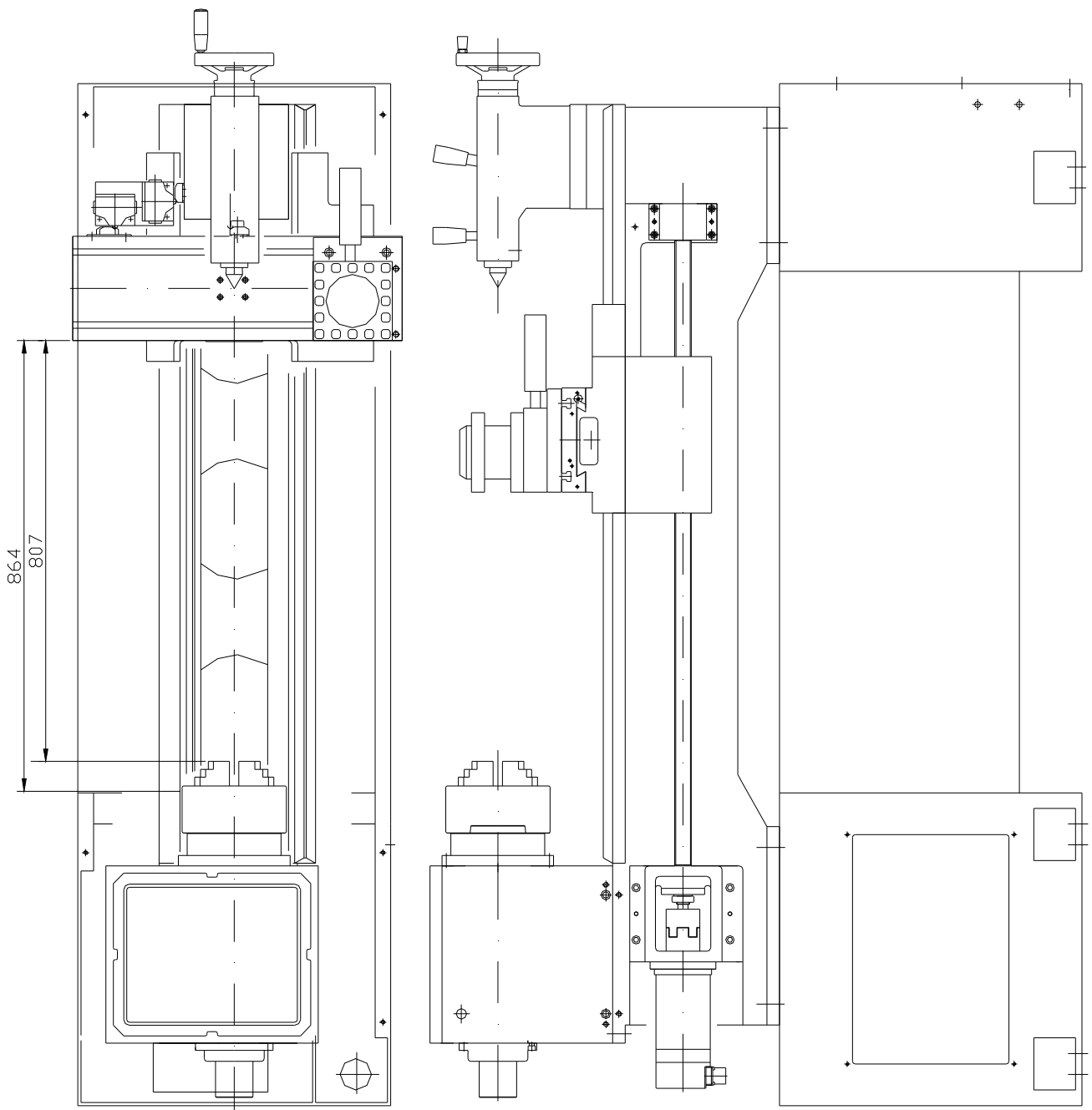


TALL STOCK

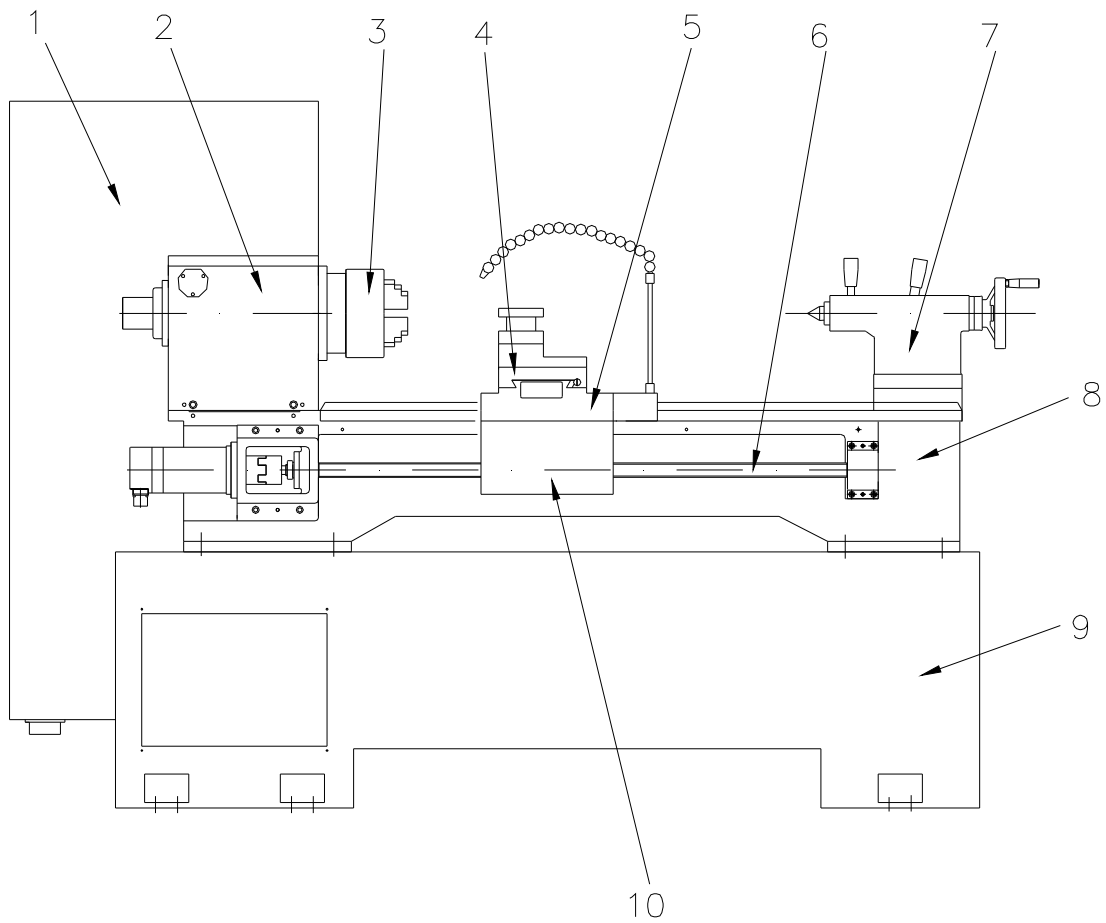
CAN BE FREED MOVEMENT ALONG THE BED BY UNLOCKING THE CLAMP LEVER (A).
THE TAILSTOCK BARREL IS LOCKED BY LEVER (B).

THE TAILSTOCK CAN BE SET-OVER FOR PRODUCTION OF SHALLOW TAPERS OR FOR
RE- ALIGNMENT, RELEASE THE CLAMPING LEVER (A) AND ADJUST SCREW (S) AT EACH
SIDE OF THE BASE TO MOVE TAILSTOCK LATERALLY ACROSS THE BASE. RETIGHTENING
AND CHECKING AFTER ADJUSTMENT OF SET OVER.



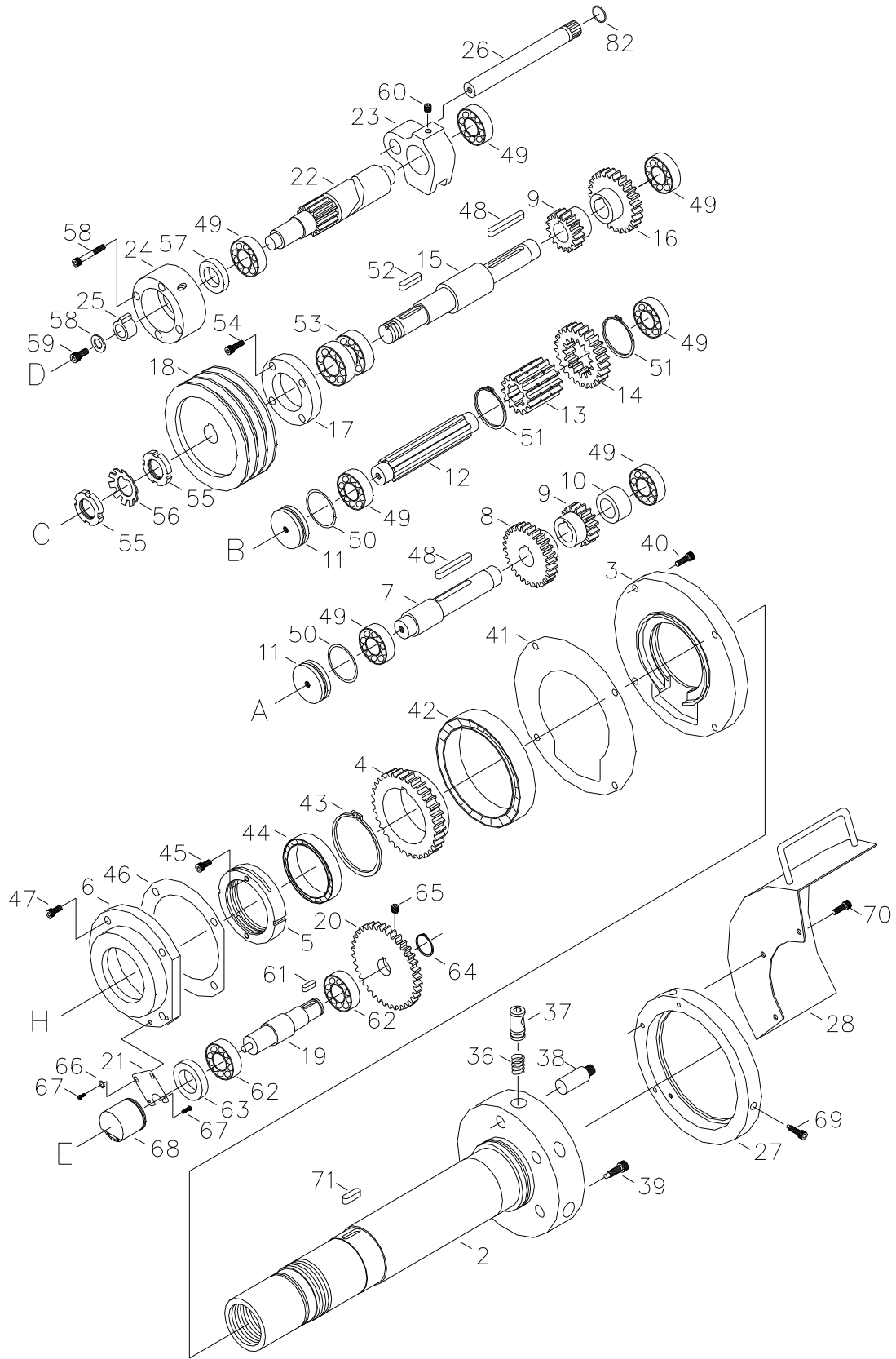


LATHE CONTROL

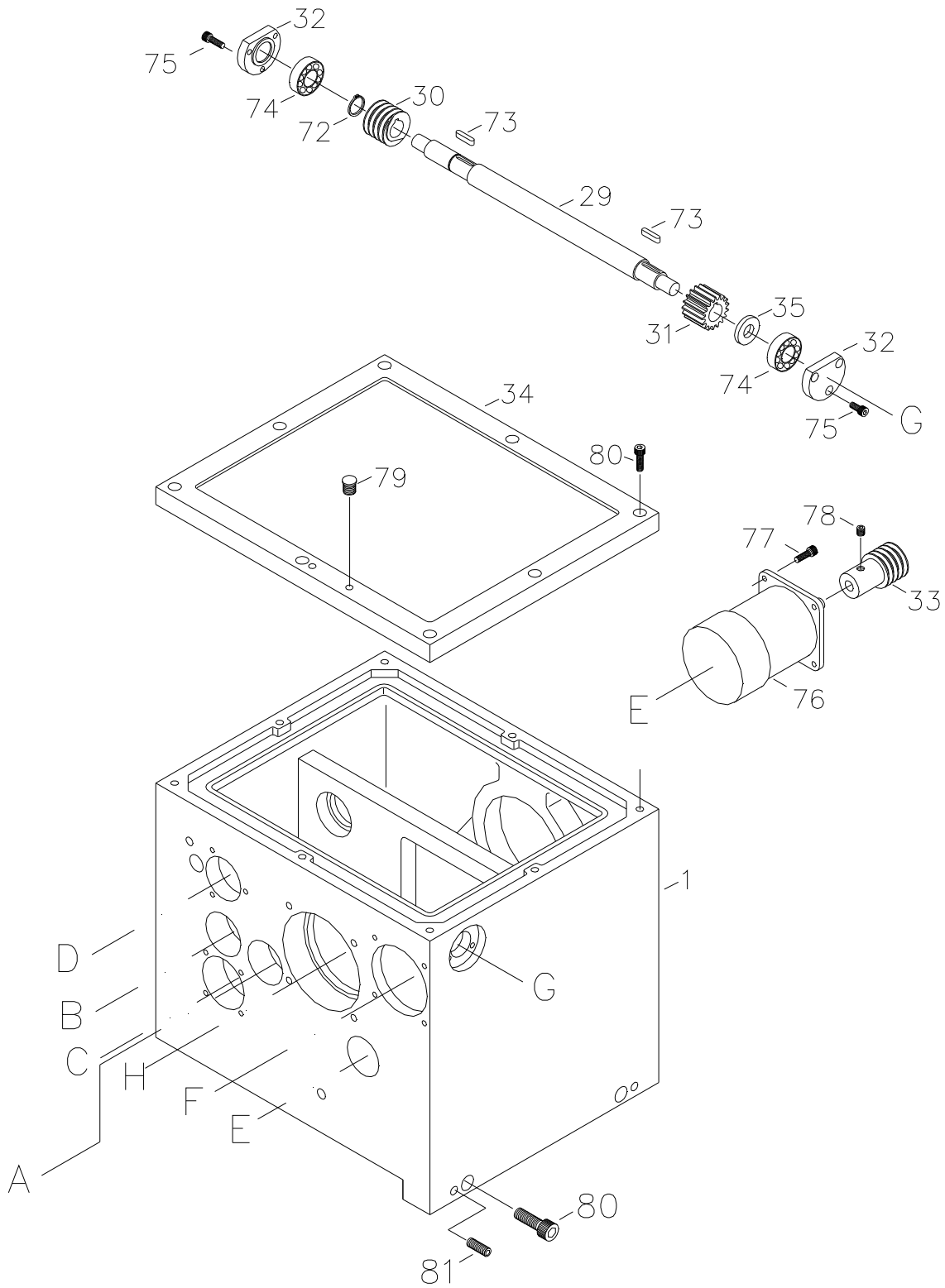


1. ELECTEIC CABINET
2. HEADSTOCK
3. SPINDLE
4. CROSS SLIDE
5. SADDLE CASTING
6. LEAD SCREW
7. TAILSTOCK
8. BED
9. BASE(FLOOR STAND)
10. APRON

HEAD STOCK (CASTING & CONTROLS)



HEAD STOCK (CASTING & CONTROLS)



HEAD STOCK (CASTING & CONTROLS)

REF . NO.	PART NO.	DESCRIPTION	Q' TY
1	38B1001	HEAD STOCK	1
2	38B1002	MAIN SPINDLE	1
3	38B1003	BLARING CAP	1
4	38B1004	GEAR	1
5	38B1005	NUT	1
6	38B1006	BEARING CAP	1
7	38B1007	SHAFT	1
8	38B1032	GEAR	1
9	38B1009	GEAR	4
10	38B1010	COLLAR	1
11	38B1011	PLUB	2
12	38B1012	GEAR SHAFT	1
13	38B1013	GEAR	1
14	38B1014	GEAR	1
15	38B1015	BEARING CAP	1
16	38B1008	GEAR	1
17	38B1016	BEARING CAP	1
18	38B1017	V-BELLT PULLEY	1
19	38B1018	SHAFT	1
20	38B1019	GEAR	1
21	38B1020	BEARING	1
22	38B1021	GEAR SHAFT	1
23	38B1022	FORK ARMS	1
24	38B1023	BEARING CAP	1
25	38B1031	SWITCH	1
26	38B1024	SHAFT	1
27	38B1035	CAP	1
28	38B1036	COVER	1
29	38B1026	SHAFT	1
30	38B1027	GEAR SPINDLE	1
31	38B1028	GEAR	1
32	38B1029	COVER	2
33	38B1030	GEAR SPINDLE	1
34	38B1025	COVER	1
35	38B1034	COLLAR	1

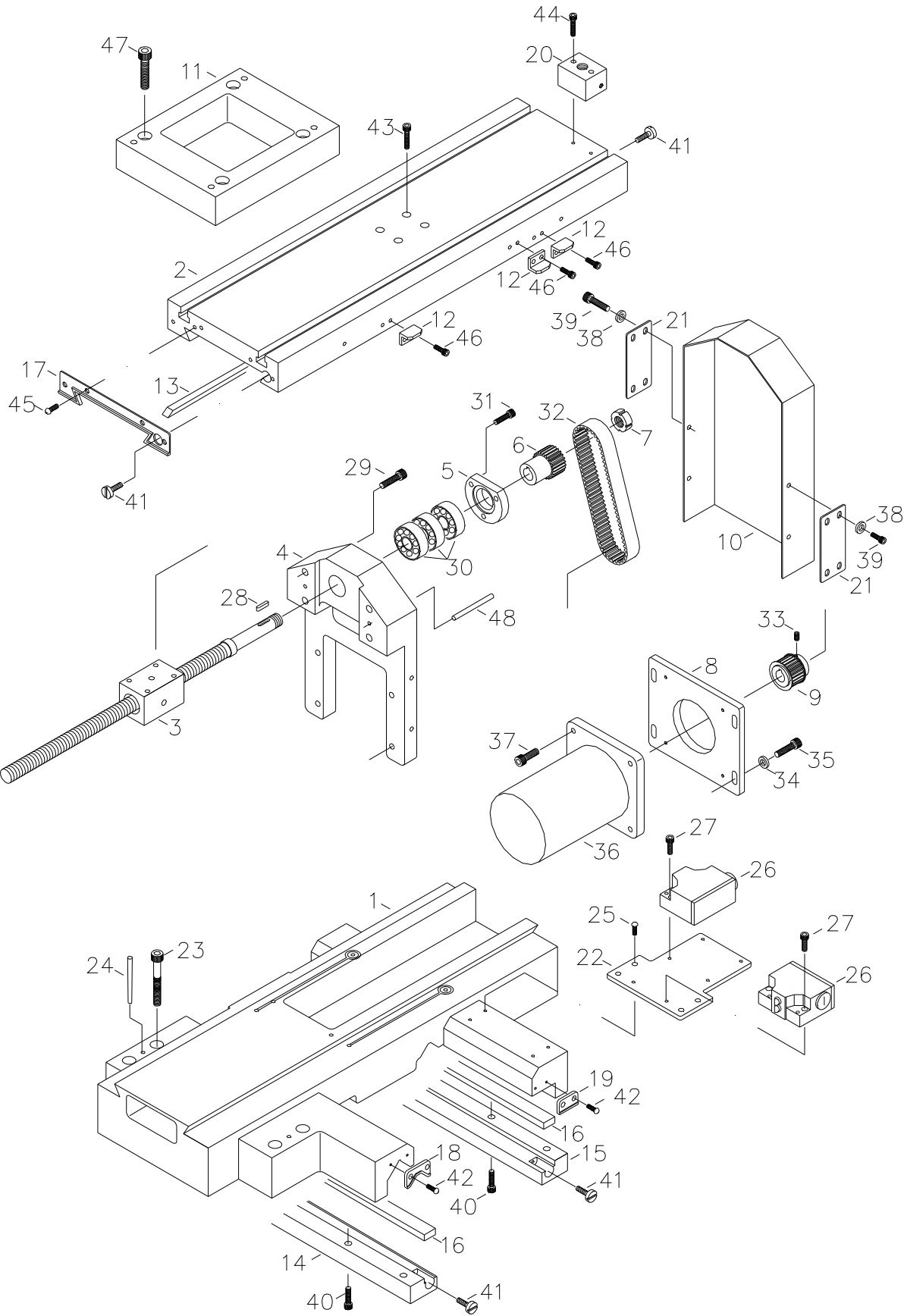
HEAD STOCK (CASTING & CONTROLS)

REF . NO.	PART NO.	DESCRIPTION	Q' TY
36	38B1041	SPRING	3
37	38B1042	CAMLOCK	3
38	38B1043	CAMLOCK STUD	3
39	38B1044	CAP SCREW	3
40	38B1045	CAP SCREW	4
41	38B1046	GASKET	1
42	38B1047	BEARING	1
43	38B1048	SNAP RING	1
44	38B1049	BEARING	1
45	38B1050	CAP SCREW	4
46	38B1051	GASKET	1
47	38B1052	CAP SCREW	4
48	38B1053	KEY	2
49	38B1054	BEARING	7
50	38B1055	OIL RING	2
51	38B1056	SNAP RING	2
52	38B1057	KEY	1
53	38B1058	BEARING	2
54	38B1059	CAP SCREW	4
55	38B1060	NUT	2
56	38B1061	WASHER	1
57	38B1062	COLLAR	1
58	38B1063	CAP SCREW	4
59	38B1064	CAP SCREW	1
60	38B1065	SCREW	1
61	38B1066	KEY	1
62	38B1067	BEARING	2
63	38B1068	COLLAR	1
64	38B1069	SNAP RING	1
65	38B1070	SCREW	1
66	38B1071	WASHER	2
67	38B1072	CAP SCREW	2
68	38B1073	COLLAR	1
69	38B1074	CAP SCREW	3
70	38B1075	CAP SCREW	3

HEAD STOCK (CASTING & CONTROLS)

REF . NO.	PART NO.	DESCRIPTION	Q' TY
71	38B1076	KEY	1
72	38B1077	SNAP RING	1
73	38B1078	KEY	2
74	38B1079	BEARING	2
75	38B1080	CAP SCREW	6
76	38B1081	MOTOR	1
77	38B1082	CAP SCREW	4
78	38B1083	SCREW	1
79	38B1084	PLUG	1
80	38B1085	CAP SCREW	10
81	38B1086	SCREW	2
82	38B1087	OIL KING	1

SADDLE & CROSS - SLIDE



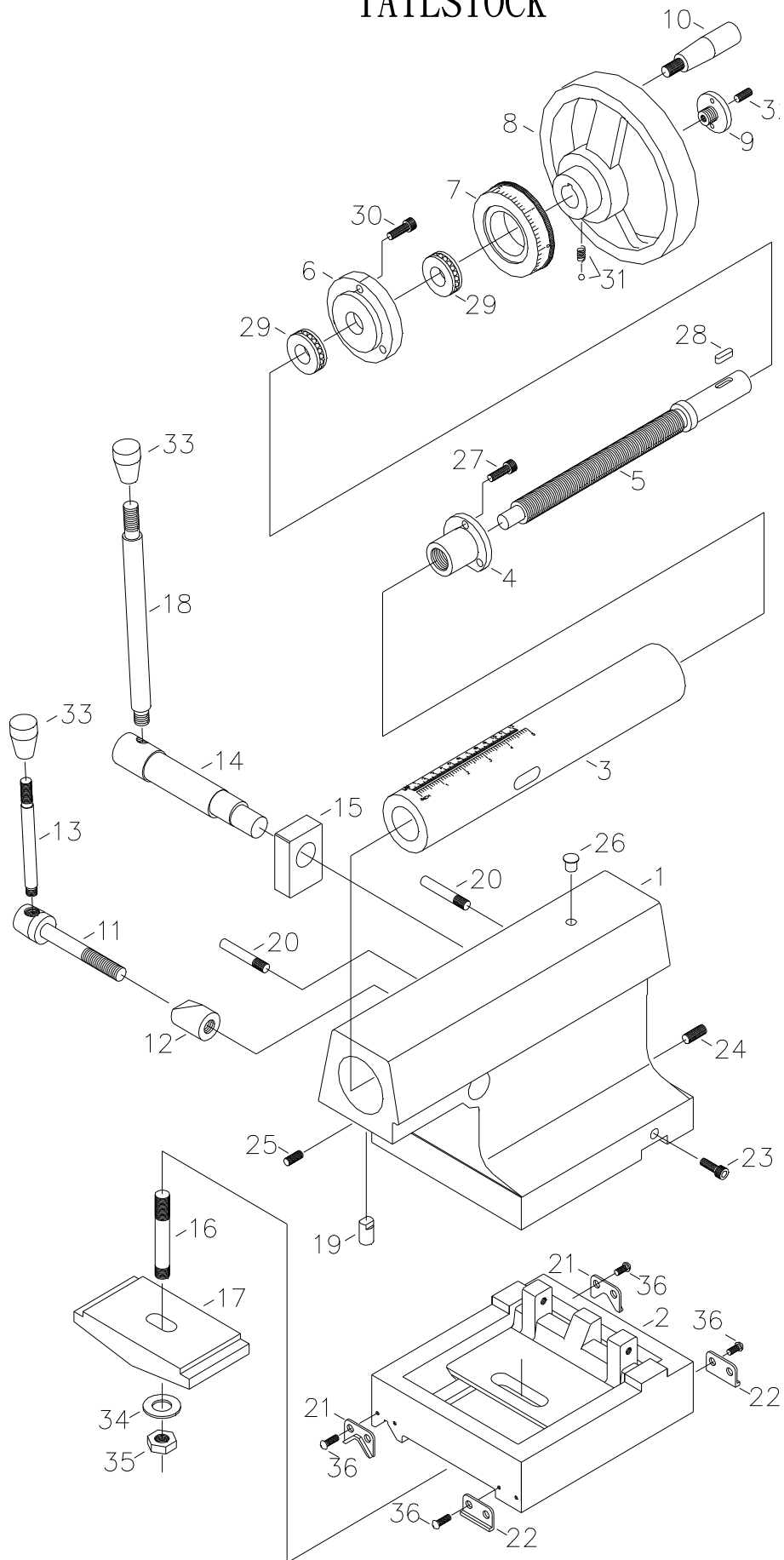
SADDLE & CROSS - SLIDE

REF . NO.	PART NO.	DESCRIPTION	Q' TY
1	38B4001	SADDLE CASTING	1
2	38B4002	CROSS-SLIDE	1
3	38B4003	SCREW	1
4	38B4004	BRACKET	1
5	38B4005	COVER	1
6	38B4006	PULLEY	1
7	38B4007	NUT	1
8	38B4008	WASHER	1
9	38B4009	PULLEY	1
10	38B4010	PLUG	1
11	38B4011	TOOL POST	1
12	38B4012	TOUCH BLOCK	3
13	38B4016	GIB	1
14	38B4014	CLAMP REAR	1
15	38B4014-1	CLAMP REAR	1
16	38B4015	GIB	2
17	38B4018	WIPER	1
18	38B4019	WIPER	2
19	38B4020	WIPER	2
20	38B4021	WATER FRAME	1
21	38B4022	WASHER	2
22	38B4024	BRACKET	1
23	38B4026	CAP SCREW	4
24	38B4027	SPRING PIN	2
25	38B4028	CAP SCREW	6
26	38B4029	BLIP	2
27	38B4030	CAP SCREW	4
28	38B4031	KEY	1
29	38B4032	CAP SCREW	4
30	38B4033	BEARING	3
31	38B4034	CAP SCREW	3
32	38B4035	GEAR BELT	1
33	38B4036	SCREW	1
34	38B4037	WASHER	4
35	38B4038	CAP SCREW	4

SADDLE & CROSS - SLIDE

REF . NO.	PART NO.	DESCRIPTION	Q' TY
36	38B4039	MOTOR	1
37	38B4040	CAP SCREW	4
38	38B4041	WASHER	8
39	38B4042	SCREW	8
40	38B4043	CAP SCREW	8
41	38B4044	SCREW	6
42	38B4045	SCREW	8
43	38B4046	CAP SCREW	4
44	38B4047	CAP SCREW	2
45	38B4048	SCREW	4
46	38B4049	SCREW	6
47	38B4050	CAP SCREW	4
48	38B4051	SPRING PIN	2

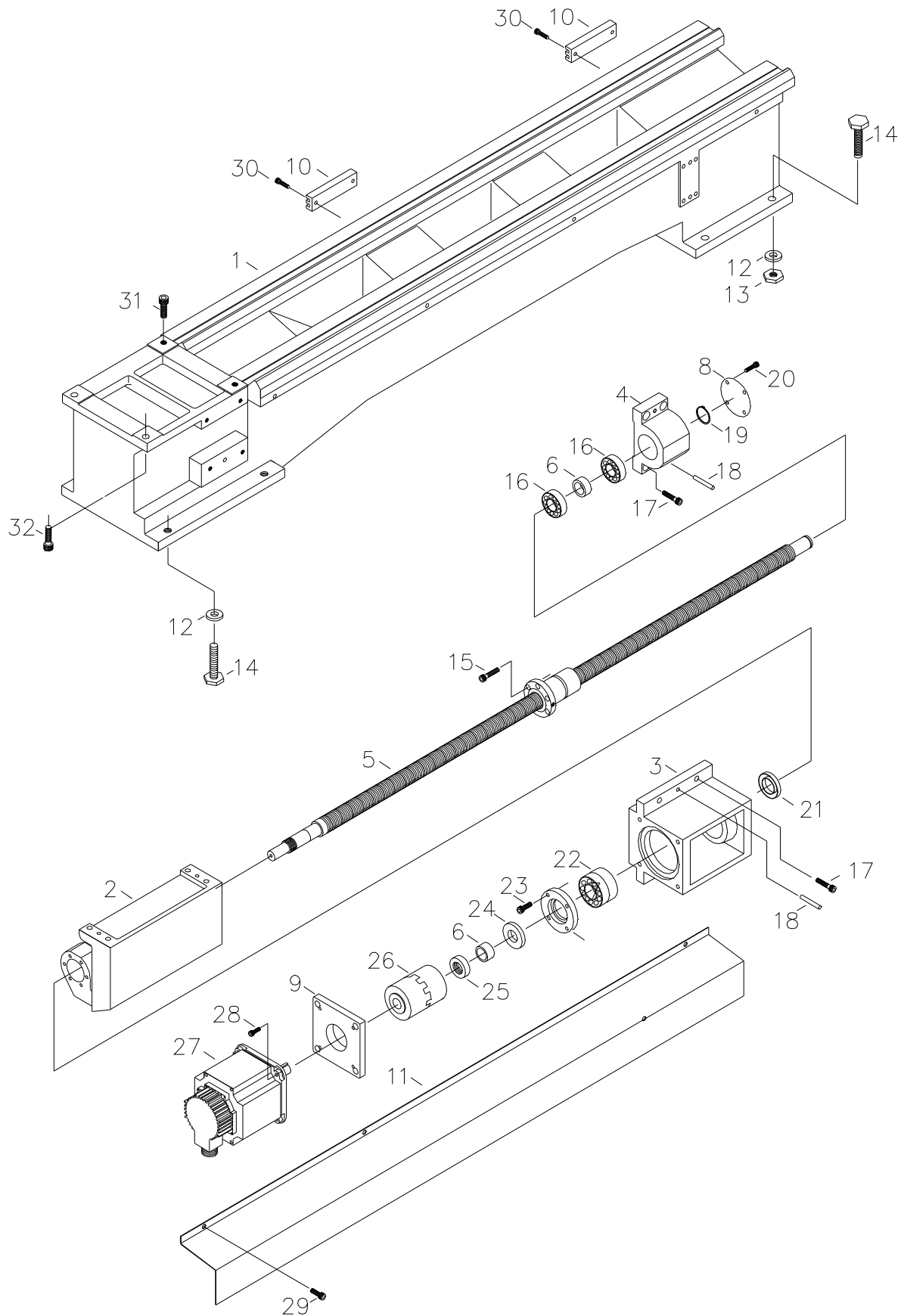
TAILSTOCK



TAILSTOCK

REF . NO.	PART NO.	DESCRIPTION	Q' TY
1	38B5001	TAILSTOCK	1
2	38B5002	BASE	1
3	38B5003	ARREL	1
4	38B5004	NUT	1
5	38B5005	FEED SCREW	1
6	38B5006	BRACKET	1
7	38B5007	INDEX RING	1
8	38B5008	HAND WHEEL	1
9	38B5009	NUT	1
10	38B5010	HANDLE	1
11	38B5011	SHAFT	1
12	38B5012	PAD	1
13	38B5013	LEVER	1
14	38B5014	SHAFT	1
15	38B5015	PIVOT BLOCK	1
16	38B5016	CLAMP BOLT	1
17	38B5017	CLAMP PLATE	1
18	38B5018	LEVER	1
19	38B5019	PAD	1
20	38B5020	SHAFT	2
21	38B5021	WIPER	2
22	38B5022	WIPER	2
23	38B5023	CAP SCREW	2
24	38B5024	SET SCREW	2
25	38B5025	SET SCREW	1
26	38B5026	DIAL	1
27	38B5027	CAP SCREW	3
28	38B5028	KEY	1
29	38B5029	BEARING	2
30	38B5030	CAP SCREW	3
31	38B5031	STEEL BALL & SPRING	1
32	38B5032	SET SCREW	1
33	38B5033	PVC KNOB	2
34	38B5034	WASHER	1
35	38B5035	NUT	1
36	38B5036	SCREW	8

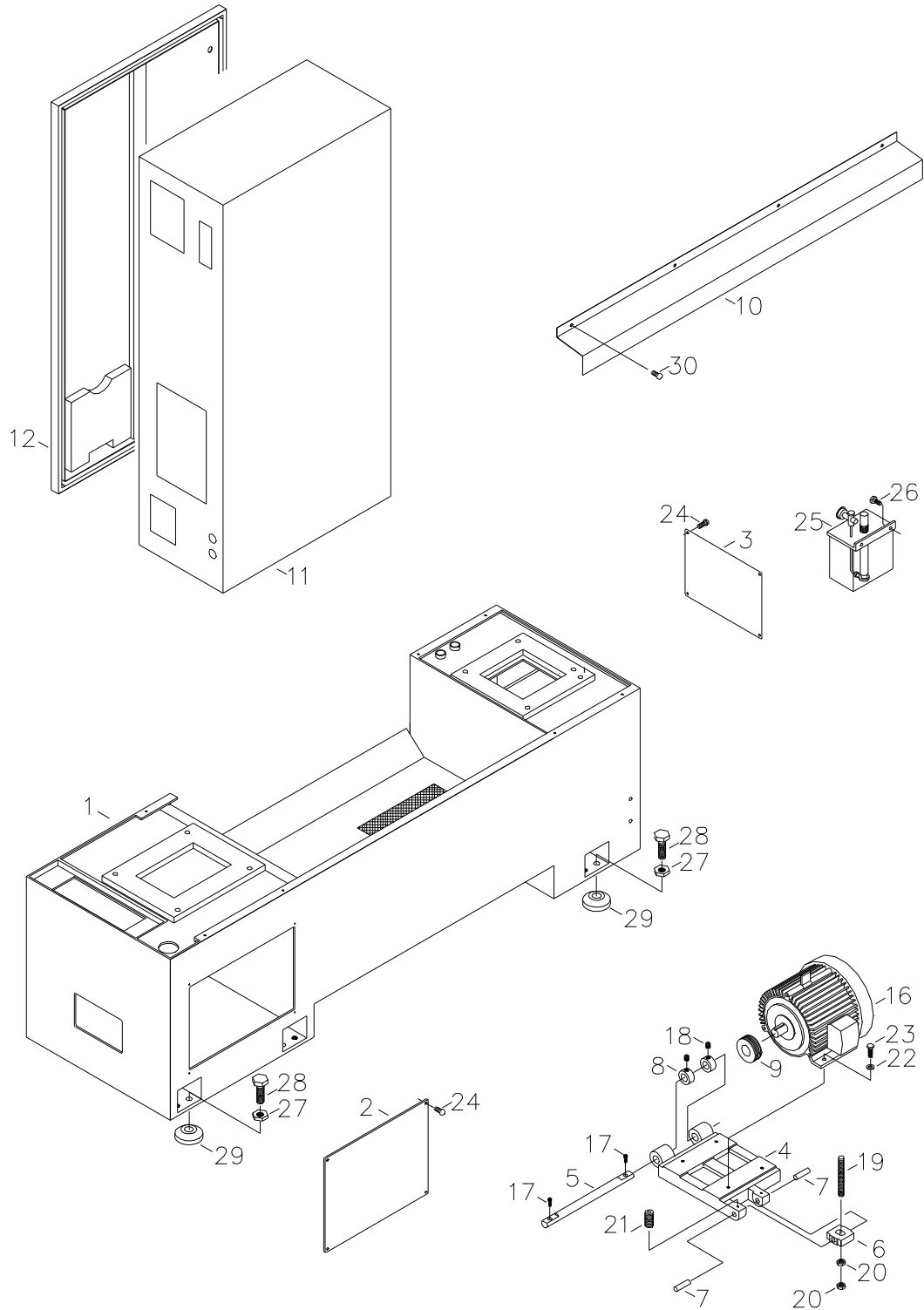
BED RACK LEAD SCREW & SHAFTS



BED RACK LEAD SCREW & SHAFTS

REF . NO.	PART NO.	DESCRIPTION	Q' TY
1	38B6001	BED	1
2	38B6002	CASTING	1
3	38B6003	BRACKET	1
4	38B6004	END BRACKET	1
5	38B6005	LEAD SCREW	1
6	38B6006	COLLAR	1
7	38B6007	COVER	1
8	38B6008	COVER	1
9	38B6009	MOTOR COVER	1
10	38B6010	TOUCH BLOCK ADJUSTING PLATE	2
11	38B6011	COVER	1
12	38B6012	WASHER	8
13	38B6013	NUT	4
14	38B6014	SCREW	8
15	38B6015	CAP SCREW	6
16	38B6016	BEARING	2
17	38B6017	CAP SCREW	4
18	38B6018	PIN	2
19	38B6019	SNAP RING	1
20	38B6020	SCREW	4
21	38B6021	COLLAR	1
22	38B6022	WASHER	2
23	38B6023	CAP SCREW	4
24	38B6024	COLLAR	1
25	38B6025	NUT	1
26	38B6026	POWER LOCK	1
27	38B6027	MOTOR	1
28	38B6028	CAP SCREW	4
29	38B6029	SCREW	4
30	38B6030	CAP SCREW	4
31	38B6031	CAP SCREW	2
32	38B6032	CAP SCREW	2

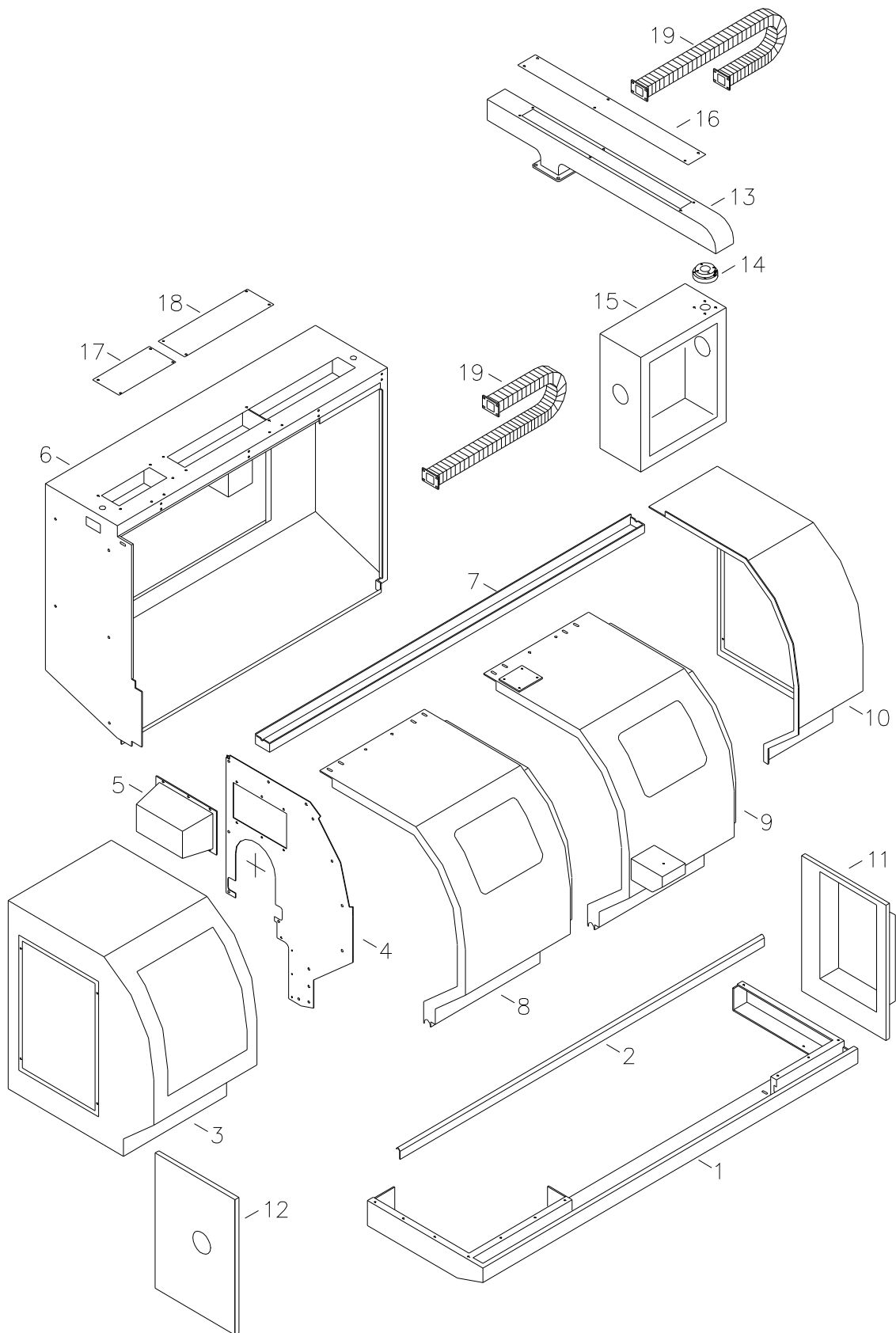
CABINET&PANELS, PUMP SYSTEM



CABINET & PANELS , PUMP SYSTEM

REF . NO.	PART NO.	DESCRIPTION	Q' TY
1	38B7001	PEDESTAL	1
2	38B7002	COVER	1
3	38B7003	COVER	1
4	38B7004	MOTOR PLATE	1
5	38B7005	SHAFT	1
6	38B7006	WASHER	1
7	38B7007	SHAFT	2
8	38B7008	COLLAR	2
9	38B7009	MOTOR PULLEY	1
10	38B7010	COVER	1
11	38B7011	ELECTRIC BOX	1
12	38B7012	ELECTRIC BOX COVER	1
13			
14			
15			
16	38B7016	MOTOR	1
17	38B7017	SCREW	2
18	38B7018	SET SCREW	2
19	38B7019	SCREW	1
20	38B7020	NUT	2
21	38B7021	SCREW	2
22	38B7022	WASHER	4
23	38B7023	CAP SCREW	4
24	38B7024	SCREW	8
25	38B7025	OIL BOX	1
26	38B7026	CAP SCREW	2
27	38B7027	NUT	6
28	38B7028	SCREW	6
29	38B7029	WASHER	6
30	38B7030	SCREW	4

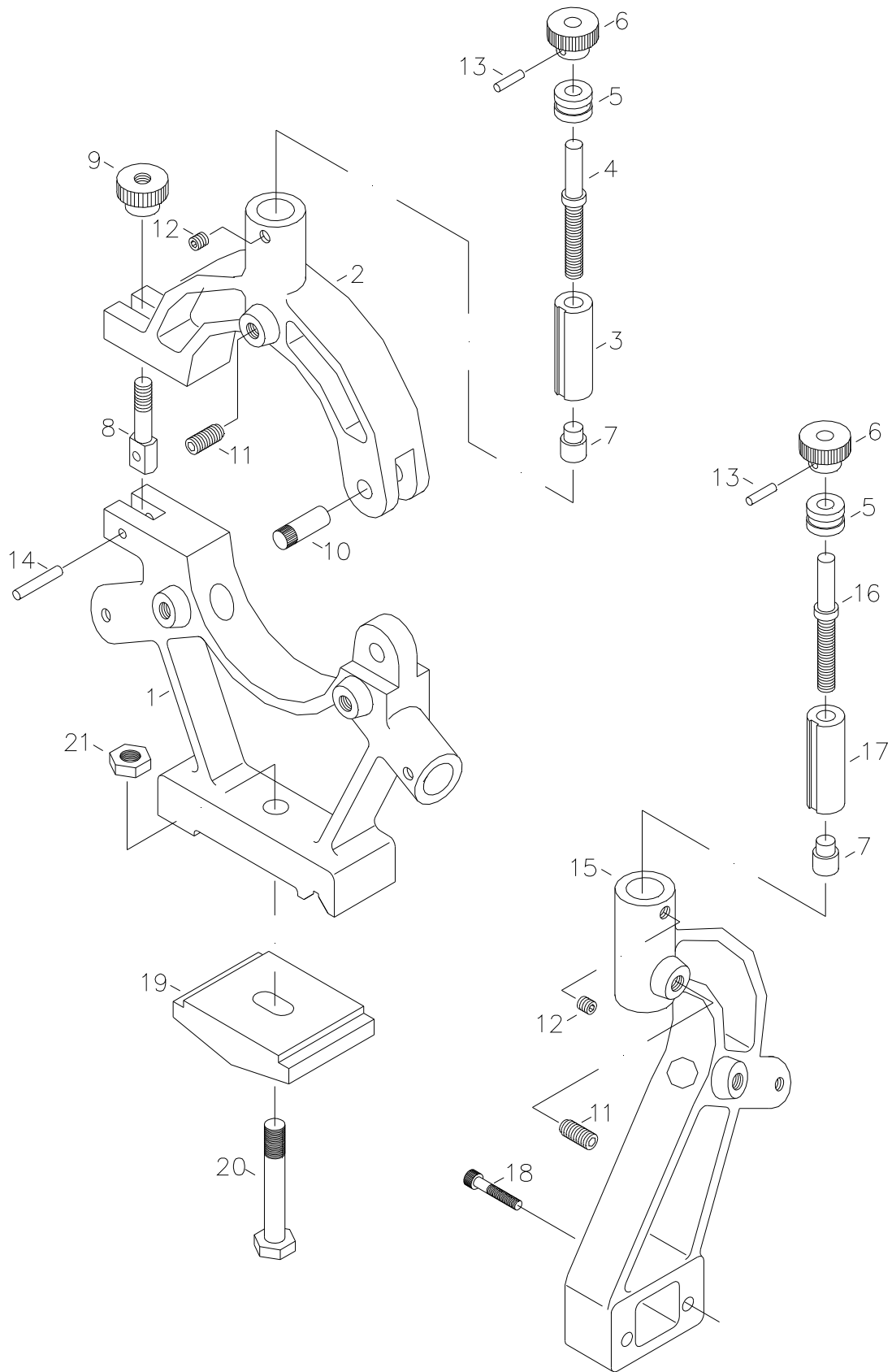
GUARDING DISTRIBUTION DRAWING



GUARING DISTRIBUTION DRAWING

REF . NO.	PART NO.	DESCRIPTION	Q' TY
1	38B7021	CONNECT PEDESTAL	1
2	38B7032	GUIDE WAY SEAT	1
3	38B7033	SPLASH GUARD	1
4	38B7034	SPLASH GUARD	1
5	38B7035	COVER	1
6	38B7036	RIGHT PROTCTION ENCLOSURE	1
7	38B7037	GUIDE WAY SEAT	1
8	38B7038	RIGHT PROTECTION DOOR	1
9	38B7039	LEFT PROTECTION DOOR	1
10	38B7040	LEFT PROTECTION ENCLOSURE	2
11	38B7041	DOOR	1
12	38B7042	DOOR	1
13	38B7043	ALGOL BOX ARM	1
14	38B7044	PLATE	1
15	38B7045	LAGOL BOX	1
16	38B7046	COVER	1
17	38B7047	COVER	1
18	38B7048	COVER	1
19	38B7049	PROTECTION CHAIN	2

STEADY REST AND FOLLOW REST



STEADY REST AND FOLLOW REST

REF . NO.	PART NO.	DESCRIPTION	Q' TY
1	38B9001	CASTING	1
2	38B9002	CASTING	1
3	38B9003	SHAFT	3
4	38B9004	SPLASH GUARD	3
5	38B9005	COLLAR	5
6	38B9006	HANDLE	5
7	38B9007	SHAFT	5
8	38B9008	SCREW	1
9	38B9009	HANDLE	1
10	38B9010	SHAFT	1
11	38B9011	SET SCREW	5
12	38B9012	SET SCREW	5
13	38B9013	PIN	5
14	38B9014	PIN	1
15	38B9015	CASTING	1
16	38B9016	SCREW	2
17	38B9017	SHAFT	2
18	38B9018	CAP SCREW	1
19	38B9019	CAM SHAFT	1
18	38B9018	SCREW	1
19	38B9019	NUT	1