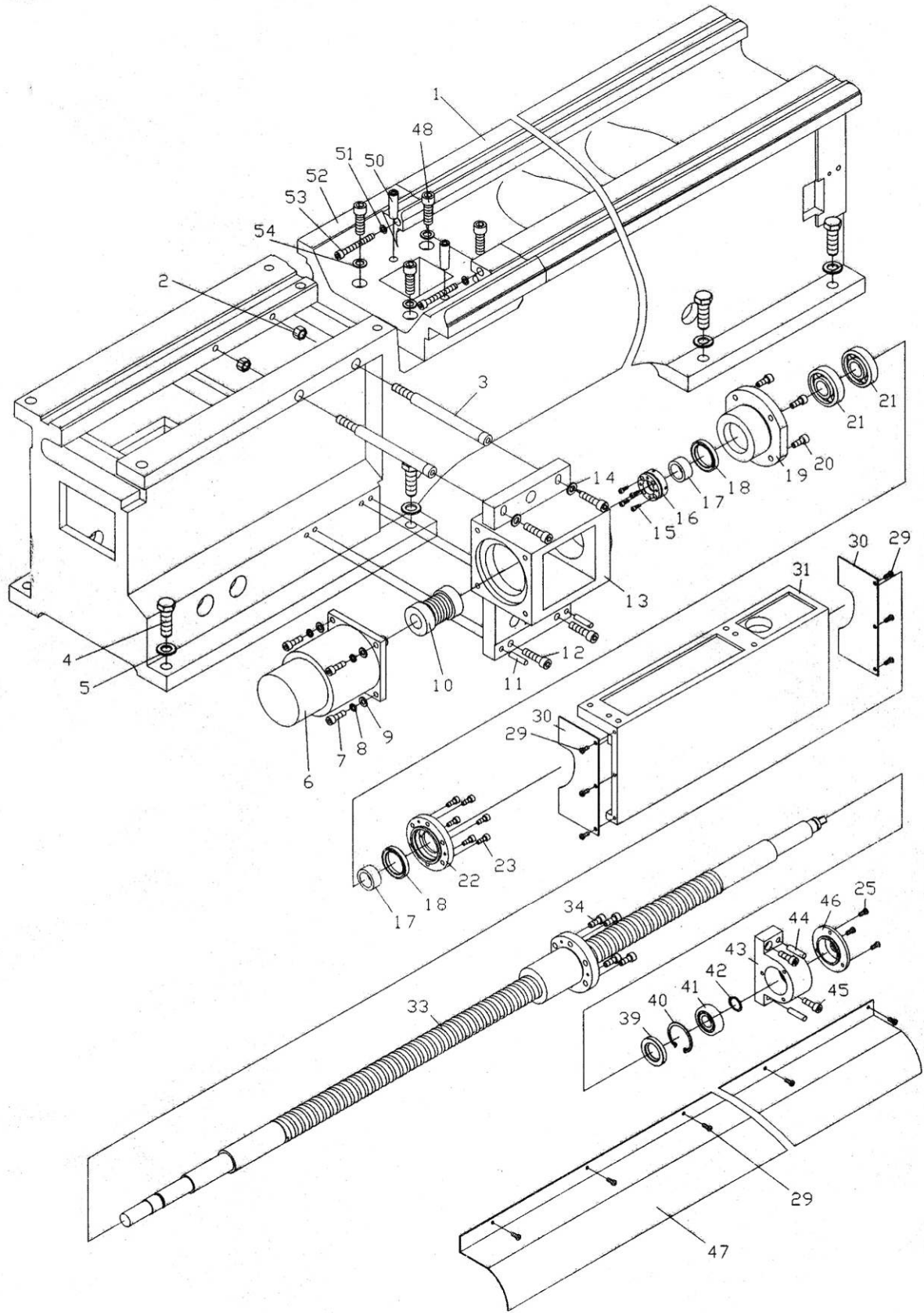


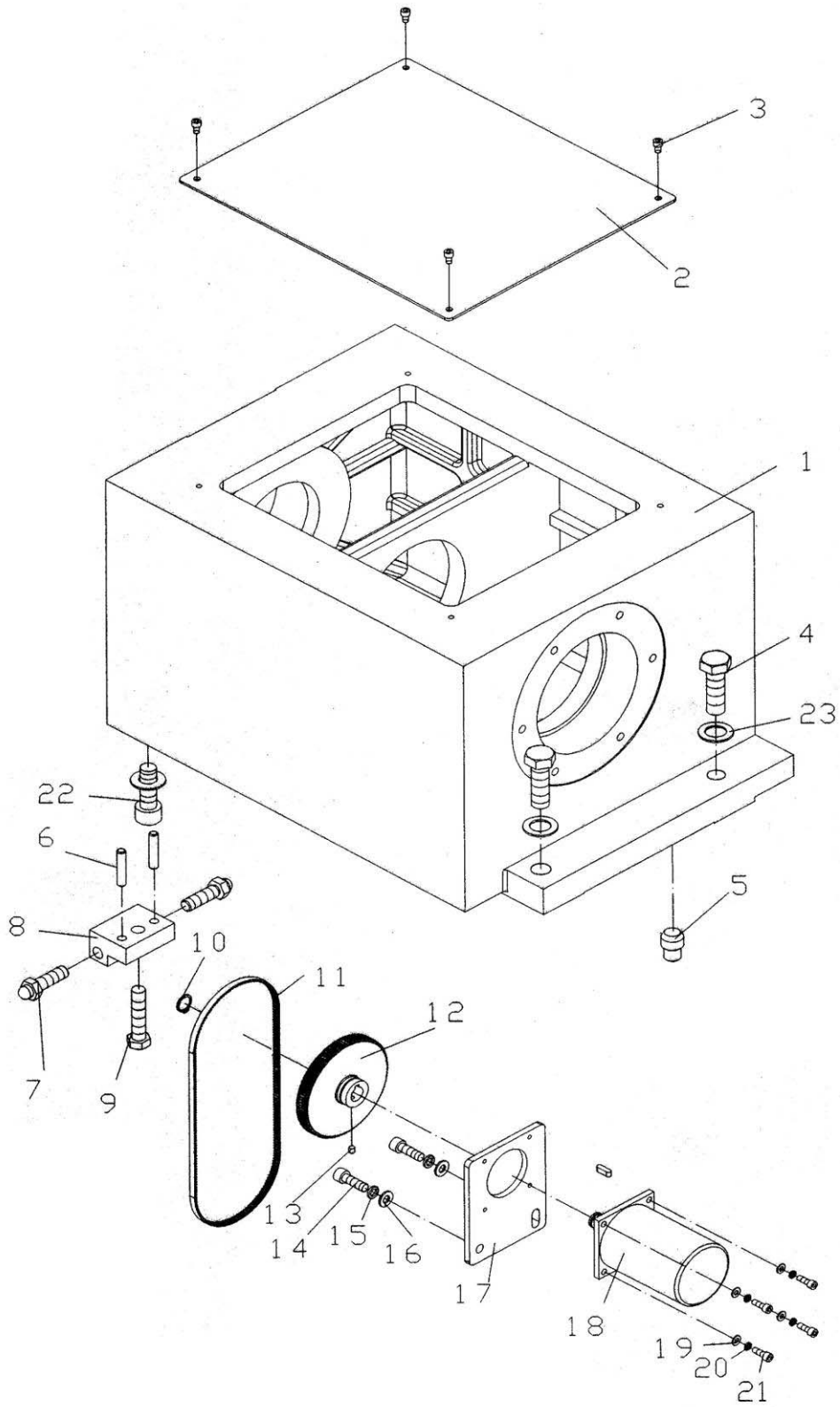
# Bed Assembly



## Bed Assembly

Index No.	Part No.	Description	Size	Qty
1	ZX-01104	Bed		1
2	CL1640ZX-0102	Hex Nut	M12	2
3	ZX-05741	Threaded Tube		2
4	GB5782-M16x50	Hex Cap Bolt	M16x50	8
5	TS-155010	Washer	16mm	8
6	CL1640ZX-0106	Servo Motor	2HP, 98V	1
7	TS-1504061	Socket Head Cap Screw	M8x30	4
8	TS-2361081	Helical Spring Lock Washer	8mm	4
9	TS-1550061	Washer	8mm	4
10	CL1640ZX-0110	Elastic Coupling	DML02Y22Z/Y22Z	1
11	CL1640ZX-0111	Pin	8x35mm	2
12	TS-1505061	Socket Head Cap Screw	M10x40	4
13	CL1640ZX-0113	Bracket		1
14	TS-1550071	Washer	10mm	4
15	TS-1501041	Socket Head Cap Screw	M4x12	4
16	CL1640ZX-0116	Lock Nut	M24x1.5	1
17	CL1640ZX-0117	Spacer		2
18	CL1640ZX-0118	Oil Seal	35x51x8mm	2
19	CL1640ZX-0119	Bearing Housing		1
20	TS-1504041	Socket Head Cap Screw	M8x20	4
21	CL1640ZX-0121	Bearing	25x62x34mm	2
22	CL1640ZX-0122	Flange		4
23	TS-1503041	Socket Head Cap Screw	M6x16	6
29	GB818-M5x10	Cross Recessed Pan Head Screw	M5x10	16
30	CL1640ZX-0130	Side Cover		2
31	CL1640ZX-0131	Middle Bracket		1
33	CL1640ZX-0133	Ball Screw	1188x1710(1000)	1
34	TS-1504041	Hex Socket Cap Screw	M8x20	6
39	CL1640ZX-0139	O-Ring	28x47x7	1
40	GB893.1-47	Retaining Ring	47mm	1
41	CL1640ZX-0141	Bearing	20x47x14	1
42	GB894.1-20	Retaining Ring	20mm	1
43	CL1640ZX-0143	Back Bracket		1
44	CL1640ZX-0144	Pin	8x35mm	2
45	TS-1504051	Hex Socket Cap Screw	M8x25	2
46	CL1640ZX-0146	Back Cover		1
47	CL1640ZX-0147	Ball Screw Housing Plate (1000)		1
48	CL1640ZX-0148	Hex Socket Cap Screw	M12x55	4
50	CL1640ZX-0150	Pin	12x70	2
51	TS-1550071	Washer	10mm	2
52	ZX-01112	Saddle		1
53	CL1640ZX-0153	Hex Cap Screw	M10x55	2
54	CL1640ZX-0154	Washer	12mm	4

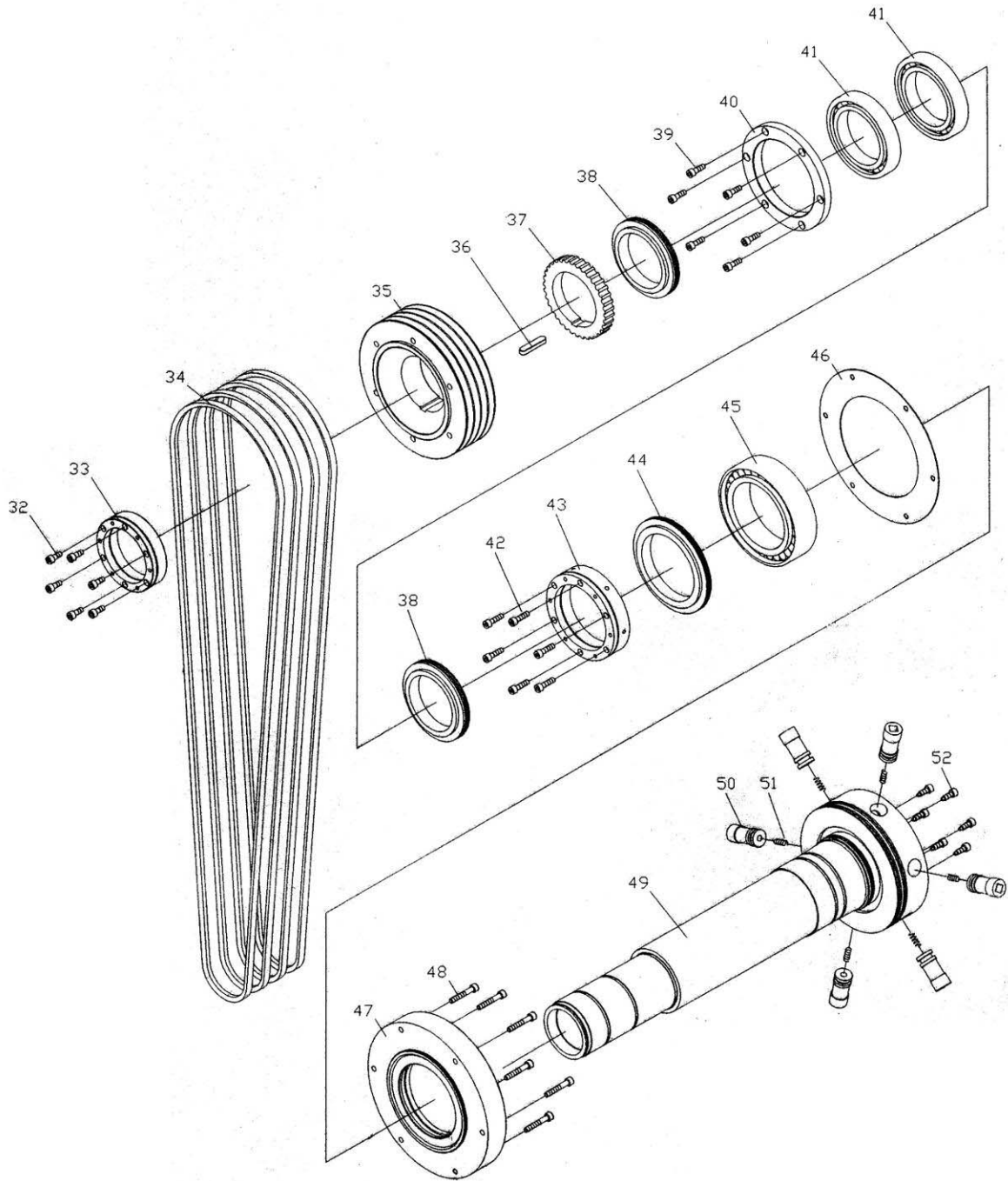
# Headstock Assembly I



## Headstock Assembly I

Index No.	Part No.	Description	Size	Qty
1	TS-1504041	Headstock Casting		1
2	CL1640ZX-0202	Headstock Cover		1
3	TS-1503021	Hex Socket Cap Screw	M6x10	4
4	CL1640ZX-0204	Hex Cap Bolt	M16x55	2
5	ZX-02736C	Positioning Pin		1
6	CL1640ZX-0206	Pin	8x40	2
7	ZX-02744	Adjusting Screw		2
8	ZX-02124	Adjusting Block		1
9	CL1640ZX-0209	Hex Cap Bolt	M12x50	1
10	GB894.1-15	Retaining Ring	15mm	1
11	CL1640ZX-0211	Synchronous Belt	HTDSM920	1
12	CL1640ZX-0212	Synchronous Pulley		1
13	TS-1522021	Socket Set Screw	M5x8	1
14	TS-1504051	Socket Head Cap Screw	M8x25	2
15	TS-2361081	Helical Spring Lock Washer	8mm	2
16	TS-1550061	Plain Washer	8mm	2
17	CL1640ZX-0217	Supporting Plate		1
18	CL1640ZX-0218	Encoder		1
19	TS-1550031	Plain Washer	5mm	4
20	TS-2361051	Helical Spring Lock Washer	5mm	4
21	CL1640ZX-0221	Socket Head Cap Screw	M5x14	4
22	CL1640ZX-0222	Socket Head Cap Screw	M16x50	2
23	CL1640ZX-0223	Plain Washer	A16	4

# Headstock Assembly II



## Headstock Assembly II

Index No.	Part No.	Description	Size	Qty
32	CL1640ZX-0332	Socket Head Cap Screw	M8x20	6
33	CL1640ZX-0333	Lock Nut		1
34	VB-A86	V Belt	A86	4
35	CL1640ZX-0335	Pulley		1
36	CL1640ZX-0336	Key	12x8x56mm	1
37	CL1640ZX-0337	Synchronous Pulley		1
38	CL1640ZX-0338	Spacer		2
39	TS-1504051	Socket Head Cap Screw	M8x25	6
40	CL1640ZX-0340	Back Flange		1
41	CL1640ZX-0341	Bearing	7020ATYDBC8P4	2
42	TS-1504061	Socket Head Cap Screw	M8x30	6
43	CL1640ZX-0343	Lock Nut		1
44	CL1640ZX-0344	Spacer		1
45	CL1640ZX-0345	Bearing	120x180x46mm	1
46	CL1640ZX-0346	Gasket		1
47	CL1640ZX-0347	Front Flange		1
48	TS-1504101	Hex Socket Cap Screw	M8x50	6
49	CL1640ZX-0349	Spindle		1
50	ZX-02701	Cam Lock		6
51	ZX-H158	Spring	1x8x25mm	6
52	ZX-02703	Cam Positioning Screw		6

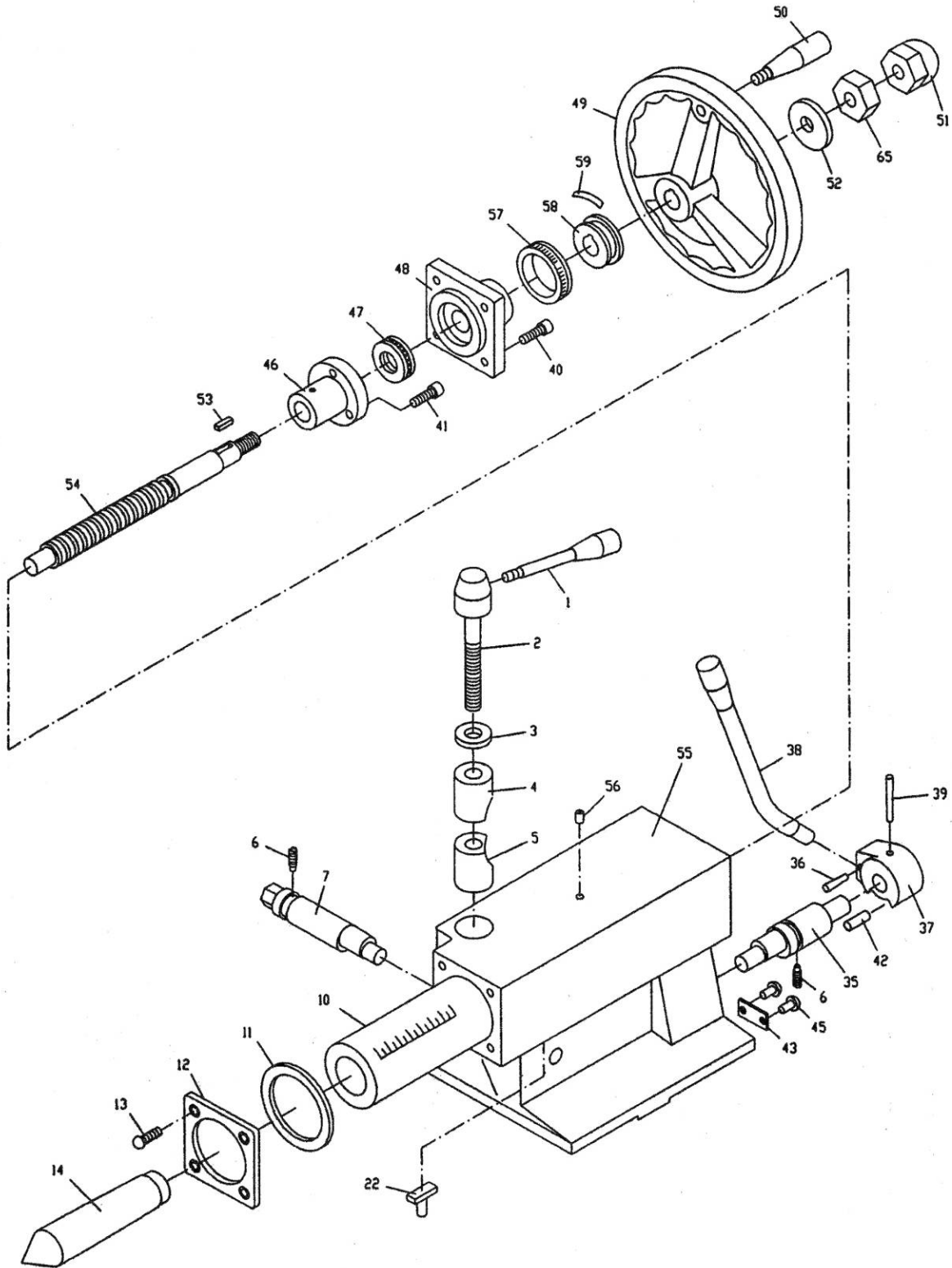


## Stand Assembly

Index No.	Part No.	Description	Size	Qty
3	CL1640ZX-0403	Pulley		1
4	CL1640ZX-0404	Key	10x8x70mm	1
5	CL1640ZX-0405	Motor	230V, 10HP 3PH	1
8	GB5782-M10x40	Hex Cap Bolt	M10x40	4
9	TS-2361101	Helical Spring Lock Washer	10mm	4
10	TS-1550071	Washer	10mm	4
11	TS-2311201	Hex Nut	M20	6
12	TS-1550111	Washer	20mm	6
13	ZX-01122A	Motor Mounting Plate		1
14	ZX-01702	Bolt		3
15	ZX-01725	Bed Stand Back Cover		1
16	TS-1481061	Hex Cap Screw	M5x25	4
17	TS-1550031	Washer	5mm	4
18	CL1640ZX-0418	Coolant Pump	230V, 1/8HP	1
19	CL1640ZX-0419	Pump Support		1
20	TS-1503051	Socket Head Cap Screw	M6x20	2
22	ZX-S15A	Socket Head Cap Screw	M5x20	1
23	ZX-01705	Water Leaking Chip Guard		1
24	CL1640ZX-0424	Bed Stand	(1000)	1
25	TS-1534052	Phillips Pan Head Machine Screw	M6x14	12
26	ZX-01734	Cover		1
27	ZX-01715	Leveling Pad		6
28	ZX-01712	Hex Cap Bolt	M24-2x135	6
29	TS-1540231	Hex Nut	M24-2	6
30	CL1640ZX-0430	Cover		1
31	ZX-S82	Hex Nut	M5	2
32	CL1640ZX-0432	Nozzle	Q/J1	1
33	CL1640ZX-0433	Coolant Tap	G3/8"	1
34	ZX-01729	Flow Pipe		1
35	ZX-01728	Fitting		1
36	CL1640ZX-0436	Coolant Hose	ID1/2"	1
38	ZX-01727	Hose Clip		1
39	GB6170-M6	Hex Nut	M6	1
40	CL1640ZX-0440	Coolant Level Indicator		1
41	CL1640ZX-0441	Drain Plug	Z1/4	2
42	TS-1525031	Socket Set Screw	M10x16	1
43	CL1640ZX-0443	Lubricating Pump Assembly (not shown)	DHB-6, 2L	1



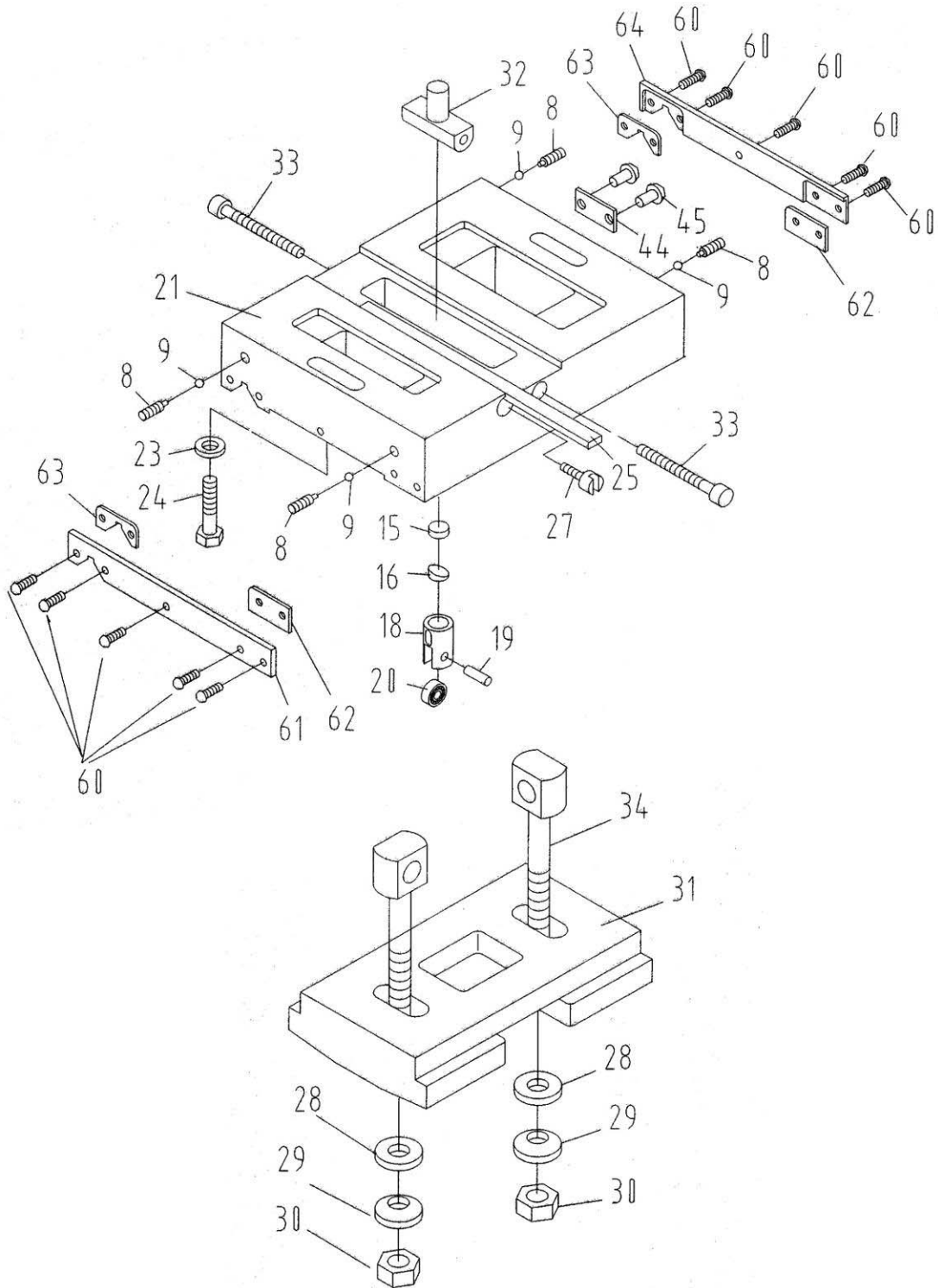
# Tailstock Assembly I



## Tailstock Assembly I

Index No.	Part No.	Description	Size	Qty
1	ZX-03711	Handle		1
2	ZX-03717	Lever Support		1
3	ZX-03718	Washer		1
4	ZX-03719	Clamping Block		1
5	ZX-03720	Clamping Block (Threaded)		1
6	ZX-T06	Cylindrical End Set Screw	M8x14	2
7	ZX-03712	Eccentric Shaft		1
10	ZX-03701B	Center Sleeve		1
11	ZX-T11	Ring Seal	75x2.65mm	1
12	ZX-03703	Front Cover		1
13	ZX-T13	Cross Recessed Countersunk Head Screw	M5x10	4
14	ZX-T14B	Center Morse	No. 4	1
22	ZX-03702	Positioning Block		1
35	CL1640ZX-0535	Eccentric Shaft		1
36	ZX-T36	Taper Pin	6x32mm	1
37	ZX-03104	Lever Sleeve		1
38	ZX-03709	Lock Handle		1
39	ZX-A28	Taper Pin	6x55mm	1
40	TS-1504041	Hex Socket Cap Screw	M8x20	4
41	TS-1515031	Hex Socket Cap Screw	M8x22	3
42	ZX-T42	Pin	10n6x22mm	1
43	ZX-03302	Sign Plate		1
45	ZX-T45	Nail	3x8mm	4
46	ZX-03105	Nut		1
47	BB-51205	Thrust Ball Bearing	25x47x15mm	1
48	ZX-03104	Sleeve		1
49	ZX-03103	Hand Wheel		1
50	CL1640ZX-0550	Handle	M10x80	1
51	ZX-T51	Acorn Nut	M16	1
52	TS-155010	Flat Washer	16mm	1
53	ZX-T53	Key	6x40mm	1
54	ZX-03710B	Lead Screw		1
55	ZX-03101B	Tailstock Casting		1
56	ZX-T56	Oil Cup	8mm	1
57	ZX-03708	Dial		1
58	ZX-03706	Sleeve		1
59	ZX-03711C	Spring Leaf		1
65	TS-2310162	Nut	M16	1

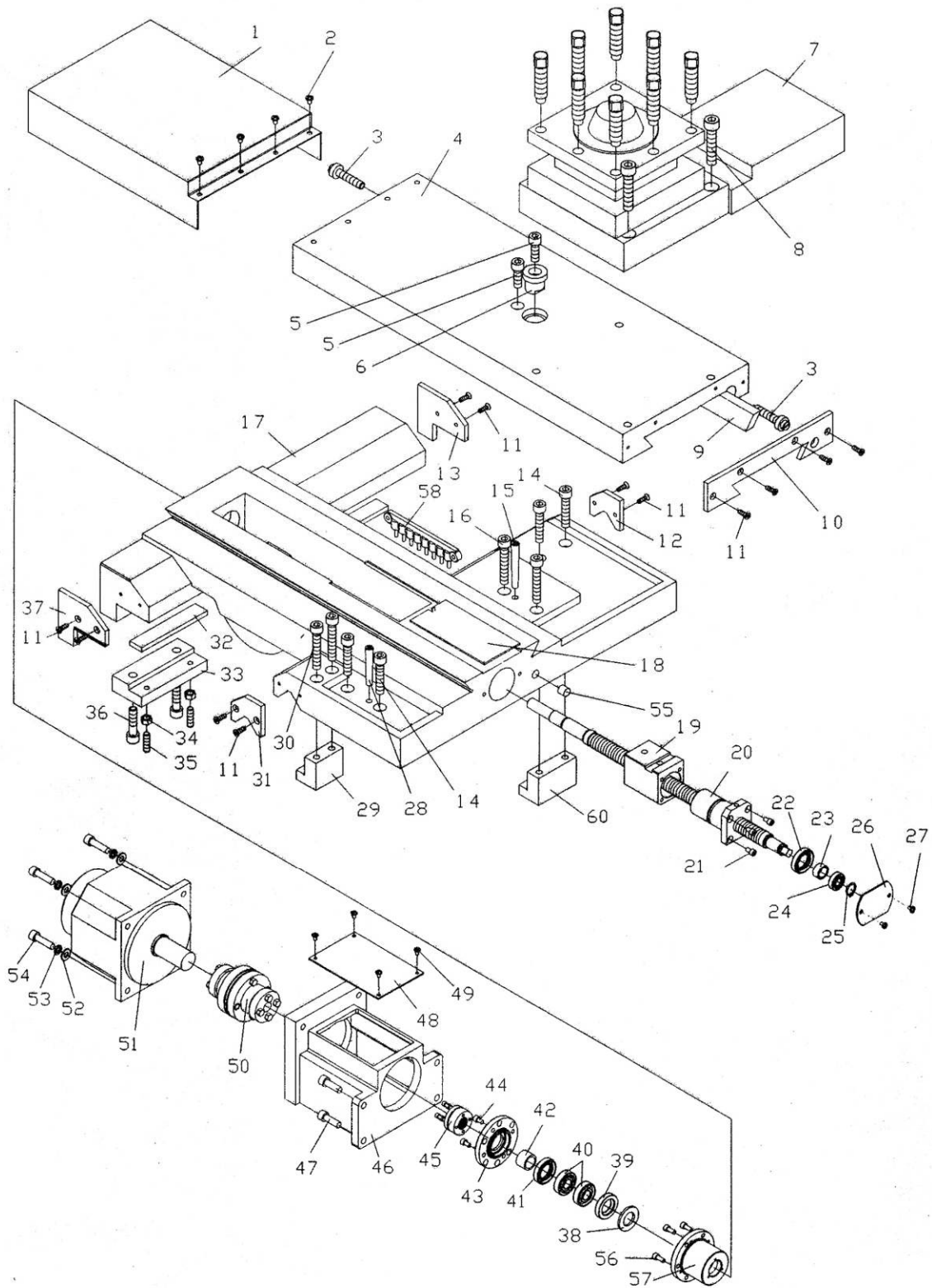
# Tailstock Assembly II



## Tailstock Assembly II

Index No.	Part No.	Description	Size	Qty
8	ZX-T8	Flat End Set Screw	M6x18	4
9	SB-4MM	Steel Ball	4mm	4
15	CL1640ZX-0615	Rubber Washer		4
16	ZX-03713	Pressing Block		4
18	ZX-03714	Bearing Support		4
19	ZX-03715	Small Axle		4
20	ZX-T20	Ball Bearing	7x19x6mm	4
21	ZX-03102B	Sliding Base		1
23	5051911	Flat Washer	10mm	2
24	TS-1491121	Hex Cap Screw	M10x70	2
25	ZX-03704	Gib		1
27	ZX-03718C	Adjusting Screw		2
28	ZX-T28	Taper Washer	16mm	2
29	ZX-T29	Spherical Washer	16mm	2
30	TS-2310162	Hex Nut	M16	2
31	ZX-03106	Clamping Bracket		1
32	ZX-03105C	Nut		1
33	ZX-T33	Hex Socket Cap Screw	M8x85	2
34	ZX-03705B	Pulling Rod		2
44	ZX-03303	Sign Plate		1
45	ZX-T45	Rivet	3x8mm	4
60	ZX-T60	Half Round Head Screw	M5x12	10
61	ZX-03721	Plate		1
62	ZX-03502	Wipe Plate		2
63	ZX-03503	Wipe Plate		2
64	ZX-03716	Plate		1
	ZX-TSA16	Tailstock Assembly 16" (includes index # 1-13, 15-65)		1

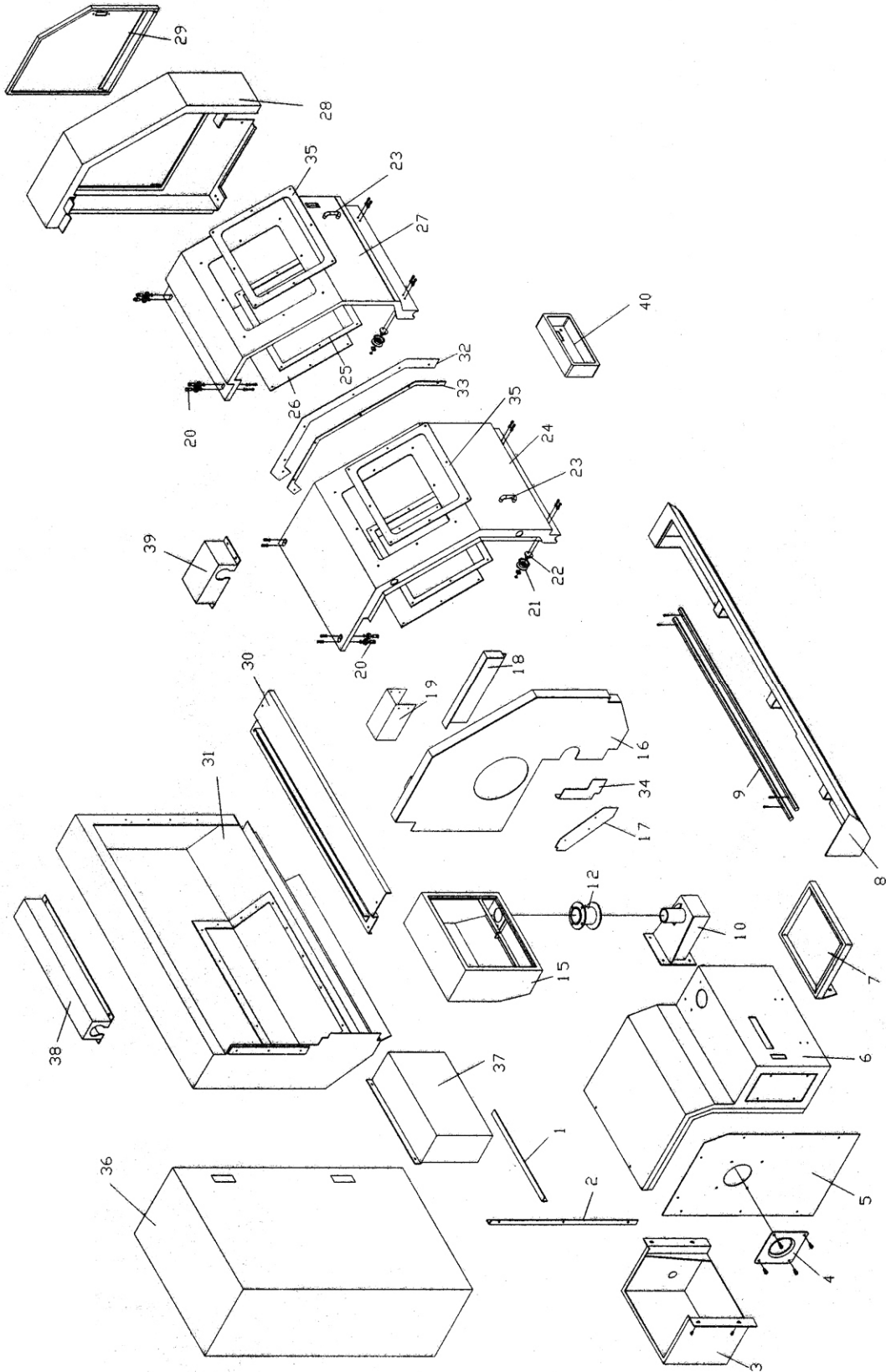
# Carriage Assembly



## Carriage Assembly

Index No.	Part No.	Description	Size	Qty
1	CL1640ZX-0701	Splash Guard		1
2	CL1640ZX-0702	Phillips Pan Head Machine Screw	M5x8	4
3	CL1640ZX-0703	Bolt		2
4	CL1640ZX-0704	Cross Slide		1
5	CL1640ZX-0705	Hex Socket Cap Screw	M10x28	2
6	CL1640ZX-0706	Sleeve		1
7	CL1640ZX-0707	Electric Tool Post	LD4	1
8	TS-1504061	Socket Head Cap Screw	M8x30	4
9	CL1640ZX-0709	Gib		1
10	CL1640ZX-0710	Wiper		1
11	TS-1533052	Phillips Pan Head Machine Screw	M5x16	12
12	CL1640ZX-0712	Wiper		1
13	CL1640ZX-0713	Wiper		1
14	TS-1505071	Socket Head Cap Screw	M10x45	4
15	CL1640ZX-0715	Taper Pin	8x70mm	1
16	TS-2239551	Socket Head Cap Screw	M10x55	2
17	CL1640ZX-0717	Saddle		1
18	CL1640ZX-0718	Chip Guard		1
19	CL1640ZX-0719	Bracket		1
20	CL1640ZX-0720	Ball Screw Pair	354/526	1
21	TS-1502031	Socket Head Cap Screw	M5x12	4
22	CL1640ZX-0722	Oil Seal	B-28x47x7mm	1
23	CL1640ZX-0723	Inner Spacer		1
24	CL1640ZX-0724	Bearing	20x47x14mm	1
25	GB894.1-20	Retaining Ring	20mm	1
26	CL1640ZX-0726	Cover		1
27	TS-1533032	Phillips Pan Head Machine Screw	M5x10	2
28	CL1640ZX-0728	Taper Pin	8x60mm	1
29	CL1640ZX-0729	Clamping Plate		1
30	TS-1505101	Socket Head Cap Screw	M10x60	2
31	CL1640ZX-0731	Wiper		1
32	ZX-04113	Lining Plate		2
33	ZX-04724	Clamping Block		2
34	CL1640ZX-0734	Hex Flat Nut	M8	4
35	CL1640ZX-0735	Hex Socket Set Screw	M8x30	4
36	TS-1505061	Socket Head Cap Screw	M10x40	4
37	CL1640ZX-0737	Wiper		1
38	CL1640ZX-0738	Washer		1
39	CL1640ZX-0739	Oil Seal	B-25x40x7mm	1
40	CL1640ZX-0740	Ball Screw Bearing	20x47x14	2
41	CL1640ZX-0741	Oil Seal	B-28x40x7mm	1
42	CL1640ZX-0742	Inner Spacer	B-28x47x7	1
43	CL1640ZX-0743	Clamping Ring		1
44	CL1640ZX-0744	Hex Socket Cap Screw	M6x14	4
45	CL1640ZX-0745	Lock Nut	M20x1.5	1
46	CL1640ZX-0746	Supporting Seat		1
47	TS-1504061	Socket Head Cap Screw	M8x30	4
48	CL1640ZX-0748	Cover		1
49	TS-2284082	Phillips Pan Head Machine Screw	M4x8	4
50	CL1640ZX-0750	Coupling		1
51	CL1640ZX-0751	Servo Motor	105V/4/3HP	1
52	TS-1550061	Plain Washer	8mm	4
53	TS-2361081	Helical Spring Lock Washer	8mm	4
54	TS-1504061	Socket Head Cap Screw	M8x30	4
55	Q56-1	Plug	12K6	1
56	TS-1503051	Socket Head Cap Screw	M6x20	6
57	CL1640ZX-0757	Bearing Support		1
58	CL1640ZX-0758	Oil Distributor		1
60	CL1640ZX-0760	Clamping Plate		1

# Protective Housing



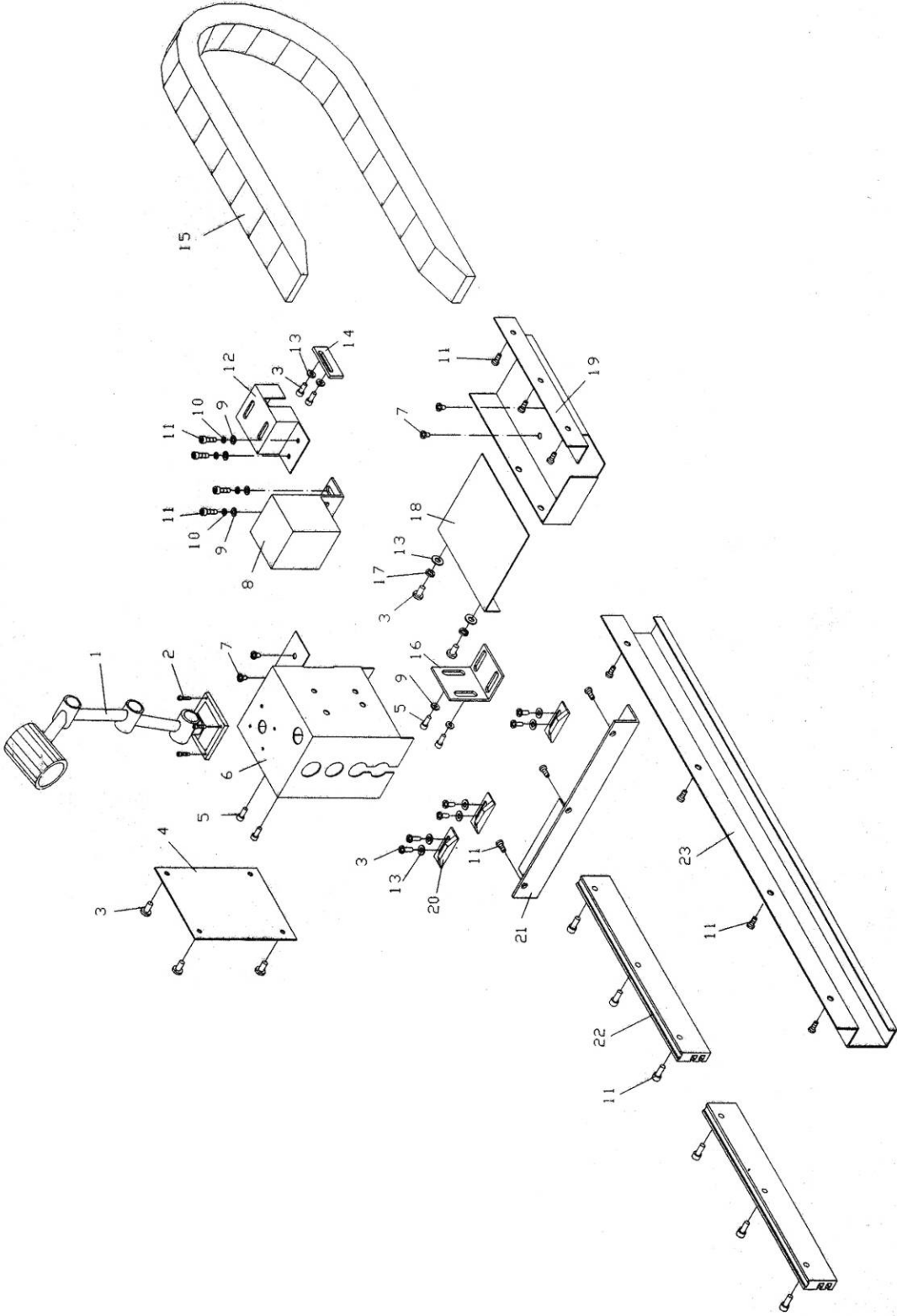
## Protective Housing

Index No.	Part No.	Description	Size	Qty
1	CL1640ZX-0801	Angle Iron		1
	TS-1503021	Socket Head Cap Screw	M6x10	2
2	CL1640ZX-0802	Angle Iron		1
	TS-1503021	Socket Head Cap Screw	M6x10	3
3	CL1640ZX-0803	Cover		1
	TS-1503021	Socket Head Cap Screw	M6x10	4
4	CL1640ZX-0804	Cover		1
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	4
5	CL1640ZX-0805	Rear Cover		1
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	8
6	CL1640ZX-0806	Front Cover		1
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	9
	TS-1503021	Socket Head Cap Screw	M6x10	2
7	CL1640ZX-0807	Tray		1
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	4
8	CL1640ZX-0808	Guide Way Support		1
	TS-1503021	Socket Head Cap Screw	M6x10	6
	CL1640ZX-AC1	Air Coupling, Male	3/8"NPT	1
	CL1640ZX-AC2	Air Coupling Socket, Quick Connect		1
9	CL1640ZX-0809	Lower Guide Way		2
	TS-1502061	Socket Head Cap Screw	M5x25	4
10	CL1640ZX-0810	Support		1
	TS-1490021	Hex Cap Screw	M8x15	4
	CL1640ZX-0810A	Block		1
12	CL1640ZX-0812	Connecting Disc		1
	CL1640ZX-0812A	Connecting Pipe		1
	CL1640ZX-0812B	Flange		1
15	CL1640ZX-0815	Control Box		1
	TS-1490031	Hex Cap Screw	M8x20	4
	TS-1550061	Plain Washer	8mm	8
	CL1640ZX-0815A	Hex Thin Nut	M8	4
16	CL1640ZX-0816	Cover		1
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	17
17	CL1640ZX-0817	Splash Guard		1
18	CL1640ZX-0818	Cover		1
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	2
19	CL1640ZX-0819	Motor Cover		1
	TS-1532032	Phillips Pan Head Machine Screw	Zinc M4x10	4
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	4
20	CL1640ZX-0820	Shaft		8
	CL1640ZX-0820A	Bearing	12x28x8	8
	GB894.1-12	Retaining Ring	12mm	8
	TS-1503041	Socket Head Cap Screw	M6x16	8
21	CL1640ZX-0821	Pulley Set		4
	GB894.1-28	Retaining Ring	28mm	4
22	CL1640ZX-0822	Small Axle		4
	TS-1503011	Socket Head Cap Screw	M6x8	8
	TS-2361061	Helical Spring Lock Washer	6mm	8
	TS-1550041	Plain Washer	6mm	8
	GB894.1-12	Retaining Ring	12mm	4
23	CL1640ZX-0823	Handle	A=117	2
24	CL1640ZX-0824	Left Sliding Door		1
	CL1640ZX-0824A	Hex Socket Asterisk Pan Head Screw	M6x18	8
	TS-1550041	Plain Washer	6mm	8
	CL1640ZX-0824B	Hex Thin Nut	M6	8
	CL1640ZX-0824C	Support		2
25	CL1640ZX-0825	Rubber Gasket		2
26	CL1640ZX-0826	Glass		2



Index No.	Part No.	Description	Size	Qty
27	CL1640ZX-0827	Right Sliding Door		1
	CL1640ZX-0824A	Hex Socket Asterisk Pan Head Screw	M6x18	8
	TS-1550041	Plain Washer	6mm	8
	CL1640ZX-0824B	Hex Thin Nut	M6	8
	CL1640ZX-0824C	Support		2
28	CL1640ZX-0828	Right Cover		1
	TS-1503021	Socket Head Cap Screw	M6x10	11
	CL1640ZX-0828A	Door Shaft		1
	CL1640ZX-0828B	Door Shaft		1
	CL1640ZX-0828C	Sleeve		2
29	CL1640ZX-0829	Door		1
	CL1640ZX-0829A	Lock	MS304-1	1
30	CL1640ZX-0830	Upper Guide Way		1
	TS-1503021	Socket Head Cap Screw	M6x10	6
31	CL1640ZX-0831	Rear Cover		1
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	5
32	CL1640ZX-0832	Rubber Plate		1
33	CL1640ZX-0833	Clamping Plate		1
	CL1640ZX-0804A	Hex Socket Asterisk Pan Head Screw	Zinc M6x10	6
34	CL1640ZX-0834	Cover		1
35	CL1640ZX-0835	Plate		2
36	CL1640ZX-0836	Electric Cabinet		1
37	CL1640ZX-0837	Cover		1
38	CL1640ZX-0838	Line Groove		1
39	CL1640ZX-0839	Bracket		1
40	CL1640ZX-0840	Box		1

# Electrical Assembly

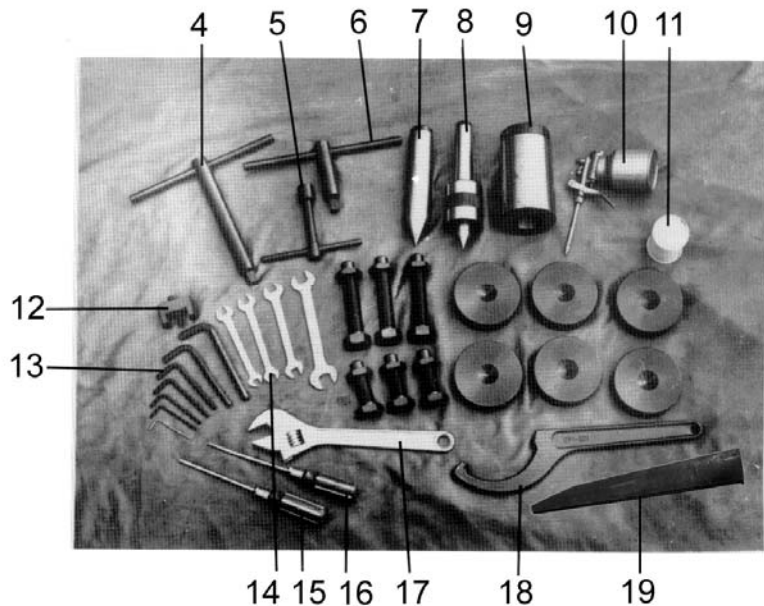
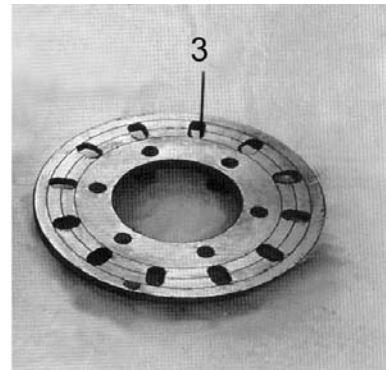


## Electrical Assembly

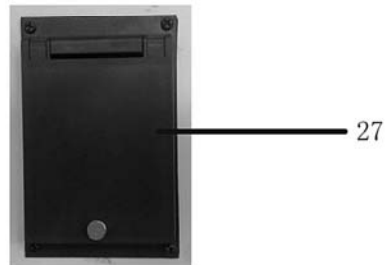
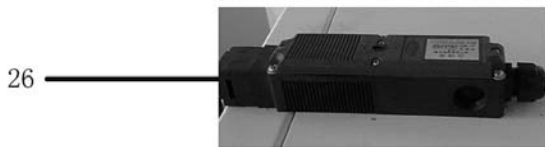
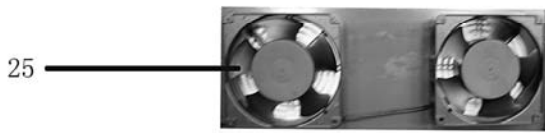
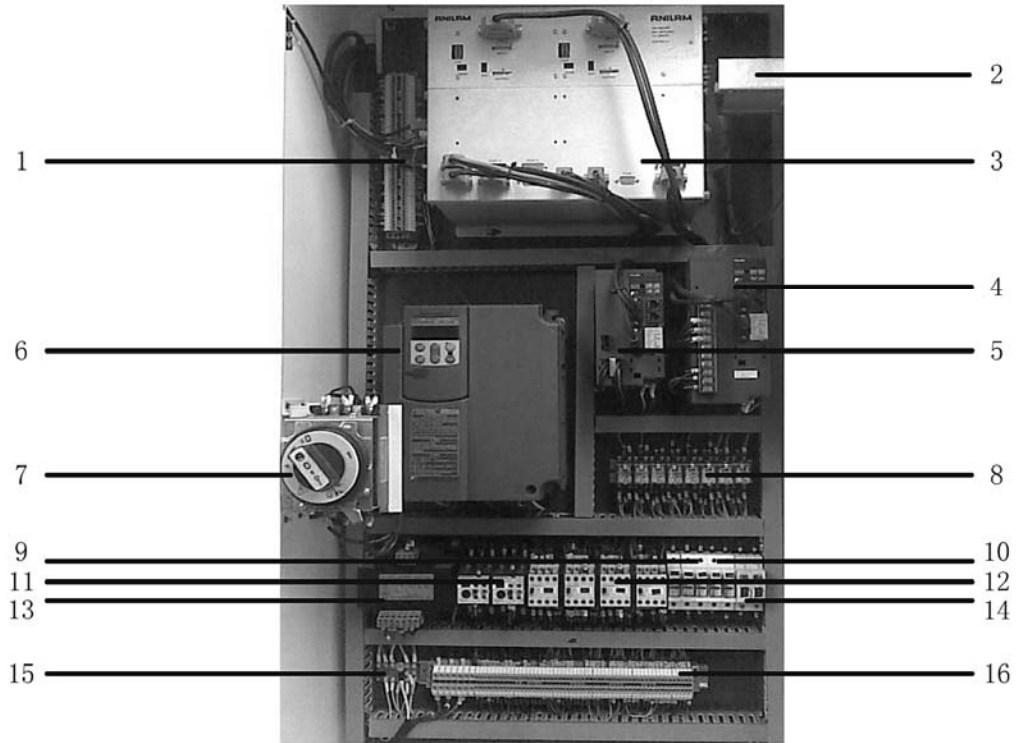
Index No.	Part No.	Description	Size	Qty
1	JC52	Work Light	24V, 50W	1
2	TS-1503021	Socket Head Cap Screw	M6x10	4
3	TS-1532032	Phillips Pan Head Machine Screw	M4x10	14
4	CL1640ZX-1004	Box Cover		1
5	TS-1504041	Socket Head Cap Screw	M8x20	4
6	CL1640ZX-1006	Box		1
7	TS-2286202	Phillips Pan Head Machine Screw	M6x20	4
8	CL1640ZX-1008	Cross Switch Bracket		1
9	TS-1550041	Plain Washer	6mm	6
10	TS-2361061	Helical Spring Lock Washer	6mm	4
11	TS-1503051	Socket Head Cap Screw	M6x20	20
12	CL1640ZX-1012	Cover		1
13	TS-1550031	Washer	5mm	10
14	CL1640ZX-1014	Middle Block		1
15	CL1640ZX-1015	Towline	1m	1
16	CL1640ZX-1016	Longitudinal Switch Bracket		1
17	TS-2361041	Helical Spring Lock Washer	4mm	2
18	CL1640ZX-1018	Cover		1
19	CL1640ZX-1019	Base		1
20	CL1640ZX-1020	Block		3
21	CL1640ZX-1021	Bracket		1
22	CL1640ZX-1022	Plate		2
	CL1640ZX-1022A	Block		1
	CL1640ZX-1022B	Block		1
	CL1640ZX-1022C	Nut		3
23	CL1640ZX-1023	Wire Cover		1

## Miscellaneous Parts

Index No.	Part No.	Description	Size	Qty
.....	ZX-18TBCP	Tool Box Complete (includes index #1 thru 19)		1
1	ZX-OP-1A	3-Jaw Chuck (mounted on lathe)	10", D1-8	1
2	CL1640ZX-1102	Serial Cable	25-M/9-F	1
3	ZX-OP-03	Face Plate	12"	1
4	ZX-OP-1B	Chuck Wrench		1
5	ZX-OP-04	Tool Tightening Wrench		1
6	ZX-OP-05	Cam Tightening Wrench		1
7	ZX-OP-06	Center	MT-5	1
8	ZX-OP-07	Live Center	MT-4	1
9	ZX-OP-08	Morse Reduction Sleeve		1
10	ZX-OP-09	Oil Gun		1
11	ZX-OP-10	Touchup Paint Can		1
12	ZX-OP-11	Gap Bridge Pin Driver		1
13	ZX-OP-12	Hex Wrench Set	2.5,4,5,6,8,10mm	1
14	ZX-OP-13	Double End		1
15	ZX-OP-14	Flat Blade Screw Driver		1
16	ZX-OP-15	Cross Point Screw Driver		1
17	ZX-OP-16	Adjustable Wrench		1
18	ZX-OP-17	Round Nut Wrench		1
19	ZX-OP-18	Wedge		1
20	CL1640ZX-1120	Air Hose with Blower Nozzle		1



# Electrical Cabinet



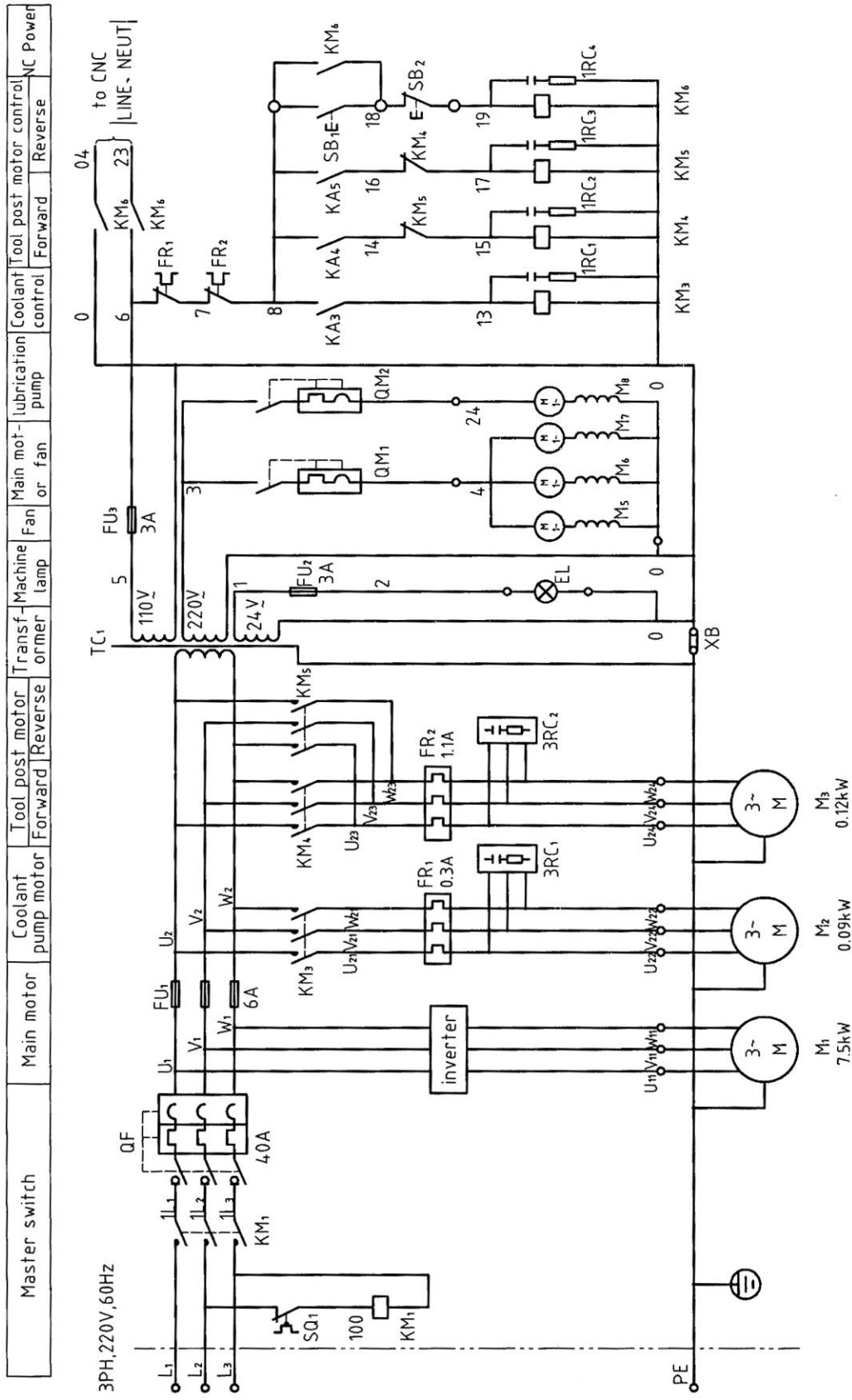
## Electrical Cabinet

Index Nos. refer to items on pages 24 and the following wiring diagrams.

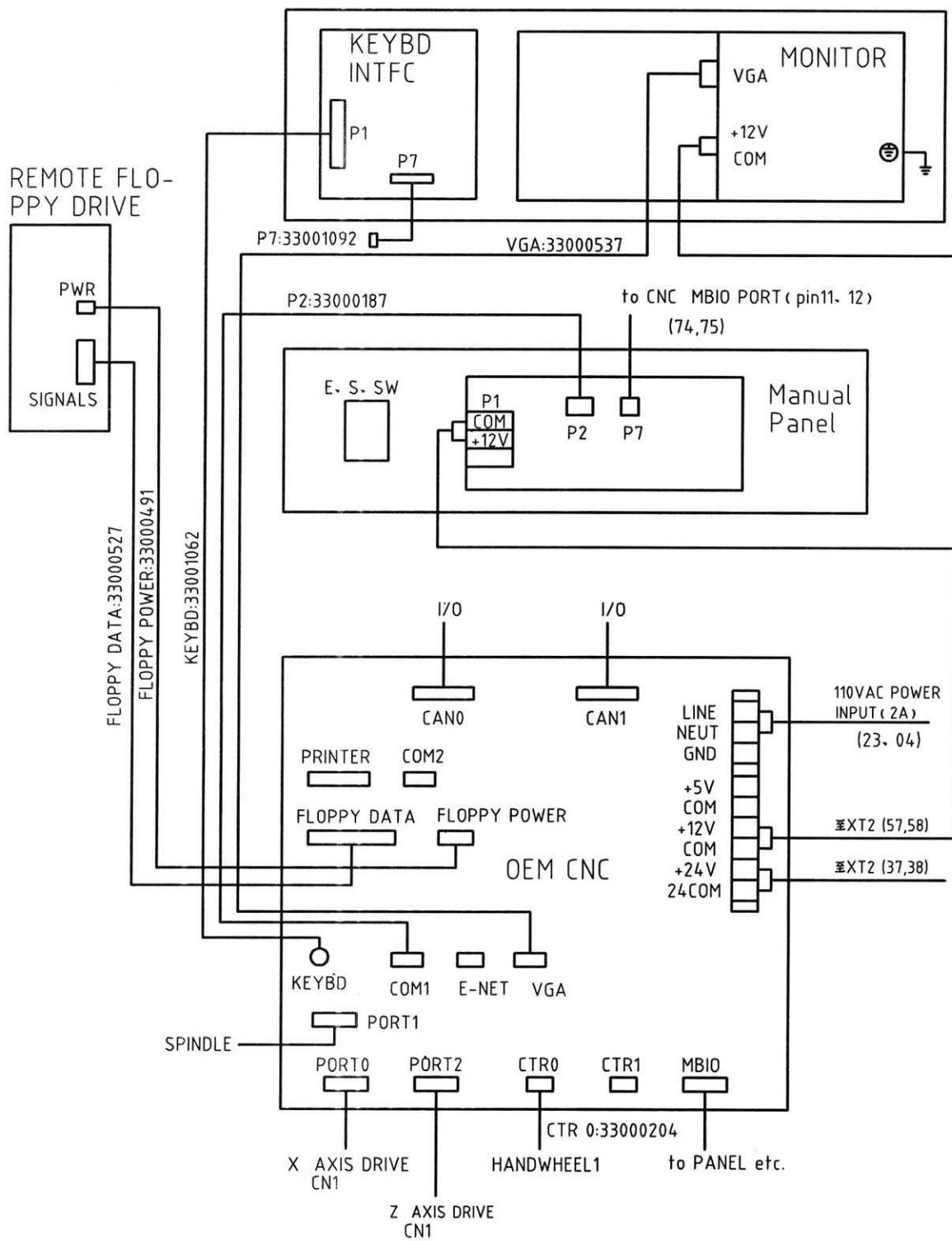
Index Nos.	Part No.	Description	Size	Qty
1.....WB	CL1640ZX-WB1	Wiring Board	JWD1	1
2.....		Flash Drive		1
3.....		Anilam OFM CNC		1
4.....	CL1640ZX-FD1.5	Fuji Drive	RYC152C3-VVT2	1
5.....	CL1640ZX-FD1.0	Fuji Drive	RYC102C3-VVT2	1
6.....	CL1640ZX-INV	Inverter	FRN11G1S-2J	1
7.....QF	CL1640ZX-QF	Main Circuit Breaker*	DZ15-40/50A	1
8.....KA1-7	CL1640ZX-KA	Relay	HH52P-FL	8
9.....FU1	CL1640ZX-FU1	Blow Fuse (6A)	RT18-32A	3
10.....FU2	CL1640ZX-FU2	Blow Fuse (3A)	RT18-32A	2
11.....FR	CL1640ZX-FR	Thermo Relay	3UA59	2
12.....KM3-6	CL1640ZX-KM	A.C. Contactor	3TB40	4
13.....TC1	CL1640ZX-TC1	Control Transformer	JBK5-400TH	1
14.....QM1-2	CL1640ZX-QM1	Circuit Breaker	DZ47-63/1A	2
15.....GB	CL1640ZX-GB	Copper Grounding Board		1
16.....WB	CL1640ZX-WB2	Wiring Board	JWD1	1
17.....		Anilam Display		1
18.....	CL1640ZX-R	Resistance	10Ω, 2000W	1
19.....		Handwheel		2
20.....		Floppy Drive		1
21.....SB1	CL1640ZX-SB1	Button (Green)	LAY3-10	1
22.....SB2	CL1640ZX-SB2	Button (Red)	LAY3-01	1
23.....SA1-2	CL1640ZX-SA1	Knob (Black)	LAY3-11X/2	2
24.....SB30	CL1640ZX-SB30	Button (White)	LAY3-10TH	1
25.....M5-6	CL1640ZX-M5	Fan	SJ1238HA2	2
26.....SQ5	CL1640ZX-SQ5	Guard Switch	SS/E-01	1
27.....	CL1640ZX-CB	Communication Box	RS232-25KN-1M-N	1
28.....	CL1640ZX-DL	Door Lock	AB-103	1
29.....SQX/Z1-3	CL1640ZX-SQX/Z1	Travel Switch	JW2-11Z/3	2
30.....SQ6	CL1640ZX-SQ6	Tailstock Switch	JW2-11H/W1	1

\*includes Master Switch

# Electrical Diagrams

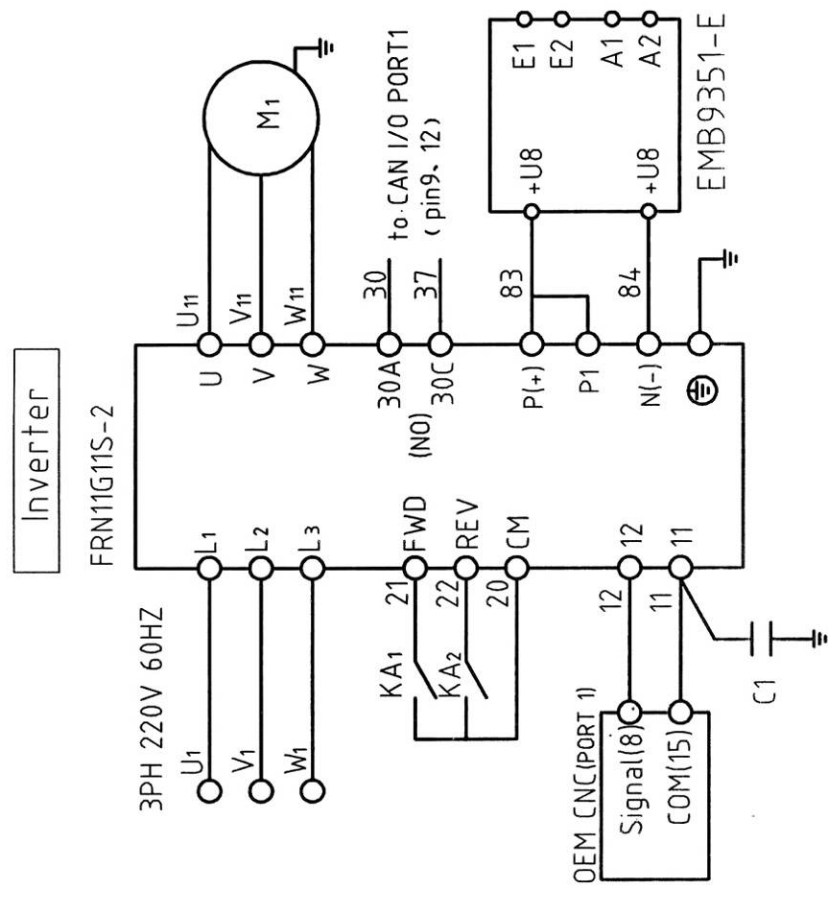
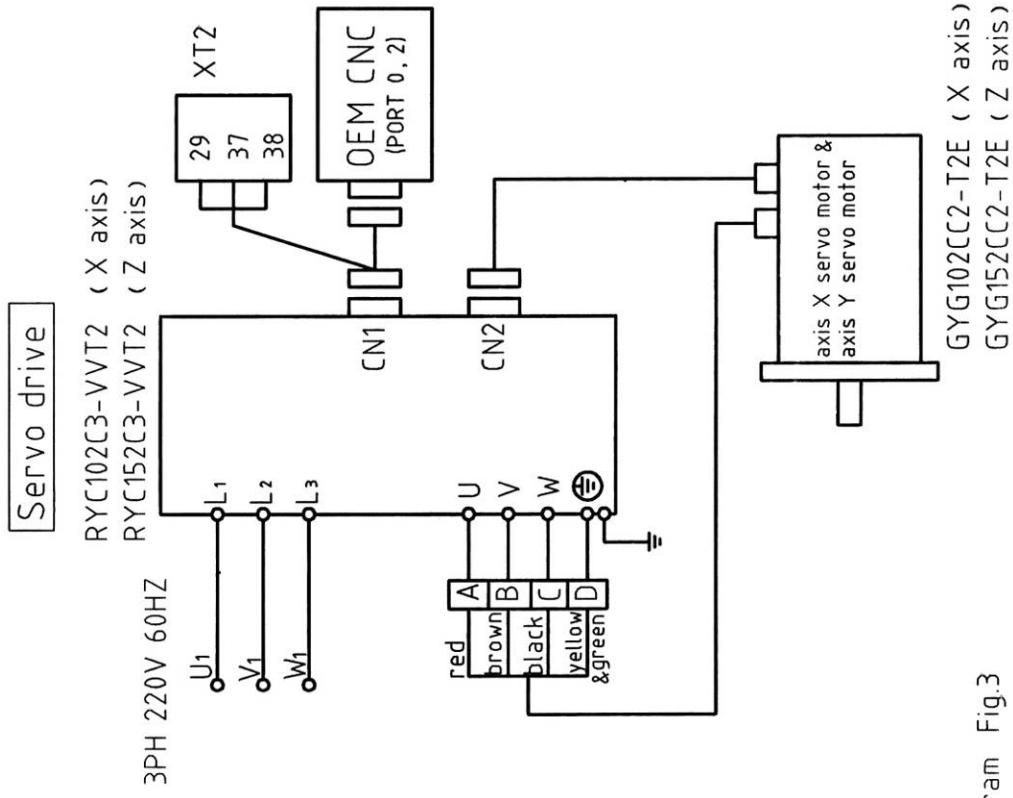


Schematic Electric diagram Fig. 1



Schematic Electric diagram Fig.2

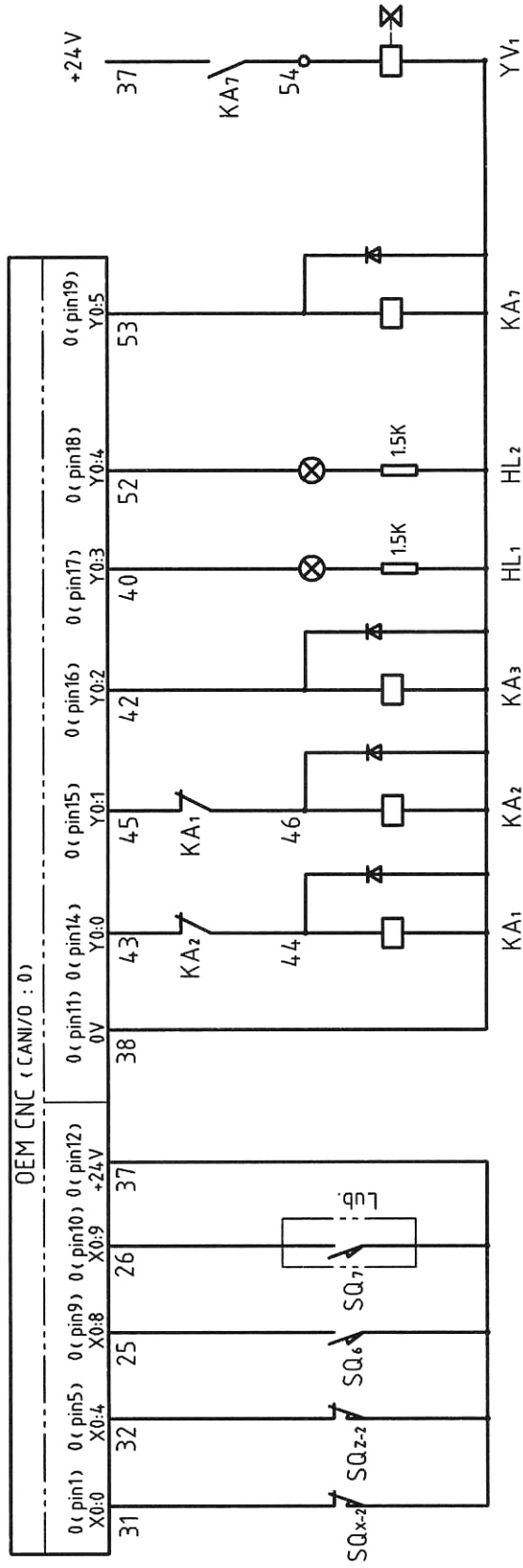




Schematic Electric diagram Fig.3

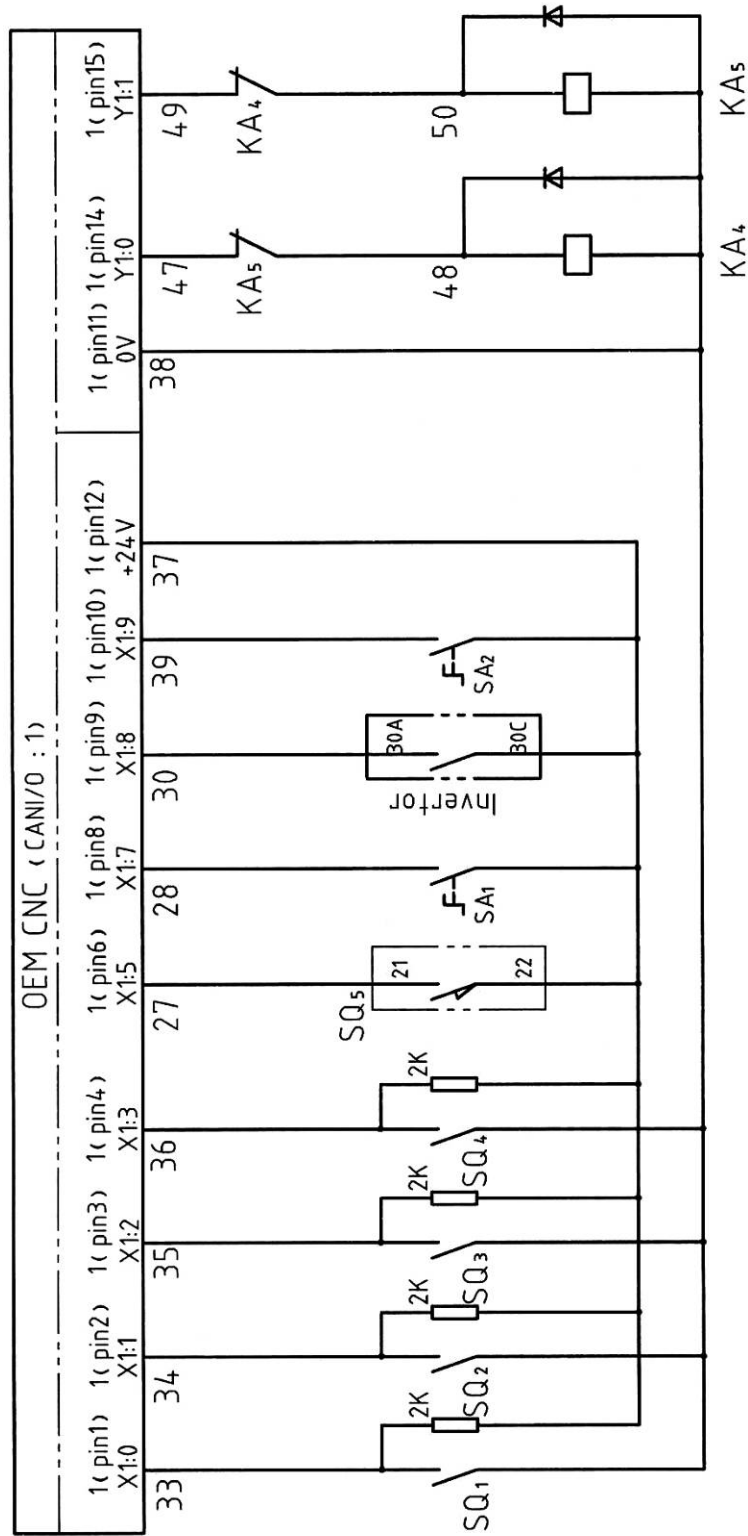
Guard valves control

X axis zero point	Z axis zero point	Tail limit switch	Lub. switch	Main motor control		Coolant	Alarm	Normal	Guard control
				Forward	Reverse				

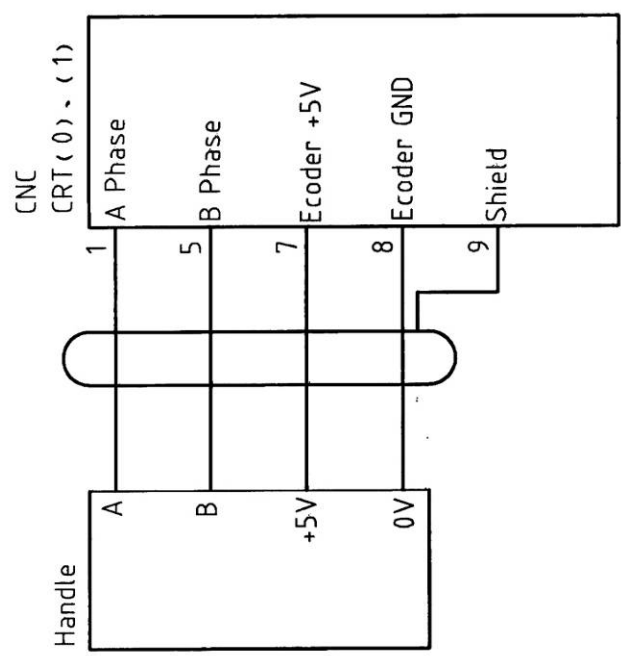
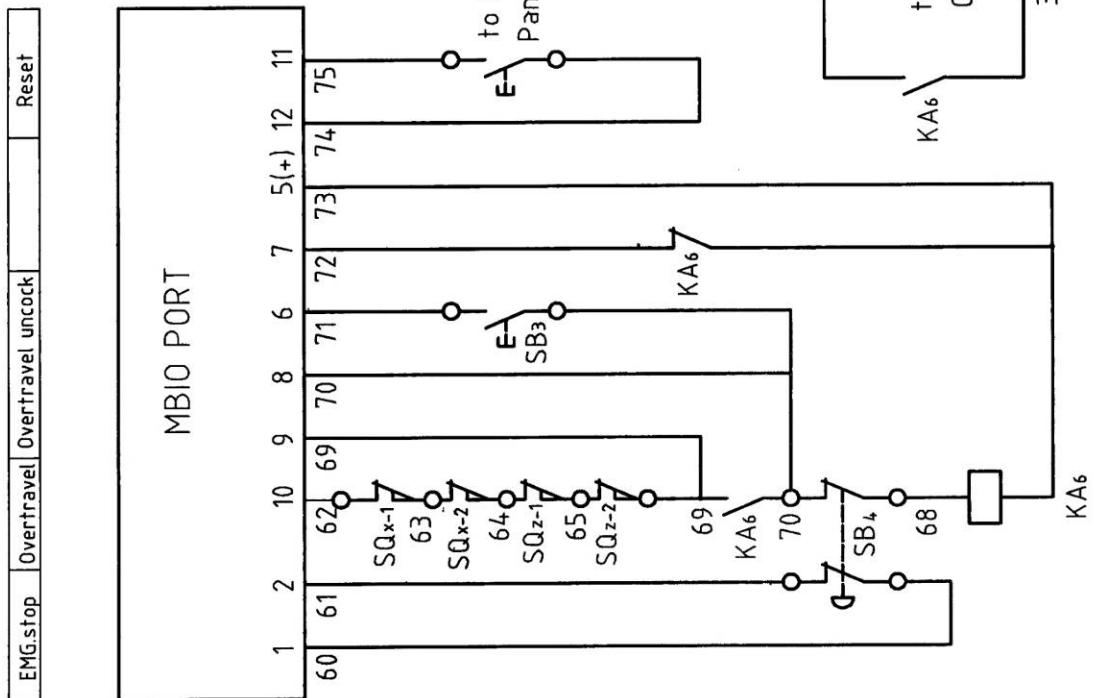


Schematic Electric diagram Fig.4

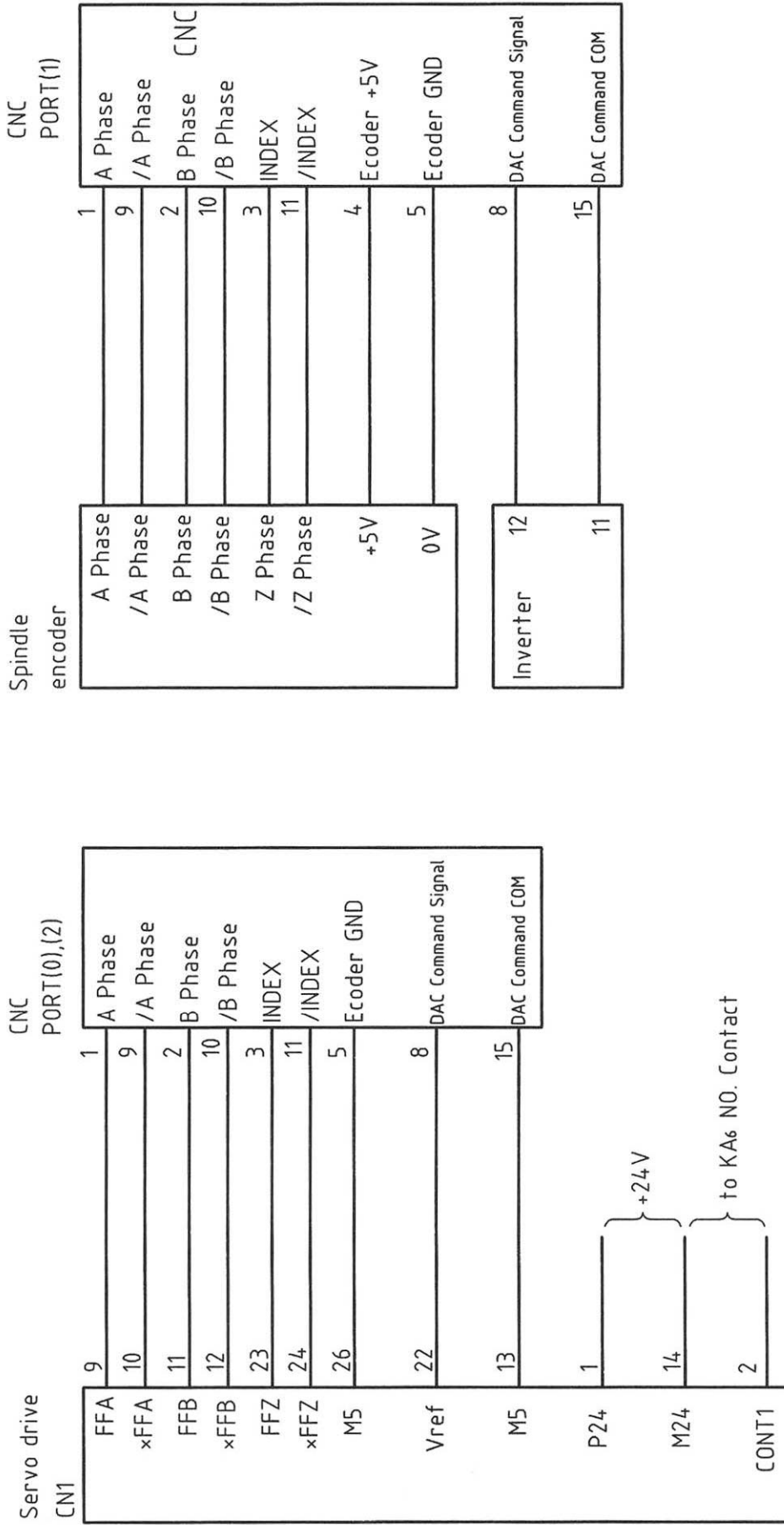
Tool position check				Guard	Option stop	Inverter alarm	Coolant	Tool post motor control	
1#	2#	3#	4#					Forward	Reverse



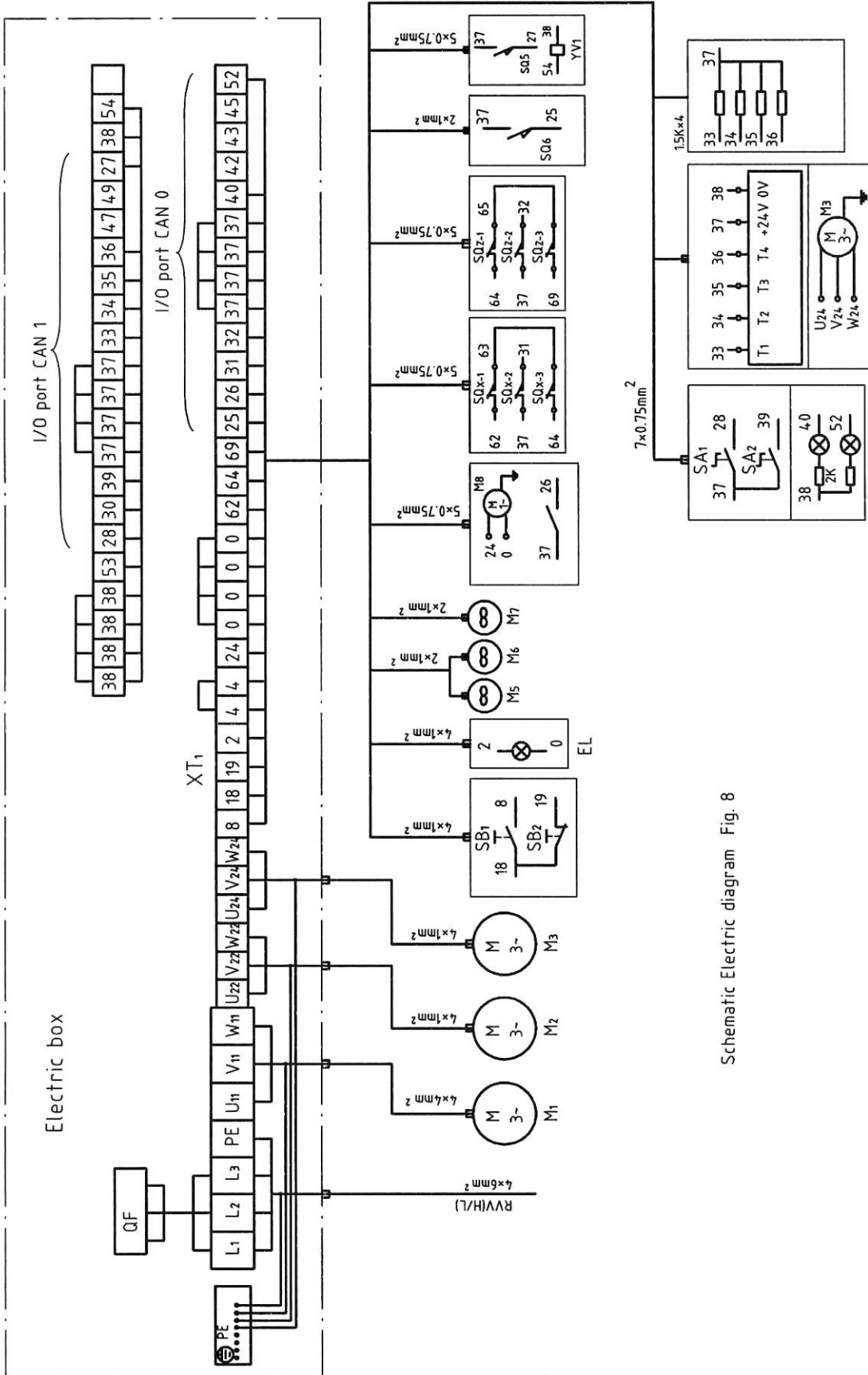
Schematic Electric diagram Fig. 5



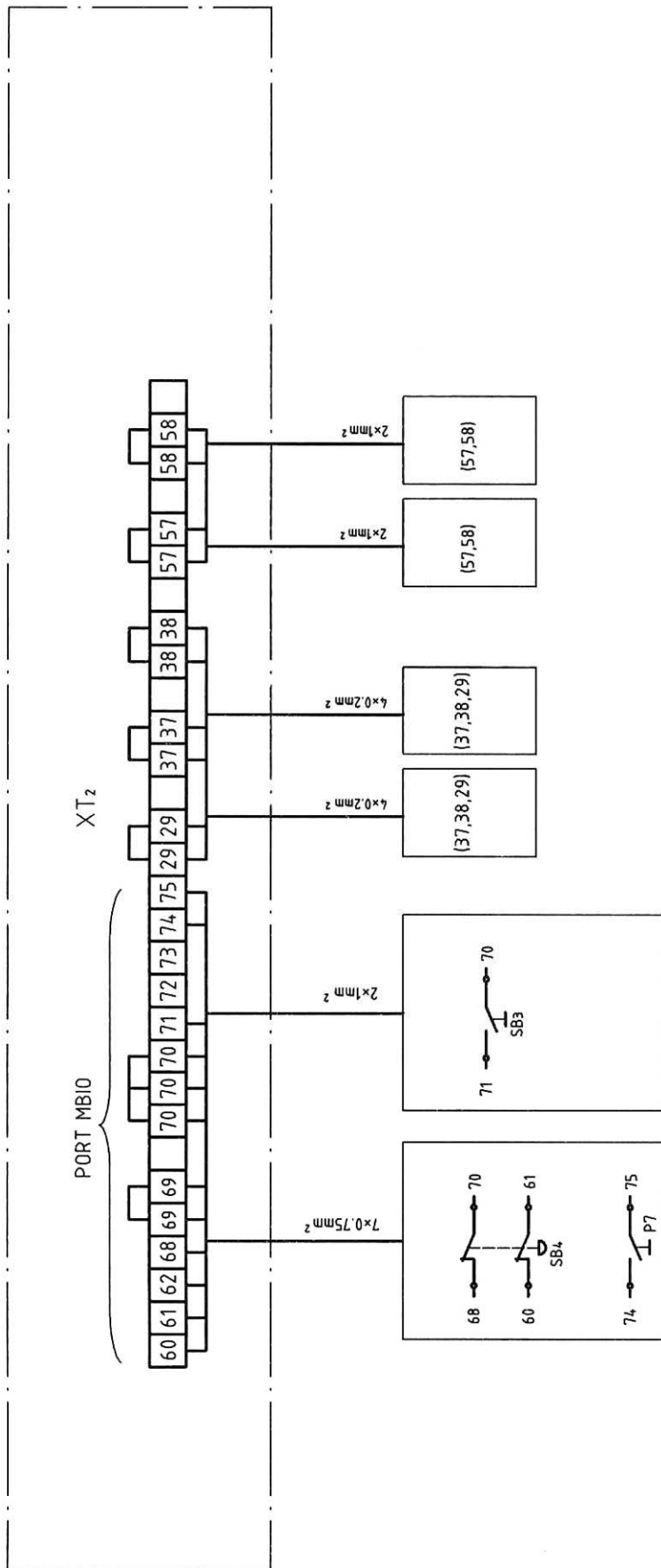
Schematic Electric diagram Fig. 6



Schematic Electric diagram Fig. 7



Schematic Electric diagram Fig. 8



Schematic Electric diagram Fig. 9