



# PART'S MANUAL

Metal Working



Book 3 of 3

## ENGINE LATHE MODEL: PL-1860E-1.0

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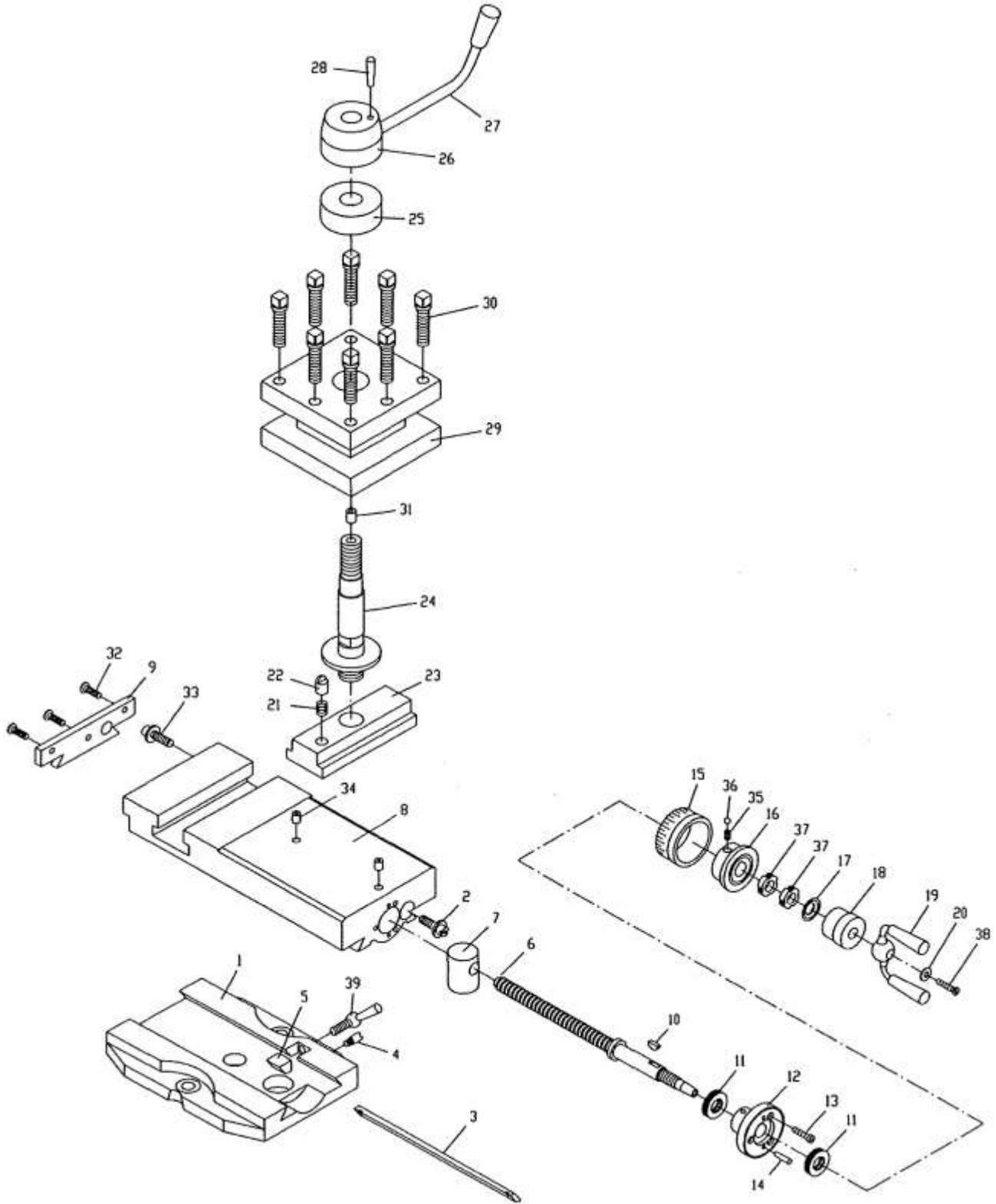


**Carriage Stop Assembly Parts List**

Item	Part No.	Description	Size	Qty.
1	ZX-26101	Left Support		1
2	TS-1504041	Hex Socket Cap Screw	M8x20	4
3	ZX-C34	Taper Pin	6x30	4
4	ZX-26704	Control Ring		1
5	TS-1523031	Set Screw	M6x10	2
6	ZX-26702	Eccentric Travel Setting Ring		5
7	ZX-H66	Flat End Set Screw	M6x10	10
8	ZX-C08	Pin	4n6x10	5
9	ZX-26703	Locking Key		5
10	ZX-267018	Travel Setting Rod		1
11	ZX-26705	Control Ring		1
12	ZX-26104	Right Support		1
13	ZX-H5	Steel Ball	8	1
14	ZX-CS14	Compression Spring	2x8x25	1
15	ZX-CS15	Flat Head Set Screw	M10x12	1
16	ZX-CS16	Oil Cup	8	2
17	ZX-26301	Dial		1



# FOUR WAY TOOL POST PARTS DIAGRAM





**Four Way Tool Post Parts List**

Item	Part No.	Description	Size	Qty.
1	ZX-04103B	Revolving Plate		1
2	ZX-04725	Screw		1
3	ZX-04710	Gib		1
4	ZX-04786	Screw		1
5	ZX-04303	Pressing Block		1
6	ZX-04706	Lead Screw		1
7	ZX-04106A	Nut		1
8	ZX-04107B	Top Slide		1
9	ZX-04501	Wipe Plate		1
10	ZX-F10	Half Circle Key	3x13	1
11	BB-51102	Thrust Bearing	15x28x9	2
12	ZX-04115	Sleeve		1
13	ZX-F13	Slotted Cheese Head Screw	M5x12	3
14	ZX-F14	Taper Pin	3x18	2
15	ZX-04727	Dial		1
16	ZX-04114	Sleeve		1
17	ZX-04768	Disc Spring		1
18	ZX-04767	Sleeve		1
19	ZX-04726	Handle		1
20	ZX-04771	Lining		1
21	ZX-04763	Spring	0.8x6x25	1
22	ZX-04787	Positioning Block		1
23	ZX-04752A	T-Slot Nut		1
24	ZX-04754	Shaft		1
25	ZX-04759	Adjusting Lining Sheet		1
26	ZX-04110	Lever Support		1
27	ZX-04753	Handle		1
28	ZX-066	Taper Pin	5x35	1
29	ZX-04713B	Tool Post		1
30	ZX-F30A	Clamping Screw	M12x45	8
31	ZX-F31	Oil Cup	8	1
32	ZX-H211	Countersunk Head Screw	M5x16	3
33	ZX-04725C	Screw		1



Item	Part No.	Description	Size	Qty.
34	ZX-F34	Oil Cup	8	2
35	ZX-F35	Spring	0.7x5x9	2
36	ZX-F36	Steel Ball	6	2
37	ZX-F37	Round Nut	M12x1.25	2
38	ZX-CA39	Cross Head Screw	M5x16	1
39	ZX-04746K	Screw Wrench		1
	ZX-TA16/18/20/22	Toolholder Assembly 16"/18"/20"/22" (includes #29 & 30)		
	ZX-CPA18/20	Compound Assembly 18"/20" (includes #1-20, 32-39)		





### Tailstock Assembly I Parts List

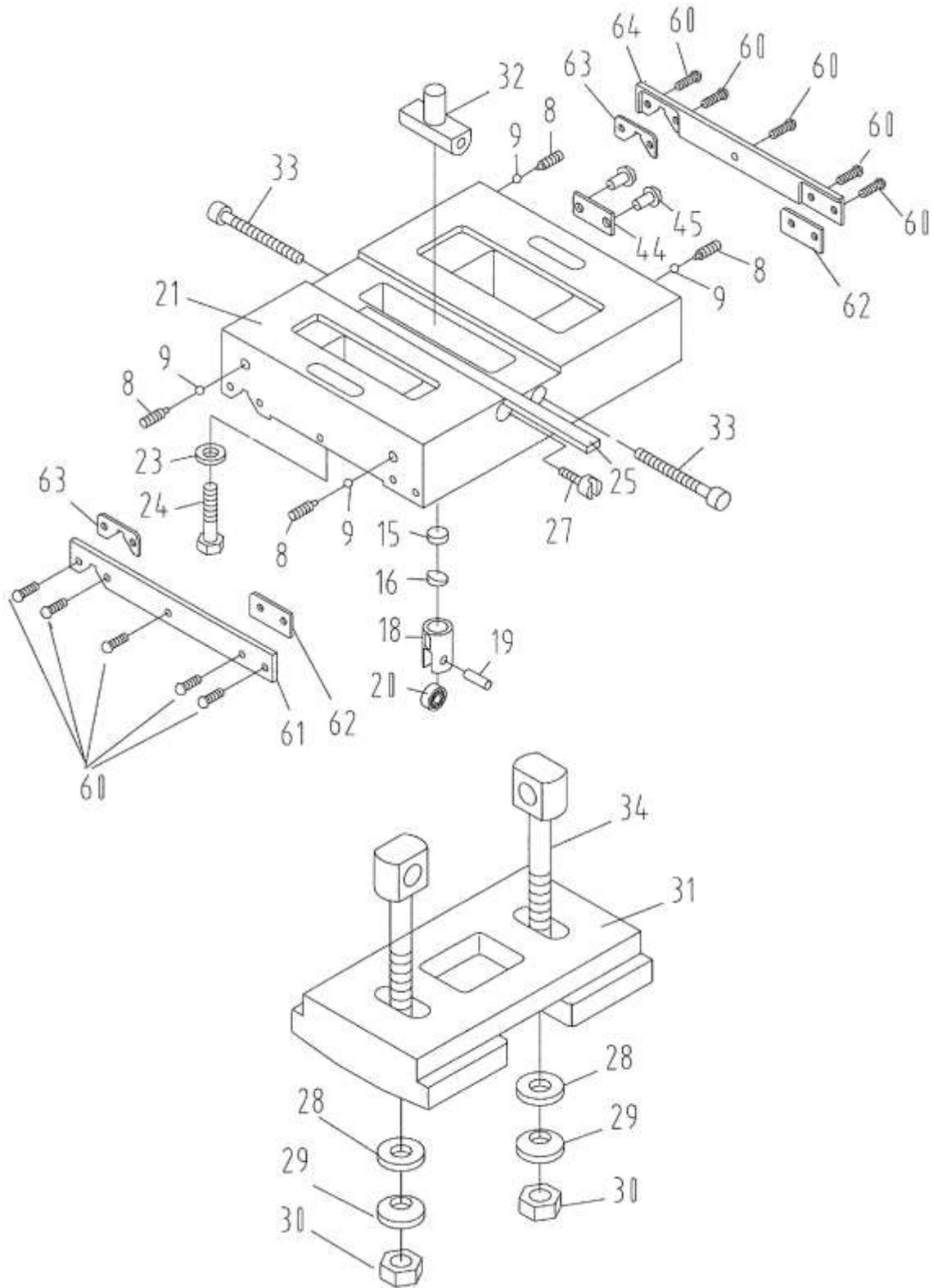
Item	Part No.	Description	Size	Qty.
1	ZX-03711	Handle		1
2	ZX-03717	Lever Support		1
3	ZX-03718	Washer		1
4	ZX-03719	Clamping Block		1
5	ZX-03720	Clamping Block		1
6	ZX-T06	Cylindrical End Set Screw	M8x14	2
7	C6136-03712	Eccentric Shaft		1
10	ZX-03701A	Center Sleeve		1
11	ZX-T11	Ring Seal	75x2.65	1
12	ZX-03703	Front Cover		1
13	ZX-T13	Cross Recessed Countersunk Head Screw	M5x10	4
14	ZX-T14A	Center Morse	No.5	1
22	ZX-03702	Positioning Block		1
35	C6136-03714	Eccentric Shaft		1
36	ZX-T36	Taper Pin	6x32	1
37	C6136-03104	Lever Sleeve		1
38	ZX-03709	Lock handle		1
39	ZX-A28	Taper Pin	6x55	1
40	TS-1504041	Hex Socket Cap Screw	M8x20	4
41	TS-1515031	Hex Socket Cap Screw	M8x22	3
42	ZX-T42	Pin	10n6x22	1
43	ZX-03302	Sign Plate		1
45	ZX-T45	Nail	3x8	4
46	ZX-03105	Nut		1
47	BB-51205	Thrust Ball Bearing	25x47x15	1
48	C6136-03104	Back Cover		1
49	ZX-03103	Hand Wheel		1
50	ZX-03707	Lever		1
51	ZX-T51	Acorn Nut	M16	1
52	TS-155010	Flat Washer	M16	1
53	ZX-T53	Key	6x40	1
54	ZX-03710A	Lead Screw		1
55	ZX-03101A	Tailstock Casting		1



Item	Part No.	Description	Size	Qty.
56	ZX-T56	Oil Cup	8	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 PARTS DIAGRAM



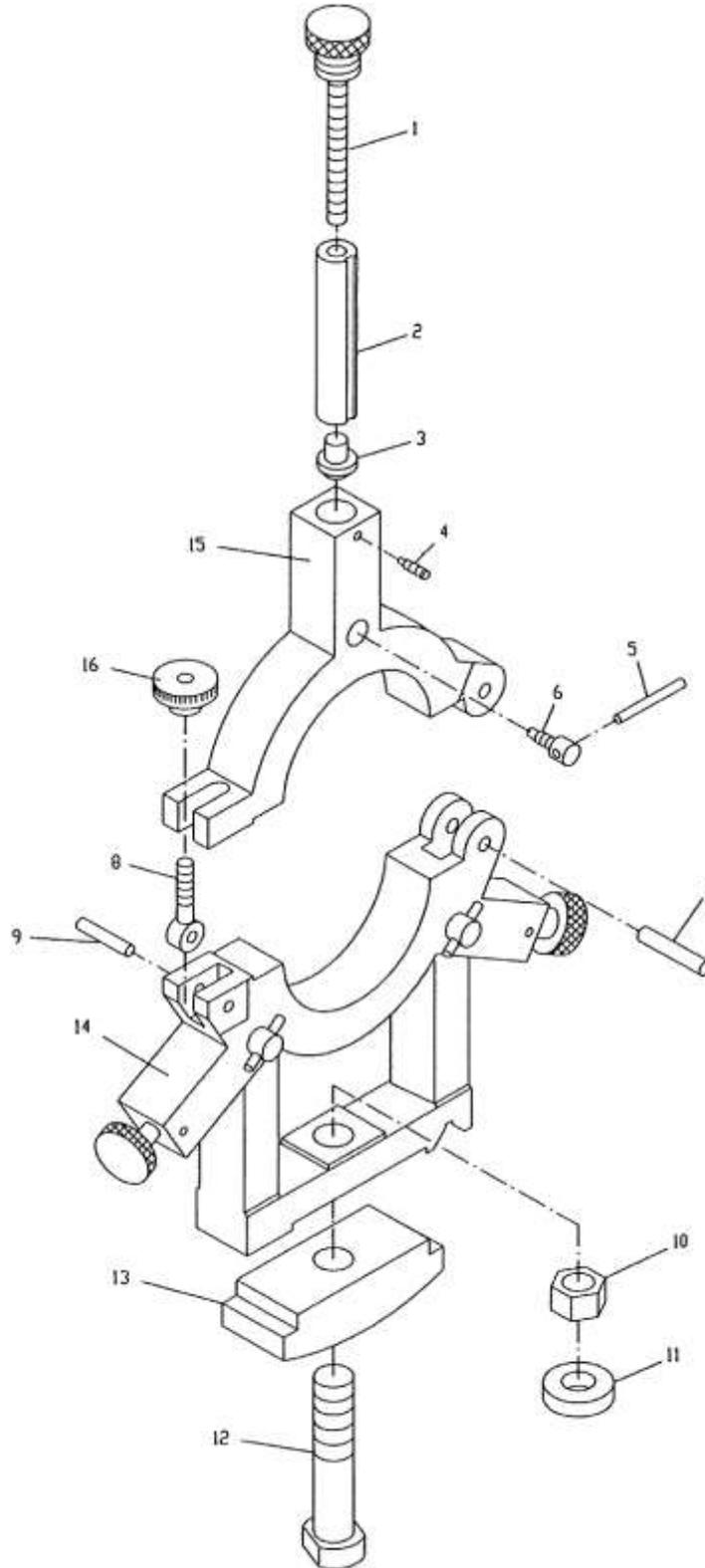


**Tailstock Assembly II Parts List**

Item	Part No.	Description	Size	Qty.
8	ZX-T08	Flat End Set Screw	M6x18	4
9	ZX-T09	Steel Ball	4	4
15	ZX-03712	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	7x19x6	4
21	ZX-03102A	Sliding Base		1
23	TS-1550071	Flat Washer	M10	2
24	TS-1491151	Hex Cap Bolt	M10x90	2
25	ZX-03704	Gib		1
27	ZX-03718C	Adjusting Screw		2
28	ZX-T28	Taper Washer	16	2
29	ZX-T29	Spherical Washer	16	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-03705A	Pulling Rod		2
44	ZX-03303	Sign Plate		1
45	ZX-T45	Nail	3x8	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-TSA18	Tailstock Assembly (includes # 1-13, 15-65)		



## STEADY REST ASSEMBLY PARTS DIAGRAM



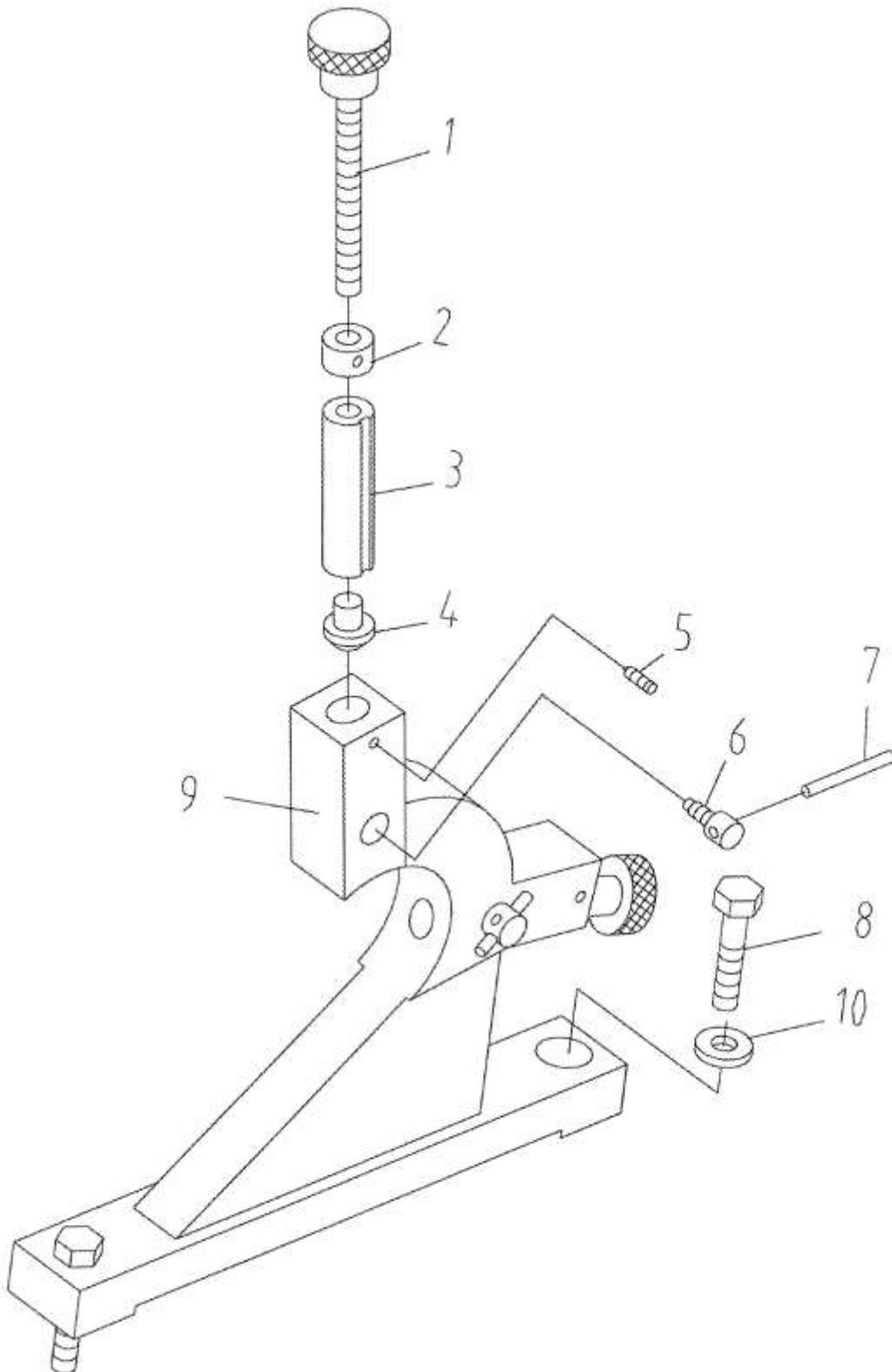


**Steady Rest Assembly Parts List**

Item	Part No.	Description	Size	Qty.
1	ZX-10702C	Screw		3
2	ZX-107040	Sliding Sleeve	90-180	3
	ZX-107050	Sliding Sleeve	20-210	3
3	ZX-103010	Pushing Block		3
4	ZX-SR04	Slotted Set Screw	M6x20	3
5	ZX-10705	Lever		3
6	ZX-107030	Locking Screw		3
7	ZX-C36	Pin	10x55	1
8	ZX10701F	Hinge Screw		1
9	ZX-SR9	Pin	8x55	1
10	ZX-SR10	Hex Nut	M20	1
11	ZX-SR11	Flat Washer	20	1
12	ZX-10708	Tightening Screw		1
13	ZX-101030	Clamping Plate		1
14	ZX10101F	Lower Part of Steady Rest		1
15	ZX10102F	Upper Part of Steady Rest		1
16	ZX-107010	Round Nut	M10	1



**FOLLOW REST ASSEMBLY PARTS DIAGRAM**



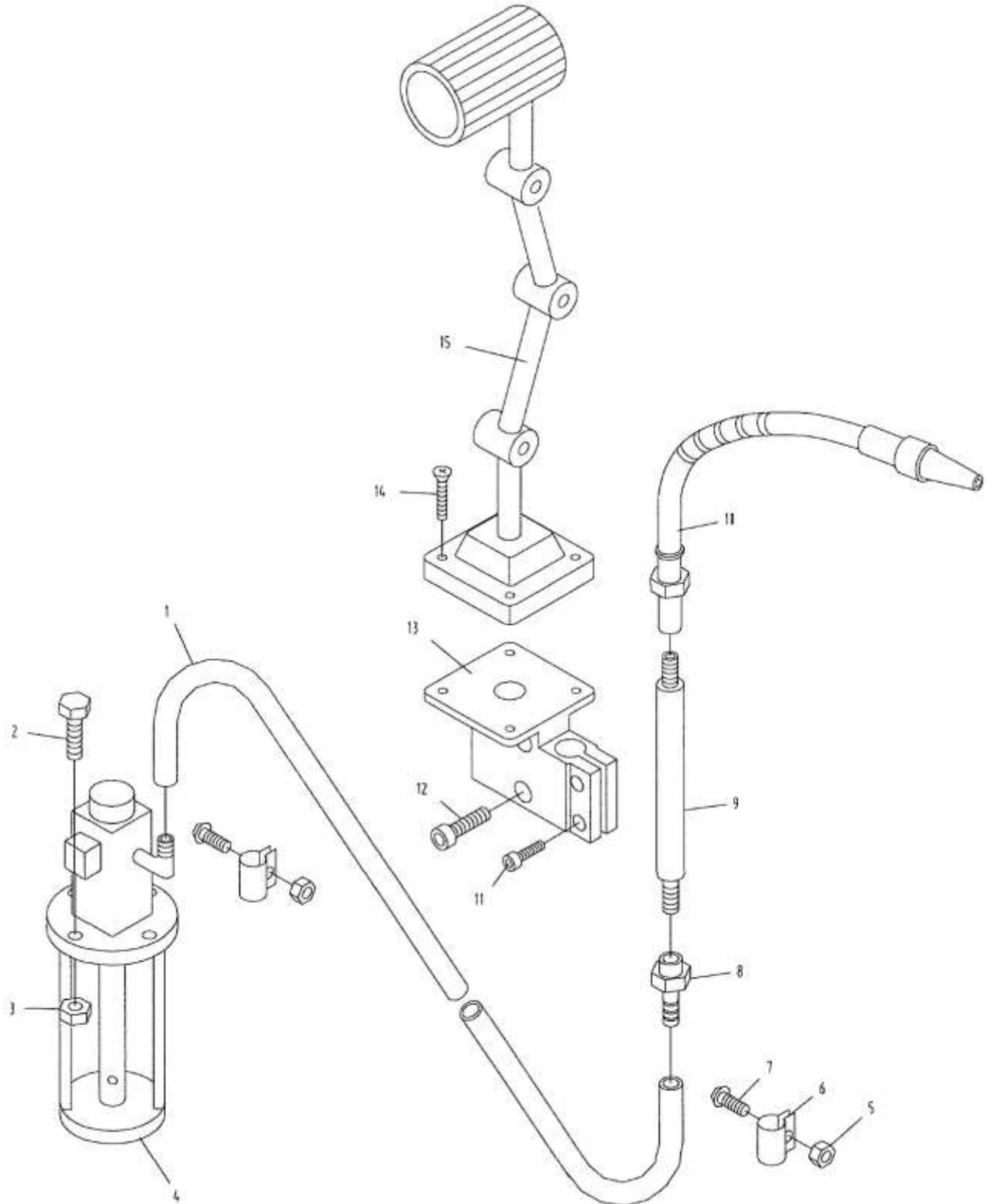


**Follow Rest Assembly Parts List**

Item	Part No.	Description	Size	Qty.
1	ZX-10710	Screw		2
2	ZX-10704	Nut		2
3	ZX-10707	Sliding Sleeve		2
4	ZX-10301	Supporting Piece		2
5	ZX-FR05	Slotted Set Screw	M6x10	2
6	ZX-10705	Locking Screw		2
7	ZX-10706	Handle		2
8	ZX-FR8	Hex Cap Bolt	M12x55	2
9	ZX-10102C	Follow Rest Casting		1
	ZX-FRA18	Follow Rest Assembly, 18" (includes #1-7, 9)		
10	ZX-FR10	Flat Washer	12	2



## COOLANT & WORK LIGHT ASSEMBLY PARTS DIAGRAM



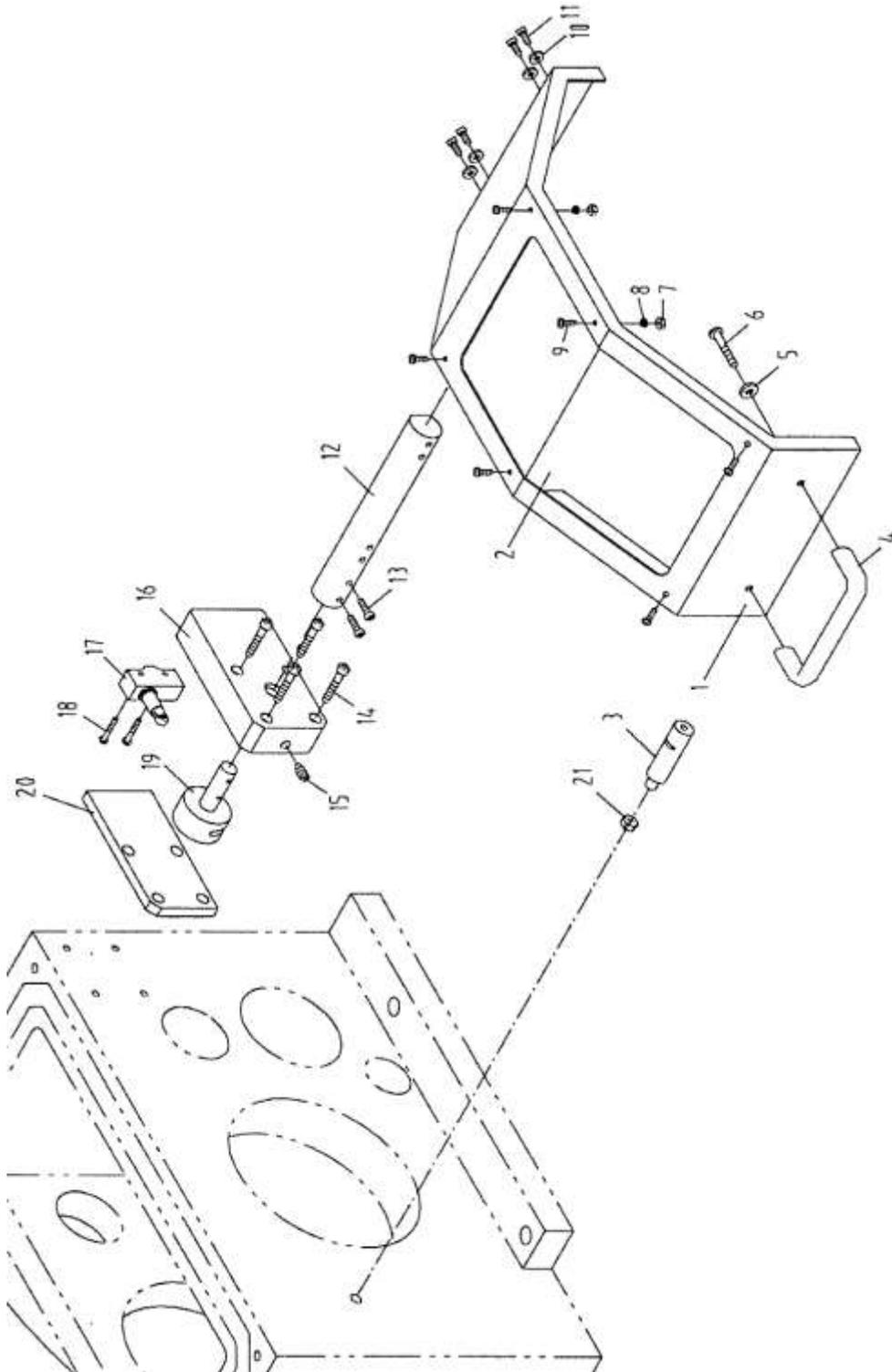


**Coolant & Work Light Assembly Parts List**

Item	Part No.	Description	Size	Qty.
1	RT-001B	Rubber Tube	10 1/2"x1780mm	1
2	ZX-CW02	Hex Cap Bolt	M5x25	4
3	ZX-CW03	Hex Nut	M5	4
4	ZX-CW04	Coolant Pump		1
5	ZX-CW05	Hex Nut	M6	2
6	ZX-01727	Clip For Rubber Tube		2
7	ZX-CW07	Half Round Head Screw	M6x16	2
8	ZX-01728	Fitting		1
9	ZX-01729	Flow Pipe		1
10	ZX-CW10	Coolant Device		1
	ZX-CW10	Coolant Tap	G 3/8"	1
11	TS-1514021	Hex Socket Cap Screw	M6x16	2
12	TS-1515051	Hex Socket Cap Screw	M8x40	2
13	ZX-CW13	Lamp Support		1
14	ZX-S04	Cross Head Screw	M6x14	4
15	ZX-CW15	Lamp Frame		1
	ZX-CW16	Bulb	50W, AC24V	1
	ZX-LA	Light Assembly (includes #13-15)		



## SAFETY GUARD COVER PARTS DIAGRAM



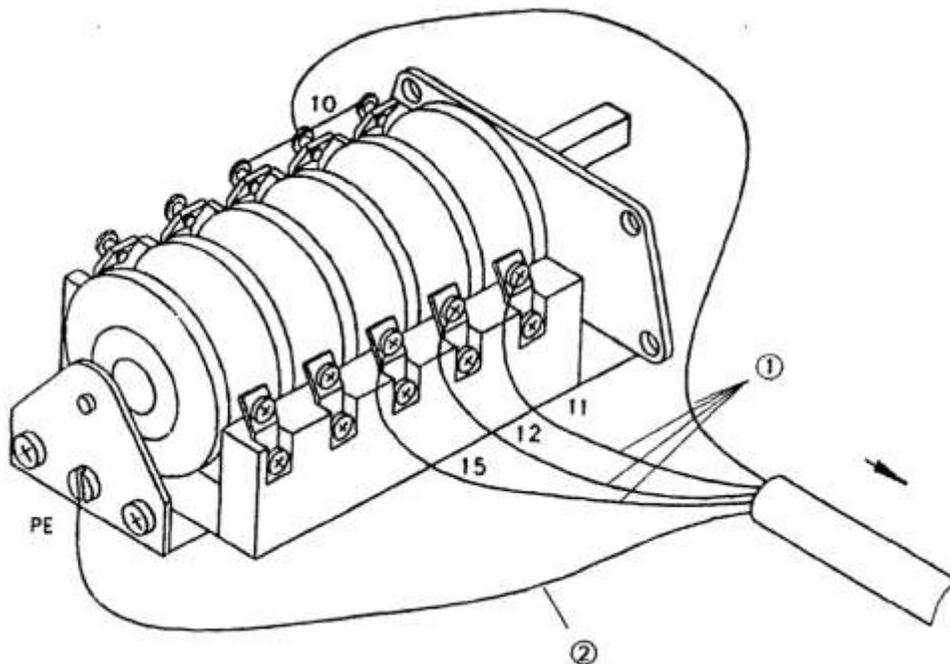
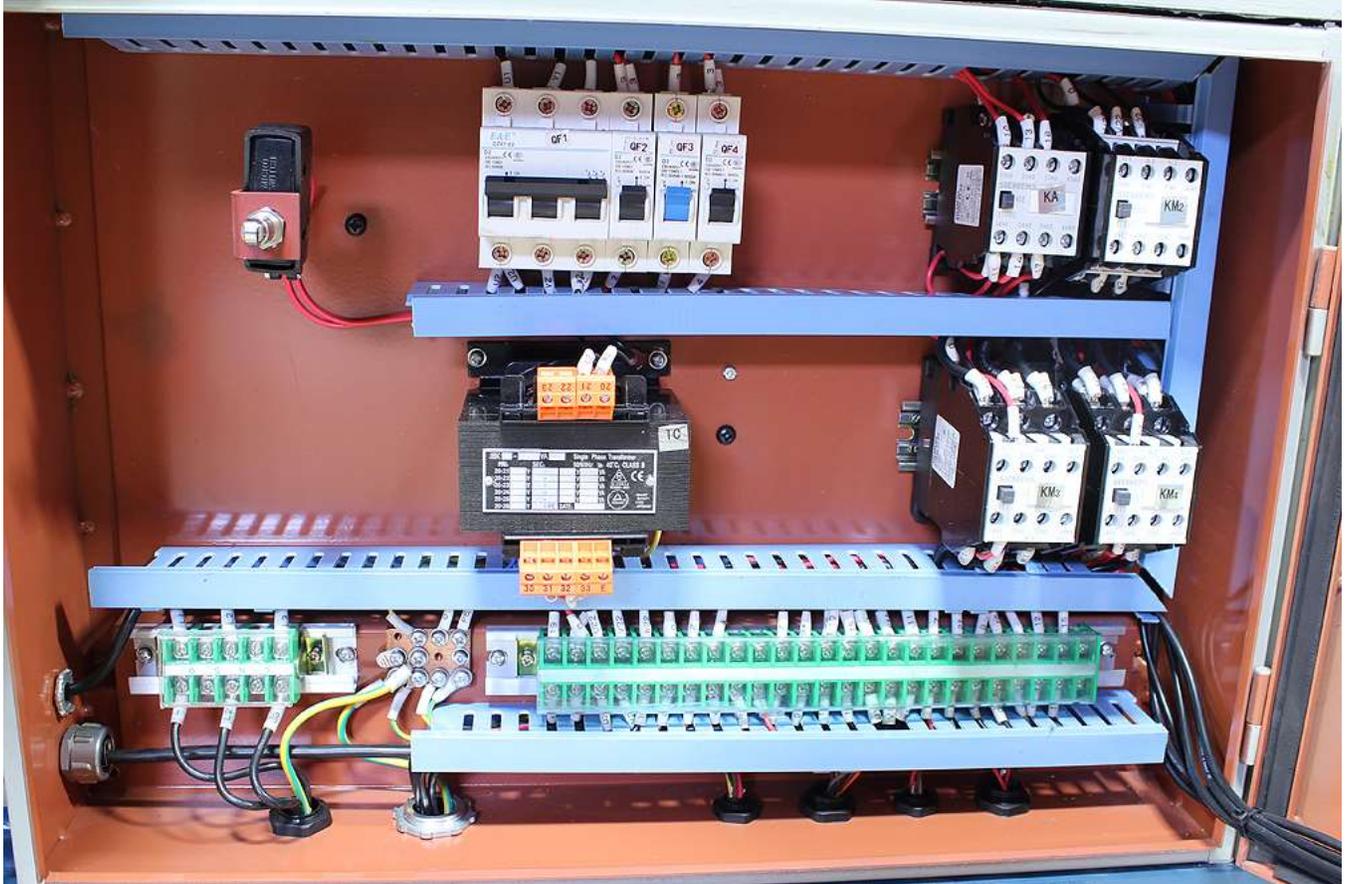


**Safety guard cover Parts List**

Item	Part No.	Description	Size	Qty.
1	ZX-19701E	Protection guard		1
2	ZX-19501E	Protection guard visual glass		1
3	ZX-19704E	Fixing rod		1
4	ZX-S04E	Handle	Z96-6	1
5	ZX-S05E	Plain washers	6	2
6	ZX-S06E	Cross recessed pan head screws	M6x12	2
7	ZX-S07E	Hexagon thin nuts	M4	6
8	ZX-S08E	Plain washers	4	6
9	ZX-S09E	Cross recessed pan head screws	M4x12	6
10	ZX-S10E	Plain washers	5	4
11	ZX-S11E	Hexagon socket cap head screws	M5x16	4
12	ZX-19703E	Rest bar		1
13	ZX-S13E	Slotted set screws	M8x10	2
14	ZX-S14E	Hexagon socket cap head screws	M6x35	4
15	ZX-S15E	Hexagon socket set screws	M8x16	1
16	GH1440A-19101E	Switch box		1
17	ZX-S17E	Stroke switch	LXW5-1101	1
18	ZX-S18E	Slotted pan head screws	M4x25	2
19	ZX-19702E	Shaft		1
20	ZX-19502E	Washer		1
21..	GB5782	Nut	M8	1



## ELECTRICAL CABINET PARTS DIAGRAM





Item	Part No.	Description	Size	Qty.
1	ZX-SB1	Jog Button	LAY3-11	1
2	ZX-SA2	Coolant Control Button	LAY3-11X/2	1
3	ZX-SB2	Emergency Stop	LAY3-012S/1	1
4	ZX-HL	Power Indicator Light	XD11-30/20	1
5	ZX-SA3	Rotary Switch	HZ3-452	1
6	ZX-QF	Master Switch (40A)	0215-40	1
7	ZX-FU1	Fuse (3A)	JRT1-16A	1
8	ZX-FU2	Fuse (2A)	JRT1-16A	1
9	ZX-FU3	Fuse (2A)	JRT1-16A	1
10	ZX-FU5	Fuse (2A)	JRT1-16A	1
	ZX-FB	Fuse Block		1
11	ZX-Q	Temperature Relay	JW6	1
12	ZX-KM2	A.C. Contactor	3TB40	1
13	ZX-KA	A.C. Contactor	3TB80	1
14	ZX-KM3	A.C. Contactor	3TB43	1
15	ZX-KM4	A.C. Contactor	3TB43	1
16	ZX-XB	Copper Plate (for grounding)		1
17	ZX-XT1	Wiring Board	JT1	1
18	ZX-XT2	Wiring Board	JX0	1
19	ZX-TC	Control Transformer	JBK3-100-TH	1
20	ZX-SQ2	Stroke Switch	LXW5-11N1	1
R1	ZX-XT2	Cord from the Wiring Board		1
R2	ZX-XB	Grounding Wire from Copper Plate		1



NOTES



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