

8 Wiring diagram and assembly drawing

8.1 Wiring diagram

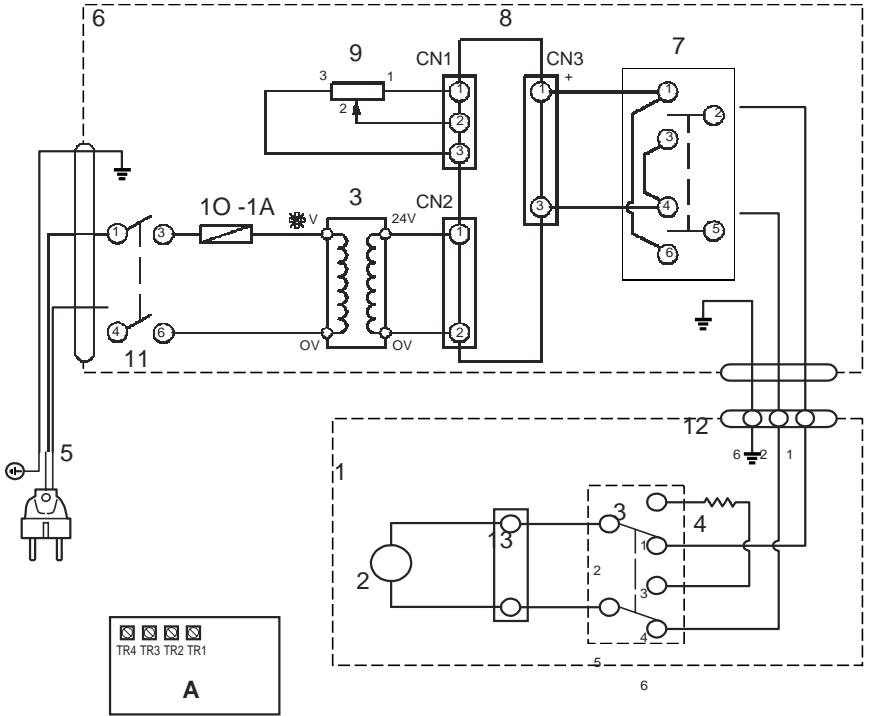


figure 8 – 1

- | | |
|------------------------------|-----------------------------------|
| 1. Body | 8. SCR Control |
| 2. Motor 15W 5000 RPM | 9. Variable resistor 50K (B.1/4W) |
| 3. SW3 switch | 10. F Fuse (2A) |
| 4. Resistor (10 7W) | 11. SW1 Switch (Power) |
| 5. 0.75 mm Cabtyre cord (5m) | 12. AG Cable |
| 6. Control box | 13. Terminal Block |
| 7. SW2 switch | |

8.2 Assembly drawing

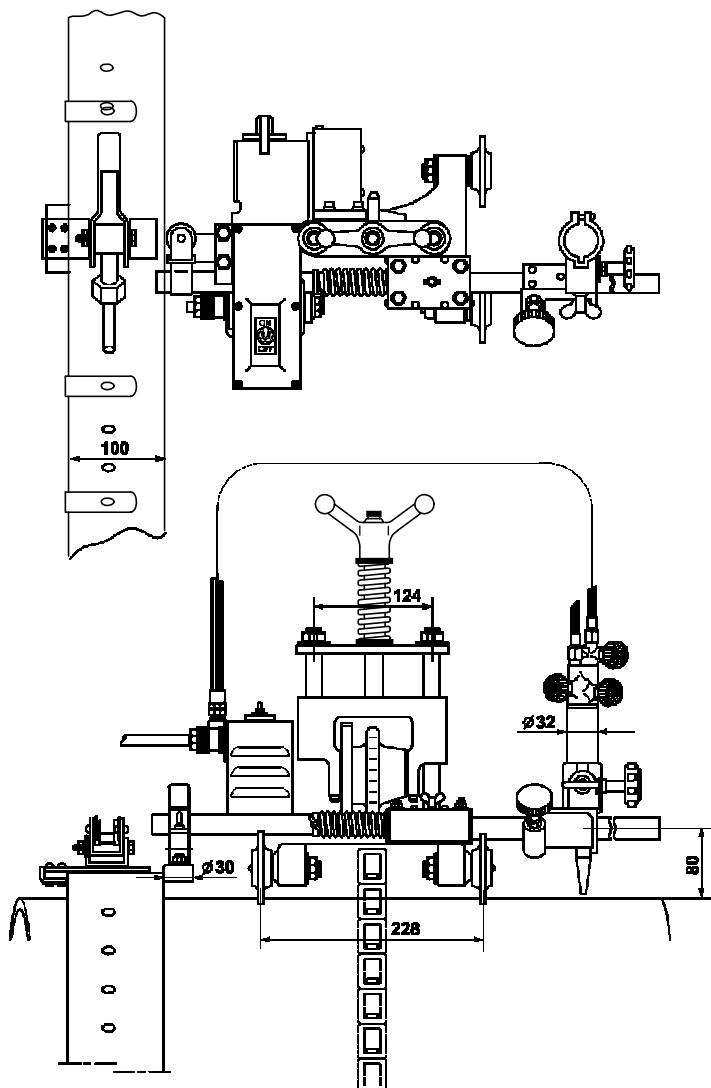
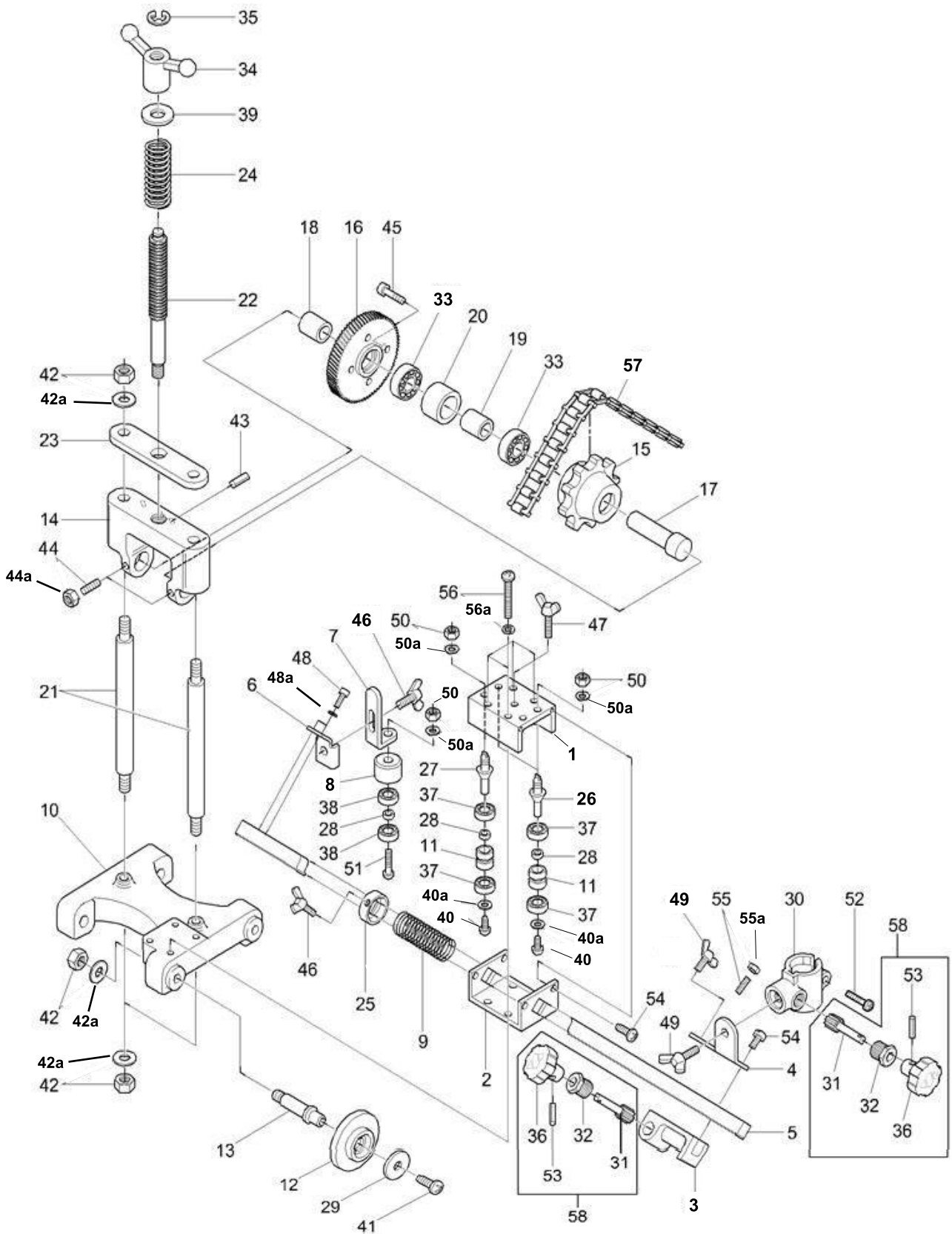


figure 8

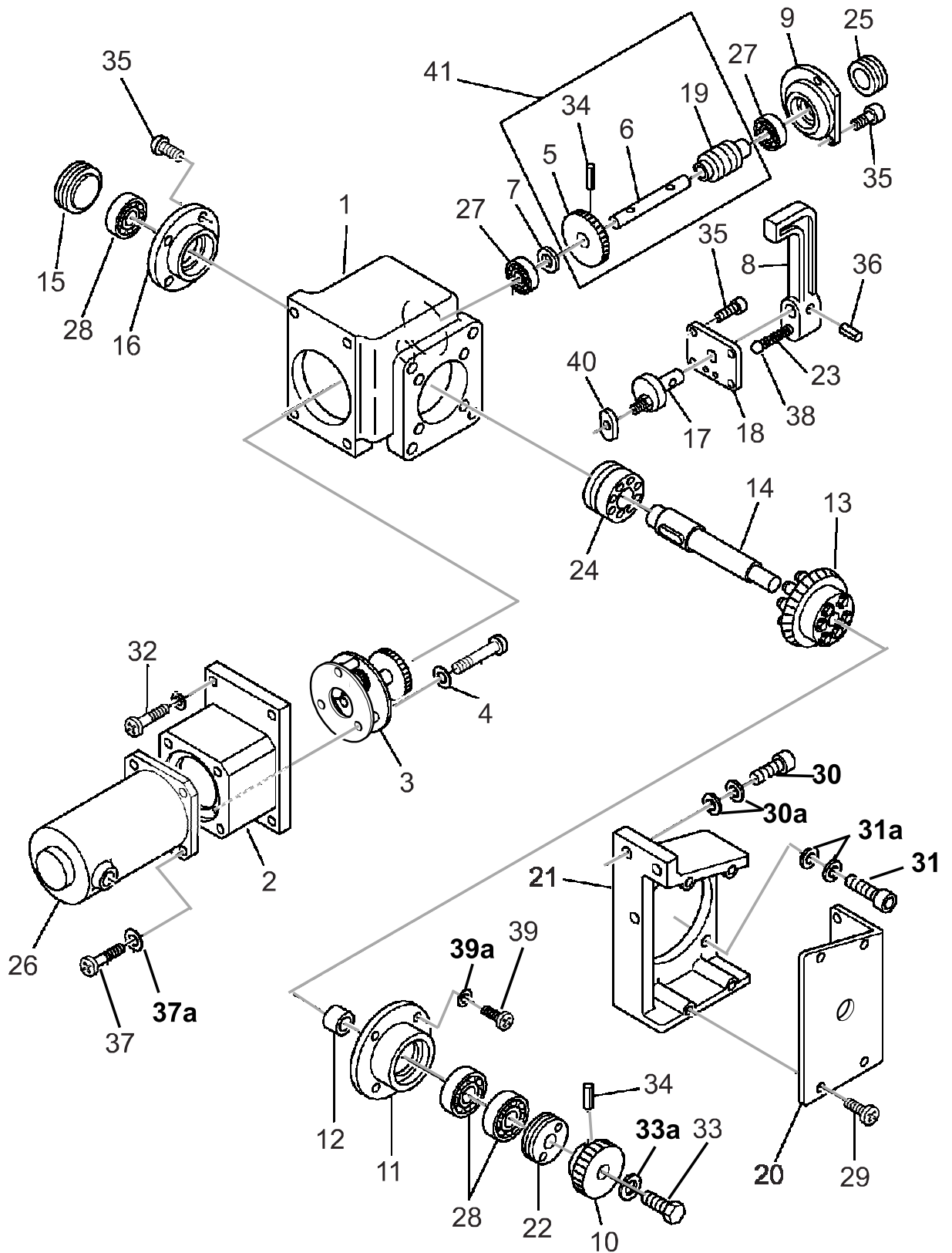
9.1 Body unit



ITEM NUMBER	PART DESCRIPTION	QUANTITY	PART NUMBER	REMARKS
1	SLIDE BODY	1	ZS32412	
2	SLIDE BODY COVER	1	ZS32413	
3	CROSS FEED BODY	1	ZS32414	
4	TORCH HOLDER BASE	1	ZS32415	
5	SLIDE BAR	1	ZS32416	
6	GUIDE ROLLER BASE	1	ZS32417	
7	GUIDE ROLLER BRACKET	1	ZS32418	
8	GUIDE ROLLER	1	ZS32419	
9	SLIDE SPRING	1	ZS32420	
10	BODY	1	ZS32421	
11	ROLLER	4	ZS32452	
12	WHEEL	4	ZS31345	
13	WHEEL SHAFT	4	ZS31346	
14	SLIDE BRACKET	1	ZS31339	
15	SPROCKET	1	ZS31335	
16	DRIVE GEAR	1	ZS31333	
17	SPROCKET SHAFT	1	ZS31334	
18	COLLAR (A)	1	ZS31338	
19	COLLAR (B)	1	ZS31336	
20	COLLAR (C)	1	ZS31337	
21	SLIDE SHAFT	2	ZS31340	
22	LIFT SHAFT	1	ZS31341	
23	UPPER PLATE	1	ZS31342	
24	SPRING	1	ZS31343	
25	STOPPER	1	ZS30912	
26	SIDE ROLLER SHAFT (A)	2	ZS31612	
27	SIDE ROLLER SHAFT (B)	2	ZS31613	
28	COLLAR	5	ZS32467	
29	WASHER	4	ZS30667	
30	TORCH HOLDER	1	ZS31842	
31	PINION (A)	2	ZS30910	
32	PINION METAL (A)	2	ZS30909	
33	BEARING	2	1138350400	6004ZZ
34	WING HANDLE	1	ZS31344	
35	STOP RING	1	6B540100	E-10
36	ADJUSTING HANDLE	2	ZS30223	
37	BEARING	8	1138354800	R1560ZZ
38	BEARING	2	1138353800	626ZZ
39	WASHER	1	9968149300	WF18
40	PHILLIPS PAN HEAD SCREW	4	9968275500	SP3X6
40a	FLAT WASHER	4	9968148500	WF3
41	PHILLIPS FLAT HEAD SCREW	4	9968156700	M5X12

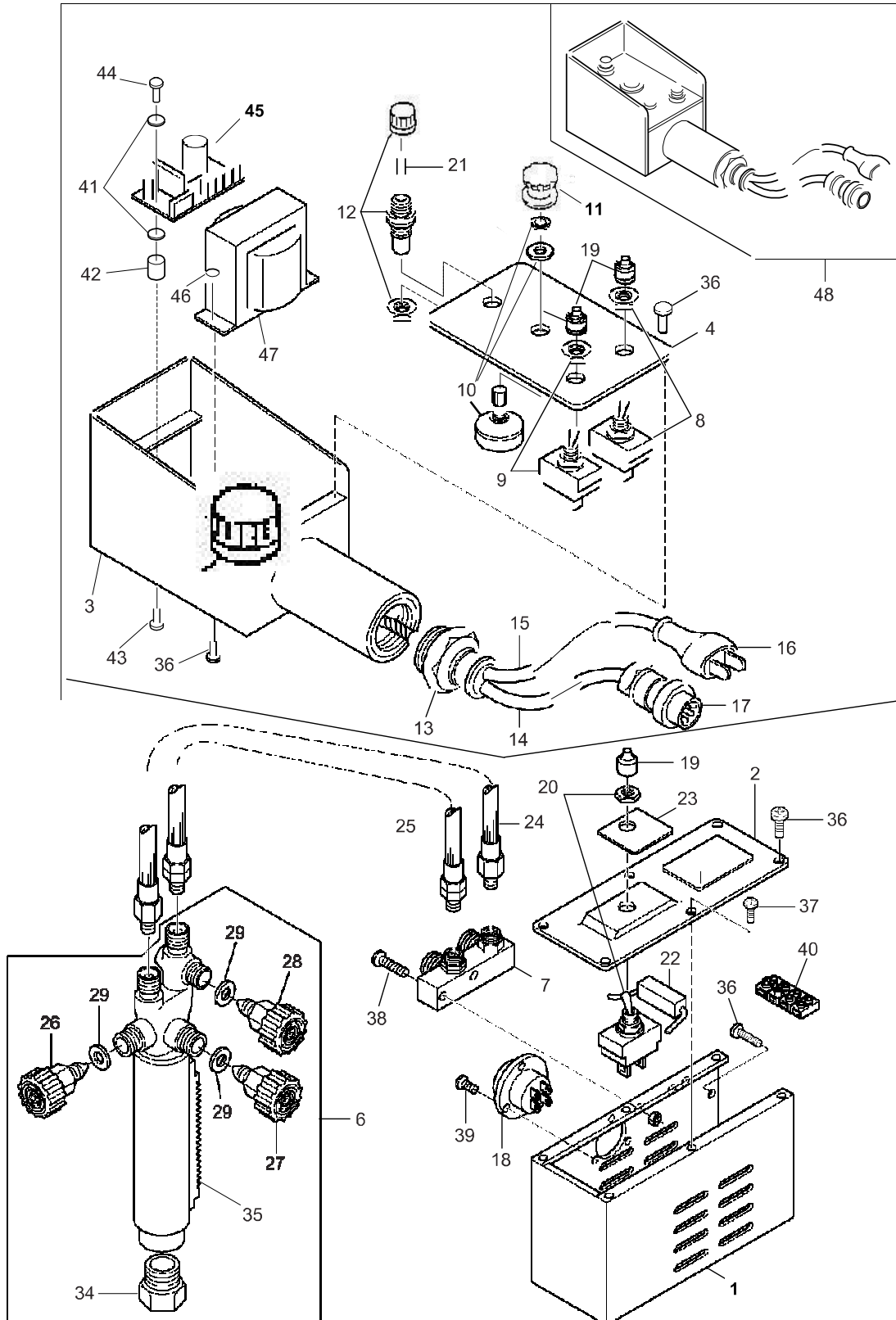
ITEM NUMBER	PART DESCRIPTION	QUANTITY	PART NUMBER	REMARKS
42	HEX NUT	8	9968123600	NH12
42a	FLAT WASHER	8	9968149100	WF12
43	ROLL PIN	1	9968207000	PR3X20
44	SET SCREW	2	9968275500	SS6X15
44a	HEX NUT	2	9968123300	NH6
45	SOCKET HEAD SCREW	4	9968128400	BC5X18
46	WING BOLT	5	9968230000	M4X10
47	WING BOLT	1	9968230400	M4X15
48	SOCKET HEAD SCREW	2	9968126800	BC4X10
48a	FLAT WASHER	2	9968148600	WF4
49	WING SCREW	1	9968233600	M8X12
50	HEX NUT	5	9968123300	NH-6
50a	FLAT WASHER	5	9968148800	WF6
51	PHILLIPS PAN HEAD SCREW	1	9968180800	SP6X30
52	PHILLIPS PAN HEAD SCREW	1	9968180500	SP6X25
53	ROLL PIN	2	9968204300	PR2.5X16
54	PHILLIPS PAN HEAD SCREW	8	9968174900	SP4X10
55	SET SCREW	1	9968273000	SS4X12
55a	FLAT WASHER	1	9968148600	WF4
56	PHILLIPS PAN HEAD SCREW	4	9968174600	SP4X45
56a	FLAT WASHER	4	9968148600	WF4
57	CHAIN	1	ZS31131	40" long 34 links
58	PINION HANDLE ASSEMBLY	2	ZS30908	

9.2 Driving unit



ITEM NUMBER	PART DESCRIPTION	QUANTITY	PART NUMBER	REMARKS
1	REDUCTION GEAR BOX	1	60032400	
2	CASING	1	61000887	
3	GEAR ASSEMBLY	1	61001127	
4	PHILLIPS PAN HEAD SCREW	1	9968173400	SP3X25
5	GEAR (B)	1	ZS32404	
6	GEAR SHAFT (B)	1	ZS32405	
7	COLLAR (B)	1	ZS32406	
8	CLUTCH LEVER HANDLE	1	ZS32407	
9	CASING (D)	1	ZS32408	
10	PINION	1	ZS31312	
11	CASING (A)	1	ZS31310	
12	COLLAR	1	ZS31309	
13	WORM WHEEL ASSEMBLY	1	ZS31308	
14	DRIVE SHAFT ASSEMBLY	1	ZS31318	
15	BEARING RETAINER	1	ZS31306	
16	CASING (B)	1	ZS31305	
17	CLUTCH LEVER SHAFT ASSEMBLY	1	ZS31313	
18	CLUTCH LEVER METAL	1	ZS31316	
19	NO.2 WORM	1	ZS32463	
20	GEAR COVER	1	ZS31319	
21	GEAR BRACKET	1	ZS31320	
22	BEARING RETAINER	1	ZS31279	
23	LEVER SPRING	1	ZS31315	
24	CLUTCH	1	ZS31307	
25	BEARING RETAINER	1	ZS31014	
26	MOTOR	1	69000126	DC 24V 5000RPM
27	BEARING	2	1138352500	608ZZ
28	BEARING	3	0866690300	6201ZZ
29	PHILLIPS PAN HEAD SCREW	6	9968172300	SP-3x6
30	SOCKET HEAD SCREW	4	9938130500	BC6X25
30a	FLAT WASHER	4	9968148800	WF6
31	SOCKET HEAD SCREW	4	9968180500	SP6X25
31a	LOCKING WASHER	4	9968150300	WS6
32	PHILLIPS PAN HEAD SCREW	4	9968179900	SP6X16
32a	FLAT WASHER	4	9968148800	WF6
33	HEX HEAD SCREW	1	9968105100	BH6x10
33a	LOCKING WASHER	1	9968150300	WS6
34	ROLL PIN	1	9968210000	PR4X20
35	PHILLIPS PAN HEAD SCREW	11	9968175000	SP 4X12
36	ROLL PIN	1	9968204500	PR2.5X20
37	PHILLIPS PAN HEAD SCREW	4	9968175300	SP4X16
37a	FLAT WASHER	4	9968148600	WF4
38	STEEL BALL	1	9968399900	¼ TB-1/4
39	PHILLIPS PAN HEAD SCREW	4	9968179900	SP6X16
39a	FLAT WASHER	4	9968148800	WF6
40	SLIDER	1	ZS30265	
41	NO.2 WORM ASSEMBLY	1	60032469	FOR USE WITH 24V MOTOR

9.3 Electrical and gas unit



WHEN ORDERING REPLACEMENT CONTROL BOX ASSY-
 VERIFY HOW MANY PIN CONNECTOR THE MACHINE UNIT
 HAS - ALL NEW MACHINES&PENDANTS HAVE 7 PIN
 CONNECTION
 IF CUSTOMER HAS A 6 PIN CONNECTOR THEY WILL NEED
 7 PIN RECEPTACLE TO REWIRE ON THE MACHINE (PART #
 ZS60786)
 11/15/17 EB

ITEM NUMBER	PART DESCRIPTION	QUANTITY	PART NUMBER	REMARKS
1	MOTOR COVER (A)	1	ZS32422	
2	MOTOR COVER (B)	1	ZS32423	
3	CONTROL BOX	1	61001001	
4	OPERATION PANEL	1	ZS32450	
5	N/A			
6	TORCH	1	ZS10051	USA ONLY
7	DISTRIBUTOR	1	ZS31847	USA ONLY
8	SWITCH	1	ZS35226	S-333
9	ON/OFF SWITCH	1	ZS32427	S-331
10	VARIABLE RESISTOR	1	ZS30745	50K
11	SPEED ADJUSTMENT KNOB	1	ZS31332	
12	FUSE HOLDER	1	ZS30749	F-7157
13	CORD LOCK	1	ZS32428	NC-2
14	CABTYRE CORD	1	ZM32429	5PX5M
15	CABTRYRE CORD	1	ZM30278	3PX5M JUST CABLE
16	RUBBER PLUG	1	9938848900	3P
17	METAL CONNECTOR (PENDANT SIDE)	1	ZS60783	7PX025
18	METAL CONNECTOR (MACHINE SIDE)	1	ZS60786	7PX025
19	CAP FOR DUST PROTECTOR	3	ZS32431	
20	SWITCH	1	ZS30822	S-332
21	FUSE	1	6N191010	1A
22	RESISTOR	1	ZS31247	RG8-7,10
23	NAME PLATE FOR ON-OFF SWITCH	1	ZS32433	
24	HOSE FOR OXYGEN	1	ZM30325	
25	HOSE FOR GAS	1	ZM30327	
26	JET OXYGEN VALVE	1	ZS15354	
27	PREHEAT OXYGEN VALVE	1	ZS15355	
28	GAS VALVE	1	ZS15356	
29	O-RING	3	ZS05026	
30	N/A			
31	N/A			
32	N/A			
33	N/A			
34	TIP FIXING NUT	1	ZS05020	
35	TORCH RACK	1	ZS10056	110MM
36	PHILLIPS PAN HEAD SCREW	10	9968174700	SP4X6
37	PHILLIPS PAN HEAD SCREW	4	9968172500	SP3X10
38	PHILLIPS OVAL C'SUNK SCREW	2	9968164700	SM5X20
39	PHILLIPS FLAT HEAD SCREW	3	9968160900	SM3X4

40	TERMINAL	1	ZS31666	2P
41	ISOLATION WASHER	4	60036374	WP-1
42	SPACER	2	60036049	SP-5
43	PHILLIPS PAN HEAD SCREW	2	9968172200	SP3X5
44	PHILLIPS PAN HEAD SCREW	2	9968172200	SP3X5
45	SCR CONTROL	1	69000105	
46	NUT	1		M4
47	TRANSFORMER	1	61000672	230-240V
	TRANSFORMER	1	61000472	100-220V
	TRANSFORMER	1	61000473	42 V
48	CONTROL BOX ASSEMBLY With 7 pin connection	1	61004383	24V MOTOR 110V (6 pin is obsolete)
	CONTROL BOX ASSEMBLY	1	61001122	24V MOTOR 220V