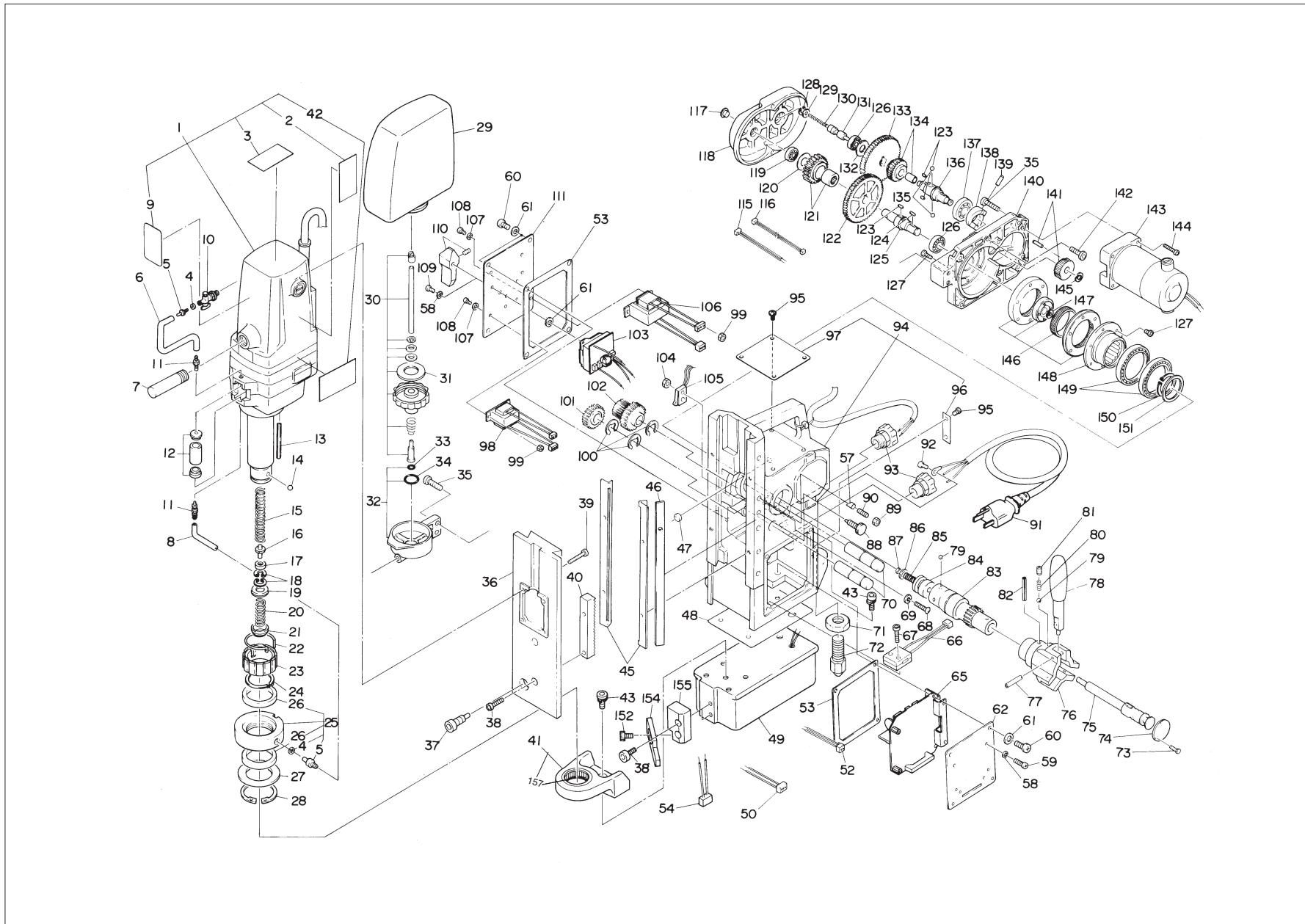


ATRA ACE QA-4000 (110-120V) ASSEMBLY AND PARTS LIST



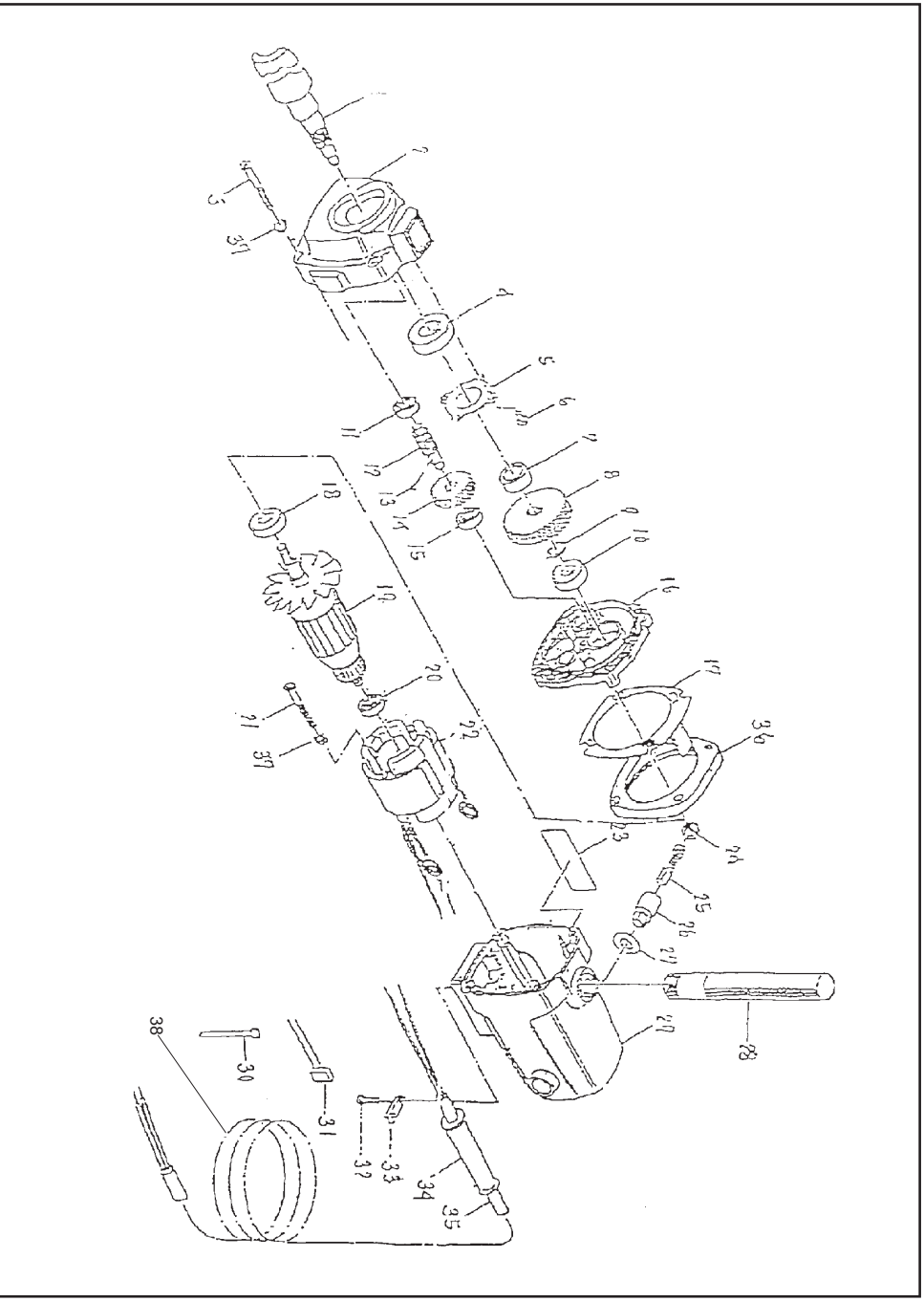
The parts numbers with () are included in the Ass'y parts written above them.

No.	Part No.	Part Name	Q'ty	Price	No.	Part No.	Part Name	Q'ty	Price	No.	Part No.	Part Name	Q'ty	Price
1	TB04072	Drill Motor Ass'y (115V)	1 set		60	TP02419	+ Screw 6 X 10	8		121	TB01360	Spur Gear 30 M1 Ass'y	1 set	
	(TB00598)	Carbon Brush (2 pcs/set)	1 set		61	TQ01331	Seal Washer M6	9		122	TQ02435	Spur Gear 70M1B	1	
2	(TQ05063)	Caution Label	1		62	TQ06040	Circuit Board	1		123	TQ01913	Sunk Key 4 X 4 X 7 Round-end	2	
3	(TQ05066)	Cutter Caution Label	1		65	TB05290	Control Board Ass'y	1 set		124	TP10130	Sunk Key 3 X 3 X 10	1	
9	(TQ05064)	Cutter Mounting Label	1		66	TB01363	Slide Detection Device	1 set		125	TQ01923	Gear Shaft B	1	
42	(TQ05063)	Caution Label	1		67	TP14471	Hex. Socket Bolt 4 X 20	2		126	TQ01916	Ball Bearing 6801ZZ	2	
4	CP21947	Seal Packing	2		68	FS00315	+ Pan Head Screw 2 X 20	2		127	TP04715	Hex. Bolt 4 X 8	12	
5	TP14500	Hose Nipple	2		69	TQ00729	Spring Washer M2	2		128	TQ01920	Retaining Ring RTW-9	1	
6	TP15821	Tube 4 X 7 X 240	1 set		70	TQ00707	Shaft	2		129	TQ01912	Spring Stopper	1	
7	TB02534	Side Handle Ass'y	1 set		71	TP03914	Hex. Nut Type 3 M16	1		130	TQ01911	Spring 0.6 X 3 X 35	1	
8	TP15820	Tube 4 X 7 X 120	1 set		72	TQ01954	Stabilizer Shaft	1		131	TQ01919	Spool	1	
10	TP14495	Petcock Valve 1/8(PT)	1		73	TP08598	+ Screw 3 X 5	3		132	TQ01963	Washer 14.5 X 25 X 0.6	1	
11	TQ00672	Dropper Nipple	2		74	TQ00844	Mounting Plate	1		133	TQ02434	Spur Gear 70M1A	1	
12	TB00503	Oil Dropper Ass'y	1 set		75	TQ01903	Inner Shaft	1		134	TB01358	Clutch Gear Sub Ass'y	1 set	
13	TP03261	Spring Pin 4 X 26 AW	1		76	TQ01901	Handle Boss	1		135	TP15428	Ball 5mm Dia.	2	
14	TB01672	Ball 5/16 Ass'y	1 set		77	TP12821	Spring Pin 5 X 26	3		136	TQ01915	Gear Shaft A	1	
15	TP15998	Spring 1.6 X 16.2 X 120	1		78	TQ00680	Rod Handle	3		137	TQ01917	Ball Bearing 6803ZZ	1	
16	TQ01895	Pilot Spacer	1		79	CP01123	Ball 3/16	7		138	TQ01918	Shift Ring	1	
17	TP15848	Spacer 10.5 X 19 X 5	1		80	TP06396	Spring	3		139	TQ01960	Roll Pin 4 X 22	1	
18	TP13905	Retaining Ring RTW-19	2		81	TP06397	Hex. Screw 6 X 8	3		140	TQ01909	Gear Box	1	
19	TB01348	Washer Ass'y	1 set		82	TP13891	Spring Pin 5 X 38	1		141	TB01356	Plain Gear 41 Ass'y	1 set	
20	TQ01898	Spring 0.8 X 12 X 31	1		83	TQ01902	Clutch Shaft	1		142	TP04197	Hex. Bolt 6 X 30	2	
21	TB01349	Push Ring Ass'y	1 set		84	TQ01904	Clutch Ring	1		143	TB02681	Feed Motor Ass'y (115V)	1 set	
22	TQ01896	Twist Spring	1		85	TQ00682	Spring 1.2 X 8 X 17	1			(TB00599)	Carbon Brush Ass'y (2 pcs/set)	1 set	
23	TQ01897	Sleeve	1		86	TP00092	Plain Washer M6	1		144	TP18619	Hex. Socket Head Cap Screw 4 X 30	4	
24	TP15239	Retaining Ring C-28	1		87	TQ00683	Grip Ring GS-6.0	1		145	TQ01961	Grip Ring GS-8	1	
25	TB00713	Oil Ring Ass'y	1 set		88	TP02931	Set Screw	1		146	TB00510	Harmonic Ass'y	1 set	
26	(TP14499)	Oil Seal GD38 X 48 X 4	2		89	TP07419	Hex. Nut Type 3 M6	5		147	TP12328	Retaining Ring STW-9	1	
27	TP12773	Washer 38.5 X 54 X 1	1		90	TQ04781	Hex. Socket Set Screw 6 X 14	5		148	TQ01952	Clutch	1	
28	TP14969	Retaining Ring ISTW-38	1		91	TA9A757	Cabtyre Cable Ass'y	1 set		149	TQ00725	Ball Bearing 6809 ZZ	2	
29	TQ04779	Oil Tank	1		92	LP08489	+ Screw 4 X 6	1		150	TP17384	Retaining Ring C-32	1	
30	TB03785	Cap Ass'y	1 set		93	TP13889	Connector SC4-3	2		151	TP14412	Retainer Holder	1	
31	(TQ00701)	Packing Cap	1		94	TB04377	Body Sub Ass'y A	1 set		152	TP01945	Hex. Bolt 5 X 12	1	
32	TB01380	Oil Tank Bracket Sub Ass'y	1 set		95	(TP05136)	Rivet No.2 X 4.8	6		154	TQ04949	Blade	1	
33	(TP11994)	O-Ring P-4	1		96	(TP04769)	Plate Serial Number	1		155	TQ04950	Blade Base	1	
34	(CP20180)	O-Ring P-18	1		97	(TQ05610)	Plate Warning	1						
35	TP03086	Hex. Bolt 6 X 20	6		98	TB03912	Transformer Sensor Ass'y	1 set						
36	TQ01899	Slide Board	1		99	TP00067	Hex. Nut M3	3						
37	TP14717	Hex. Socket Bolt 10 X 20	1		100	TP04126	Snap Ring E-12	3						
38	TP14178	Hex. Bolt 6 X 10	2		101	TQ00708	Spur Gear 24 M1.5	1						
39	TP08013	Hex. Bolt 5 X 25	4		102	TQ00706	Spur Gear 16 X 24	1						
40	TP15111	Rack	1		103	TB03702	Switch Ass'y	1 set						
41	TB02694	Bracket Ass'y	1 set		104	TP02627	Hex. Nut M2	2						
157	(TQ03444)	Needle Bearing B-2410	1		105	TQ00703	Limit Switch DC3A-D3RB	1						
43	TQ03344	Hex. Socket Bolt 8 X 20	6		106	TB03911	Trans. Power Supply Ass'y (115V)	1 set						
45	TP12777	Slide Plate	2		107	TQ01330	Seal Washer M3	3						
46	TQ01905	Jib	1		108	TP00056	+ Screw 3 X 6	3						
47	TQ00394	Seal Bushing	1		109	TP12819	+ Pan Head Screw 4 X 6	2						
48	TQ01928	Packing for Pole	1		110	TB01381	Switch Knob Ass'y	1 set						
49	TB02687	Square Pole Ass'y (115V)	1 set		111	TQ05061	Switch Plate	1						
50	TB00578	H Cord Ass'y	1 set		115	TB00573	D Cord Ass'y	1 set						
52	TB00577	F Cord Ass'y	1 set		116	TB03809	Cord Ass'y M-M	1 set						
53	TQ01933	Packing for Body	2		117	TQ01962	Collar Cap K-100 16CSBL	1						
57	TQ04783	Supporter	5		118	TQ04982	Gear Box Cover	1						
58	TQ00258	Seal Washer M4	6		119	TQ01924	Ball Bearing 688ZZ	1						
59	TQ01526	Pan Head Screw 4 X 10	4		120	TQ01926	Washer 10.2 X 20 X 0.6	1						

ACCESSORIES

No.	Part No.	Part Name	Q'ty	Price
	TP04696	Hex. Wrench Key 3	1	
	TP01939	Hex. Wrench Key 4	1	
	TP17014	Spanner 8 X 10	1	
	UEA0835	Pilot Pin 5/16" X 1-3/8" DOC	1	
	TA99027	Safety Chain Ass'y	1 set	
	TB02145	Cutting Oil 0.5L	1	
	TQ05611	Instruction Manual	1	
	TP10198	Tool Box 285 X 125 X 62	1	
	TQ03060	Label Combination	1	

QA-3500/QA-4000 MOTOR ASSEMBLY AND PARTS LIST



The Part Numbers with () are included in the Ass'y parts written above them.

No.	Part No.	Part Name	Q'ty	Price
1	TQ01959	Spindle Arbor	1	
2	TQ01137	Gear Case	1	
3	TP17449	+ Screw 5 X 60	4	
4	TP04160	Ball Bearing 6203 ZZ	1	
5	TP00858	Bearing Stopper	1	
6	TP11492	+ Screw 5 X 10	4	
7	TQ00860	Collar	1	
8	TQ00861	Spiral Gear (B)	1	
9	TP18356	Retaining Ring C-14	1	
10	TP17438	Ball Bearing 6200Z	1	
11	TP00468	Ball Bearing 608Z	1	
12	TQ00862	Pinion	1	
13	TP06393	Sunk Key 3 X 3 X 5	1	
14	TQ00863	Spiral Gear (A)	1	
15	TQ00468	Ball Bearing 608ZZ	1	
16	TQ00864	Bearing Bracket	1	
17	TQ00865	Wind Shield Plate	1	
18	TP17438	Ball Bearing 6200Z	1	
19	TB00820	Armature Ass'y (115V)	1 set	

No.	Part No.	Part Name	Q'ty	Price
20	TP00468	Ball Bearing 608Z	1	
21	TP17449	+ Screw 5 X 60	4	
22	TB00822	Field Ass'y (115V)	1 set	
23	TQ04417	Name Plate (115V)	1	
24	TQ00867	Brush Cap	2	
25	TB00598	Carbon Brush (2 pcs/set)	1 set	
26	TQ00868	Brush Holder	2	
27	TB00869	Insulation Washer	1	
28	TB02534	Slide Handle Ass'y	1 set	
29	TQ00870	Motor Housing	1	
30	LP13171	Cable Band	1	
31	TP16481	Condenser SM-37R8291	1	
32	LP30251	+ Screw 4 X 16	2	
33	TP13362	Cord Clamp	1	
34	TP13363	Cord Armor	1	
35	TQ01440	Cord for Electric Motor	1	
36	TQ00866	Spacer	1	
37	TP00513	Spring Washer M5	6	
38	TQ01440	Cord for Electric Motor	1	