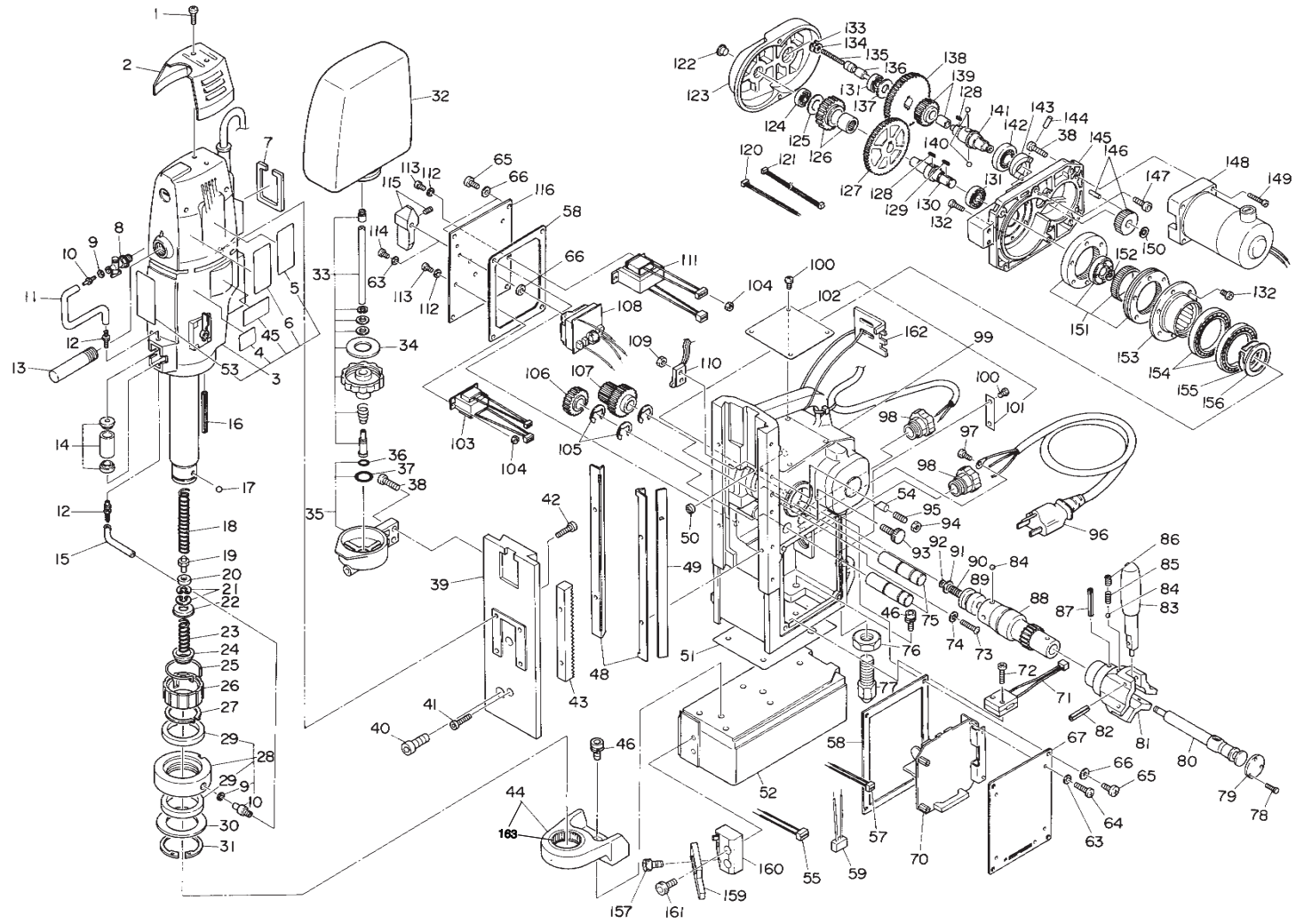


ATRA ACE QA-5000 (110-120V) ASSEMBLY AND PARTS LIST

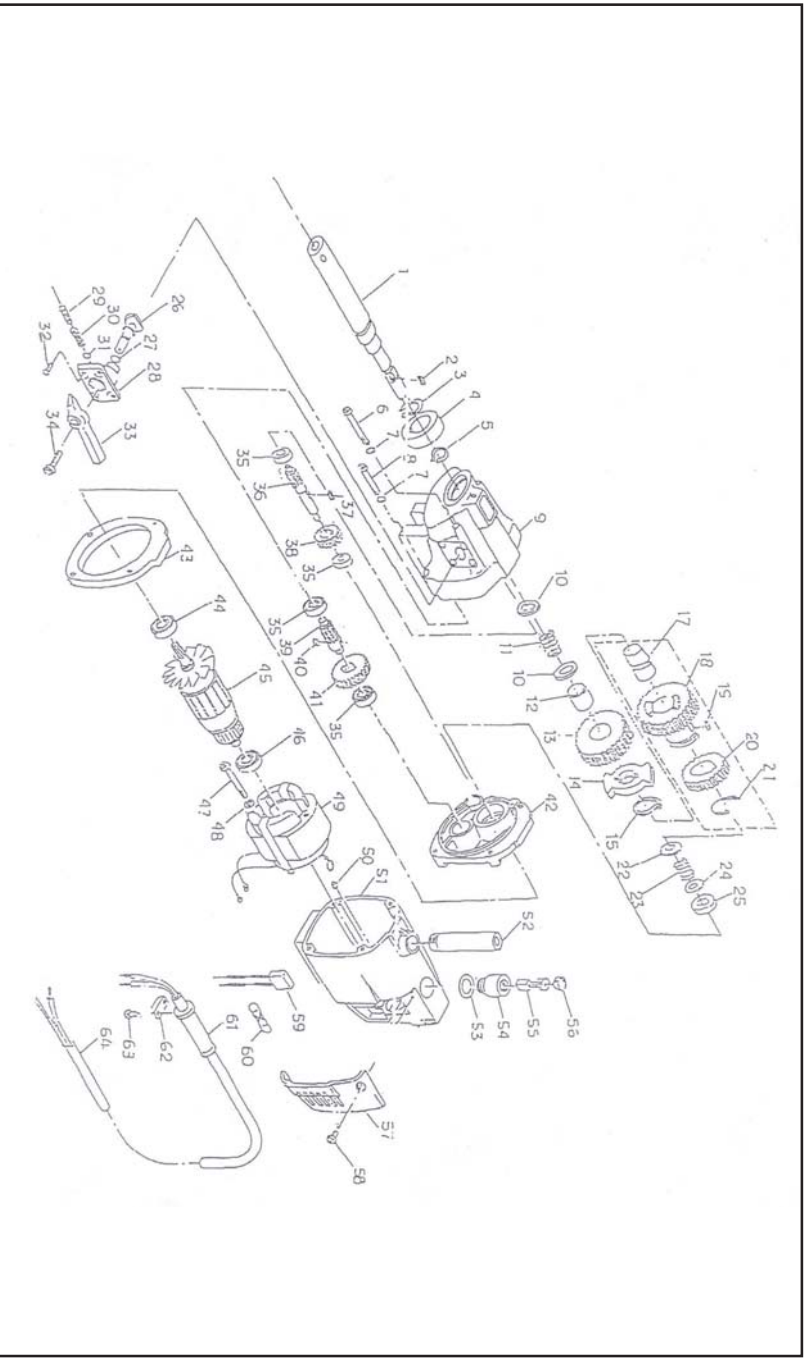


The parts numbers with () are included in the Ass'y parts written above them.

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	LP30156	Pan Head Screw 4 X 6	2		58	TQ00932	Packing Body	2		123	TQ04982	Gear Box Cover	1	
2	TQ00926	Protection Cover	1		56	TP02639	Hex. Nut M4	9		124	TQ01924	Ball Bearing 688ZZ	1	
3	TB04020	Drill Motor Ass'y for QA-5000	1 set		63	TQ00258	Seal Washer M4	6		125	TQ01926	Washer 10.2 X 20 X 0.6	1	
	TA9A028	Brush Ass'y (2 pcs/set)	1 set		64	TQ01526	Pan Head Screw 4 X 10	4		126	TB01360	Spur Gear 30 M1 Ass'y	1 set	
4	TQ05077	Label – Drill rpm	1		65	TP02419	+ Screw 6 X 10	8		127	TQ02435	Spur Gear 70 M1B	1	
45	TQ05063	Caution Label	1		66	TQ01331	Seal Washer M6	9		128	TQ01913	Sunk Key 4 X 4 X 7 Round-end	2	
5	TQ05065	Label – Cutter Insertion	1		67	TQ06041	Mounting Plate	1		129	TP10130	Sunk Key 3 X 3 X 10 Round-end	1	
6	TQ05064	Cutter – Mounting Label	1		70	TB05294	Control Board Ass'y	1 set		130	TQ01923	Gear Shaft B	1	
54	TQ05066	Cutter – Caution Label	1		71	TB01363	Slide Detection Device	1 set		131	TQ01916	Ball Bearing 6801ZZ	2	
7	TQ00927	Drill Motor Packing	1		72	TP14471	Hex. Socket Bolt 4 X 20	2		132	TP04715	Hex. Bolt 4 X 8	12	
8	TP14495	Petcock Valve 1/8(PT)	1		73	FS00315	+ Pan Head Screw 2 X 20	2		133	TQ01920	Retaining Ring RTW-9	1	
9	CP21947	Seal Packing	2		74	TQ00729	Spring Washer M2	2		134	TQ01912	Spring Stopper	1	
10	TP14500	Hose Nipple	2		75	TQ00707	Shaft	2		135	TQ01911	Spring 0.6 X 3 X 35	1	
11	TP15821	Tube 4 X 7 X 240	1 set		76	TP03914	Hex. Nut Type 3 M16	1		136	TQ01919	Spool	1	
12	TQ00672	Dropper Nipple	2		77	TQ00720	Stabilizer Shaft	1		137	TQ01963	Washer 14.5 X 25 X 0.6	1	
13	TB02534	Side Handle Ass'y	1 set		78	TP08598	+ Screw 3 X 5	3		138	TQ02434	Spur Gear 70M1A	1	
14	TB00503	Oil Dropper Ass'y	1 set		79	TQ00844	Name Plate –Auto Feeder	1		139	TB01358	Clutch Gear Sub Ass'y	1 set	
15	TP15820	Tube 4 X 7 X 120	1 set		80	TQ01903	Inner Shaft	1		140	TP15428	Ball 5mm Dia.	2	
16	TP03261	Spring Pin 4 X 26 AW	1		81	TQ01901	Handle Boss	1		141	TQ01915	Gear Shaft A	1	
17	TB01672	Ball 5/16 Ass'y	1 set		82	TP12821	Spring Pin 5 X 26	3		142	TQ01917	Ball Bearing 6803ZZ	1	
18	TP15998	Spring 1.6 X 16.2 X 120	1		83	TQ00680	Rod Handle	3		143	TQ01918	Shift Ring	1	
19	TQ01895	Pilot Spacer	1		84	CP01123	Ball 3/16	7		144	TQ01960	Roll Pin 4 X 22	1	
20	TP15848	Spacer 10.5 X 19 X 5	1		85	TP06396	Spring	3		145	TQ01909	Gear Box	1	
21	TP13905	Retaining Ring RTW-19	2		86	TP06397	Hex. Screw 6 X 8	3		146	TB01356	Plain Gear 41 Ass'y	1 set	
22	TB01348	Washer Ass'y	1 set		87	TP13891	Spring Pin 5 X 38	1		147	TP04197	Hex. Bolt 6 X 30	2	
23	TQ01898	Spring 0.8 X 12 X 31	1		88	TQ01902	Clutch Shaft	1		148	TB04014	Feed Motor Ass'y	1 set	
24	TB01349	Push Ring Ass'y	1 set		89	TQ01904	Clutch Ring	1		-	(TB00599)	Carbon Brush Ass'y (2 pcs/set)	1 set	
25	TQ01896	Twist Spring	1		90	TQ00682	Spring 1.2 X 8 X 17	1		149	TP18619	Hex. Socket Head Cap Screw 4 X 30	4	
26	TQ01897	Sleeve	1		91	TP00092	Plain Washer M6	1		150	TQ01961	Grip Ring GS-8	1	
27	TP15239	Retaining Ring C-28	1		92	TQ00683	Grip Ring GS-6.0	1		151	TB00510	Harmonic Ass'y	1 set	
28	TB00713	Oil Ring Ass'y	1 set		93	TP02931	Set Screw	1		152	TP12328	Retaining Ring STW-9	1	
29	(TP14499)	Oil Seal GD38 X 48 X 4	2		94	TP07419	Hex. Nut Type 3 M6	5		153	TQ01952	Clutch	1	
30	TP12773	Washer 38.5 X 54 X 1	1		95	TQ04781	Hex. Socket Set Screw 6 X 14	5		154	TQ00725	Ball Bearing 6809 ZZ	2	
31	TP14969	Retaining Ring ISTW-38	1		96	TA9A757	Cabtyre Cable Ass'y	1 set		155	TP17384	Retaining Ring C-32	1	
32	TQ04779	Oil Tank	1		97	LP08489	+ Screw 4 X 6	1		156	TP14412	Retainer Holder	1	
33	TB03785	Cap Ass'y	1 set		98	TP13889	Connector SC4-3	2		157	TP01945	Hex. Bolt 5 X 12	1	
34	(TQ00701)	Packing Cap	1		99	TB04376	Body Sub Ass'y A	1 set		159	TQ04949	Blade	1	
35	TB01380	Oil Tank Bracket Sub Ass'y	1 set		100	(TP05136)	Rivet No. 2 X 4.8	6		160	TB03863	Blade Base Ass'y	1 set	
36	(TP11994)	O-Ring P-4	1		101	(TP04769)	Plate Serial Number	1		161	TP14178	Hex. Bolt 6 X 10	2	
37	(CP20180)	O-Ring P-18	1		102	(TQ05610)	WARNING Plate	1		162	TQ04952	Chip Stopper	1	
38	TP03086	Hex. Bolt 6 X 20	6		103	TB03912	Transformer Sensor Ass'y	1 set						
39	TQ02497	Slide Board	1		104	TP00067	Hex. Nut M3	3						
40	TP14717	Hex. Socket Bolt 10 X 20	1		105	TP04126	Snap Ring E-12	3						
41	TP07118	Hex. Bolt 6 X 16	2		106	TQ00708	Spur Gear 24 M1.5	1						
42	TP04532	Hex. Socket Bolt 5 X 30	4		107	TQ00706	Spur Gear 16 X 24	1						
43	TQ02496	Rack	1		108	TB03702	Switch Ass'y	1 set						
44	TB02694	Bracket Ass'y	1 set		109	TP02627	Hex. Nut M2	2						
163	(TQ03444)	Needle Bearing B-2410	1		110	TQ00703	Limit Switch DC3A-D3RB	1						
46	TQ03344	Hex. Socket Bolt 8 X 20	6		111	TB03911	Trans. Power Supply Ass'y (115V)	1 set						
48	TP12777	Slide Plate	2		112	TQ01330	Seal Washer M3	3						
49	TQ01905	Jib	1		113	TP00153	+ Screw 3 X 12	3						
50	TQ00394	Seal Bushing	1		114	TB12819	Pan Head Screw 4 X 6	2						
51	TQ01928	Packing for Pole	1		115	TB01381	Switch Knob Ass'y	1 set						
52	TB04022	Square Pole Ass'y	1 set		116	TQ05073	Switch Plate	1						
54	TQ04783	Supporter	5		120	TB00573	D Cord Ass'y	1 set						
55	TB00578	H Cord Ass'y	1 set		121	TB03809	Cord Ass'y M-M	1 set						
57	TB00577	F Cord Ass'y	1 set		122	TQ01962	Collar Cap K-100 16CSBL	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	
	UEA0850	Pilot Pin 5/16" X 2" DOC	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	
	TQ05186	Label Combination	1	

QA-5000 MOTOR ASSEMBLY AND PARTS LIST



The part numbers with () are included in the Assy parts written above them.

No.	Part No.	Part Name	Q'ty	Price
1	TQ02521	Spindle Arbor	1	
2	TQ00979	Sunk Key 4 X 4 X 7	1	
3	CP20569	Retaining Ring C-47	1	
4	TP17382	Ball Bearing 6005Z	1	
5	CQ02200	Retaining Ring C-25	1	
6	TQ00980	+ Round Head Screw 5 X 145	2	
7	TP00513	Spring Washer M5	4	
8	TQ00981	+ Round Head Screw 5 X 80	2	
9	TQ00982	Gear Case	1	
10	TP16502	Plain Washer	2	
11	TP16501	Spring (L)	1	
12	TP06503	Bush	1	
13	TA9A584	Spiral Gear B-L Assy	1	
14	TP16505	Boss	1	
15	CP03040	Retaining Ring C-20	1	
16	TB00750	Spiral Gear B-H Assy	1 set	
17	TQ00976	Needle Bearing HK2012	2	
18	TB01087	Spiral Gear	1	
19	TP16497	Sunk Key 5 X 5 X 7	1	
20	TQ00983	Spur Gear	1	
21	TP17384	Retaining Ring C-32	1	
22	TP16507	Plain Washer 20.2 X 26 X 1	1	
23	TP16508	Spring (H)	1	
24	TP16509	Plain Washer 15.2 X 24.2 X1	1	
25	TP17383	Ball Bearing 6202	1	
26	TQ00984	Cam Shaft	1	
27	TQ09421	O Ring P-6	1	
28	TP16490	Guide Boss	1	
29	TP18684	Hex Socket Set Screw 4 X 8	1	
30	TP16493	Coil Spring	1	
31	TP16492	Steel Ball	1	
32	TP17385	+ Screw 4 X 12	4	

No.	Part No.	Part Name	Q'ty	Price
33	TP16489	Lever SM-378284-1	1	
34	TP09693	Hex Bolt 4 X 14	1	
35	TP17380	Ball Bearing 629	4	
36	TQ00985	Pinion (L)	1	
37	TP16506	Sunk Key 4 X 4 X 10	1	
38	TQ00986	Spiral Gear (S)	1	
39	TQ00987	Pinion (H)	1	
40	TP13351	Sunk Key 3 X 3 X 7	1	
41	TP16516	Spiral Gear (A)	1	
42	TQ00662	Bearing Bracket	1	
43	TP16488	Spacer	1	
44	TP06718	Ball Bearing 6201Z	1	
45	TB03381	Armature Assy (115V)	1 set	
46	TP06242	Ball Bearing 629ZZ	1	
47	TQ00988	+ Round Head Screw 5 X 75	2	
48	TP00513	Spring Washer M5	2	
49	TB03380	Field Assy (115V)	1 set	
50	TP13355	Rubber Packing	1	
51	TQ00989	Motor Housing	1	
52	TB02534	Side Handle Assy	1 set	
53	TP13359	Insulation Washer	2	
54	TP13358	Brush Holder	2	
55	TA9A028	Brush Assy (2 pcs/set)	1 set	
56	TP13357	Brush Cap	2	
57	TP13360	Cover	1	
58	TP11245	+ Screw 4 X 10	1	
59	TP16481	Condenser SM-37R8291	1	
60	TQ00990	Insulated Connector FNCE-2	2	
61	TP13363	Cord Armor	1	
62	TP13362	Cord Clamp	1	
63	TP17453	+ Screw 4 X 20	2	
64	TQ00991	Cable from Motor	1	