


※Specifications

MODEL		ED-B512L2	ED-B522L2	ED-B512LH2	ED-B517LH2	ED-B512P2	ED-B522P2	ED-B512PH2	ED-B517PH2
Input voltage		AC-220~240V 50/60HZ 0.2A							
Power Consumption		40W							
Torque	(kgf.cm)	1.5-12	4-22	1.5-12	3~17	2-12	4-22	2-12	3~17
	(Lbf.in)	1.30-10.42	3.47-19.10	1.30-10.42	2.56~14.76	1.74~10.42	3.47-19.10	1.74~10.42	2.56~14.76
	(N.m)	0.15-1.18	0.39-2.16	0.15-1.18	0.29~1.67	0.2~1.18	0.39-2.16	0.2~1.18	0.29~1.67
Repeatable Torque Accuracy (%)		±3%							
Torque Adjustment		Step less							
Unloaded Rotation Speed (r/min)±10%	HI	1200	1200	2000	2000	1200	1200	2000	2000
Screw Size Dia (mm)	Machine screw	1.6~3.0	2.3~4.0	1.6~3.0	1.6~3.5	1.6~3.0	2.3~4.0	1.6~3.0	1.6~3.5
	Tapping screw	1.6~2.6	2.3~3.5	1.6~2.6	1.6~3.0	1.6~2.6	2.3~3.5	1.6~2.6	1.6~3.0
Weight (g)		470							
Length (mm)		245							
Model of Torque Fixing Ring		EAA-TL6, EAA-TL6/E							
Model of Suspension Rack		EAA-HD3, EAA-HD4							
Bit Type									

* 1N.m=10.2Kgf.cm 1N.m=8.85Lbf.in

※Accessories

1. BIT Type:

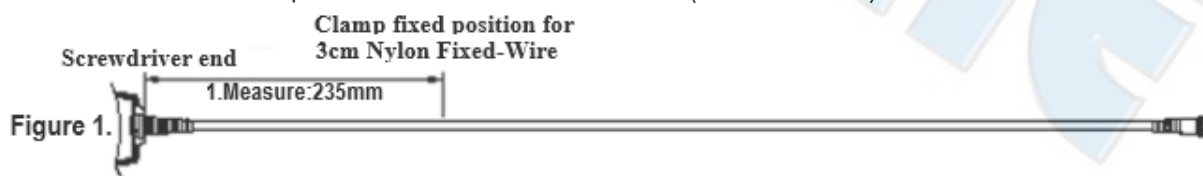
- No. 00 . . . Bit use in dia 1.3~1.8mm screw
- No. 0 . . . Bit use in dia 1.8~2.0mm screw
- No. 1 . . . Bit use in dia 2.0~2.6mm screw
- No. 2 . . . Bit use in dia 3.0~4.0mm screw

ED-B512L2 ; ED-B512P2	with BIT	1# & 2#	1 Pce. Each
ED-B522L2 ; ED-B522P2	with BIT	1# & 2#	1 Pce. Each
ED-B512LH2 ; ED-B512PH2	with BIT	1# & 2#	1 Pce. Each
ED-B517LH2 ; ED-B517PH2	with BIT	1# & 2#	1 Pce. Each

2. Suspension rack and Torque fixing ring acceptable for use with the tool are available from SUMAKE catalogue.
3. Torque Fixing Ring EAA-TL6C(S) 1 Pcs

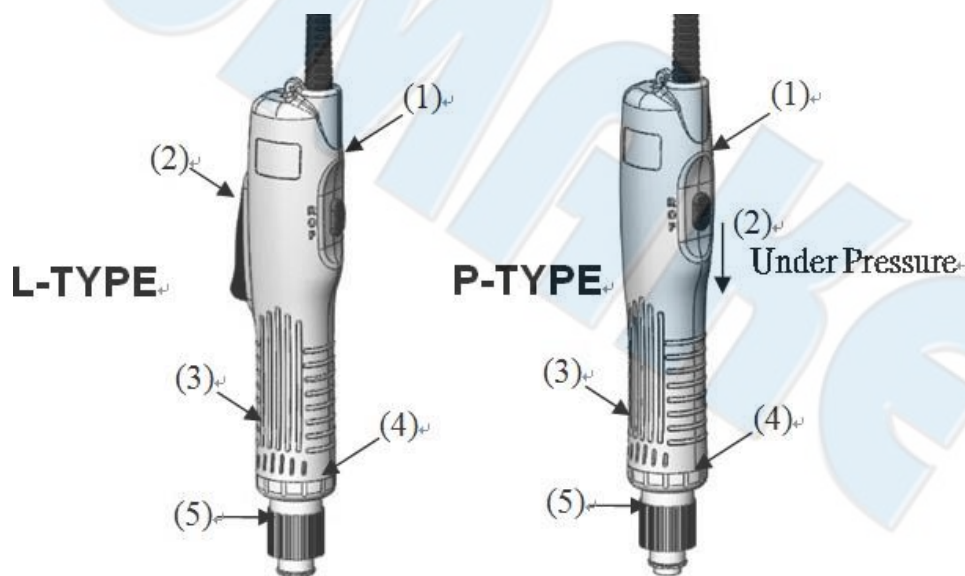
※Operations Cautions

1. Whenever changing a bit, make certain the Forward / Reverse Switch is in the " OFF " position and tool is unplugged.
2. Do not allow chemicals such as acetone, benzene, thinner, trichloroethylene ketone, or other similar chemicals to come in contact with the screwdriver housing as damage will result.
3. Do not drop or abuse the screwdriver.
4. Do not adjust the torque setting higher than 8 on the torque scale.
5. There should be a tool rest interval when cycles three seconds or longer. This tool is intended for a duty cycle of 1.0 sec on, 3.0 sec off.
6. Do not use this screwdriver for tightening wood screws. This is " Metal Assembly Screw Driver "
7. Do not operate the Forward / Reverse Switch the motor is running.
8. Whenever a tool is not being used, move the Forward / Reverse Switch to the "OFF" position and unplug the screwdriver.
9. Don't touch For&Rew Switch during operating for keeping system from wrong judgement.
10. Clamp fixed position for 3cm Nylon Fixed-Wire The clamp fixed position for 3cm Nylon Fixed-Wire is at 235mm start count from the top of the screwdriver flat surface (for direct cable).



※Function Description

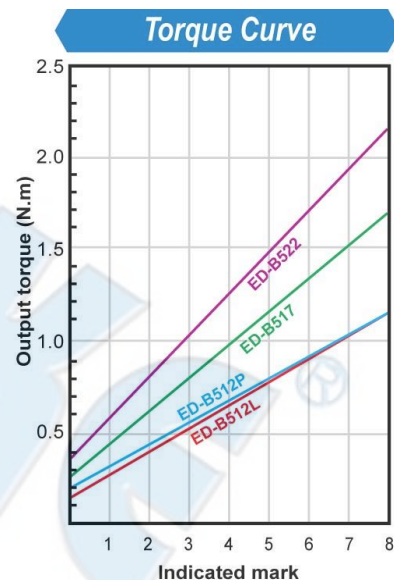
1. Forward/Reverse Switch : To switch screwdriver run in Reserve or Forward
 - (1) R : Run in reserve to untighten screw ◦
 - (2) F : Run in Forward to tighten screw ◦
2. L-TYPE: Press Level switch and hold to start screwdriver, release to stop ◦
P-TYPE: Under Pressure and hold to start screwdriver, release to stop ◦
3. Front Locking Ring : To fixed the housing of screwdriver ◦
4. Torque Adjusting Ring : To adjust torque from low (scale 0) to high (scale 8) torque ◦
5. Bit holder cap : Pull out to put bit into the holder or take out from the holder ◦



✖Torque Adjustment Operation

To adjust the torque on these screwdrivers. Proceed as follows:

1. Determine the torque output of the tool by checking a tightened fastener with a torque wrench.
2. Increase or decrease the torque by turning the torque adjusting nut on the nose of the driver. Turning the nut clockwise to a higher number on the torque scale increase torque output while rotating the nut counterclockwise to a lower number decreases the torque output.
3. Check the adjustment with a torque wrench. A number of factors will affect torque output from one job to another. Final torque adjustment should be made at the job through a series of gradual increase. Always start below the desired torque and work upward.
4. Adjust the bit torque by changing the driving in length of the adjust nut at the end.
5. The relationship between torque scale on nut and bit torque is as shown in the torque diagram. The figures of torque scale do not indicate bit torque actual values. However, the clamping torque of screw itself is different from type, size, material of the screw and the material of its mating part. Use it as standard to obtain an appropriate clamping torque.
6. The (Return torque method) in which once-clamped screw is returned with torque wrench or the like is available as one of torque control methods however, note that the measured values by the return torque method generally appear in 10%~30% lower than the actually clamping torque.
7. The torque tester measures the torque of screwdriver. The clamping torque of screw itself is different from the clamped conditions. Understand the correlation between clamping torque values and the torque tester values perform the torque control properly.



CAUTION

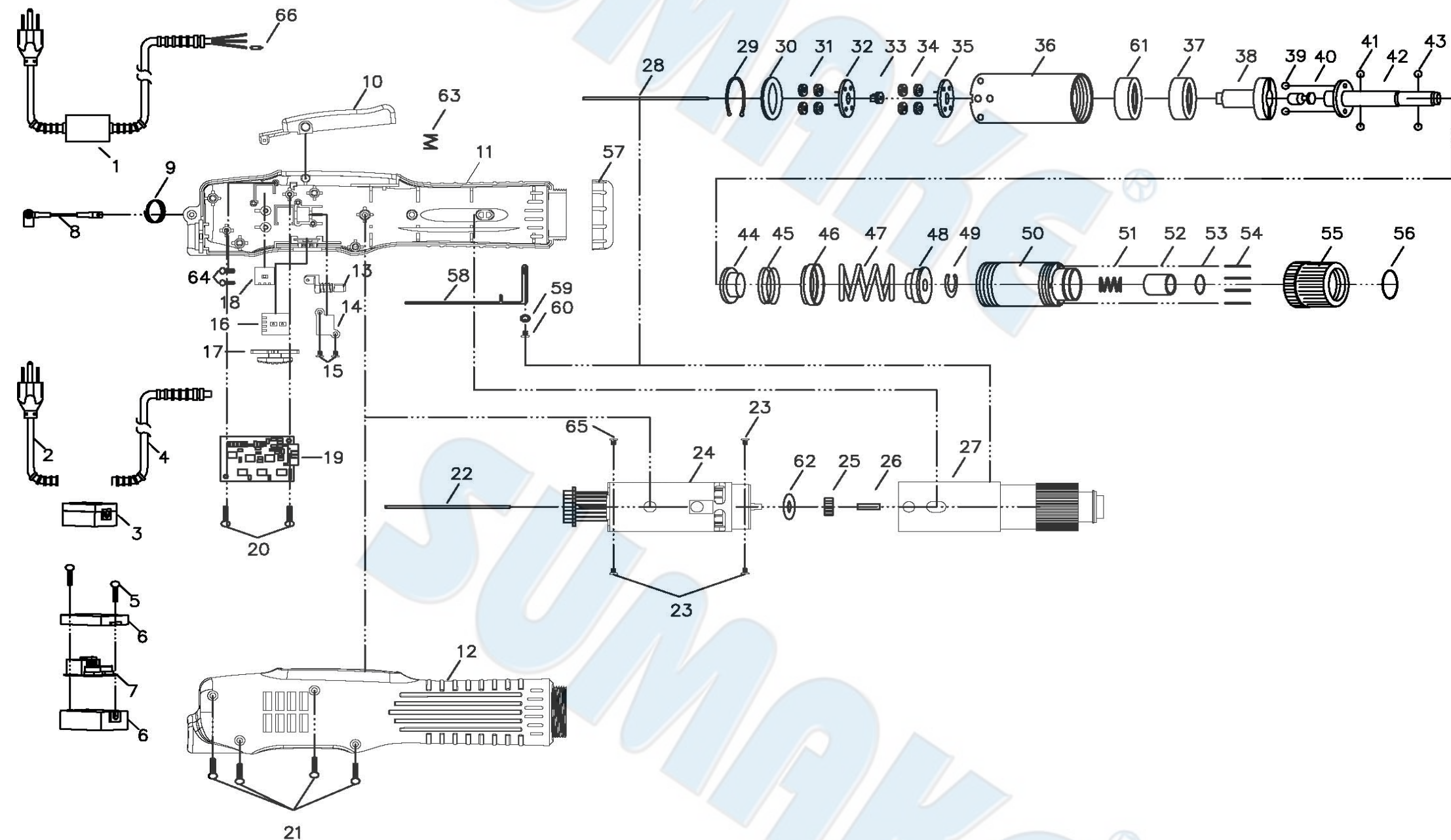
1. Also in reverse rotation, the clutch is shut-off in such manner as in normal rotation, stopping the motor running accordingly, when the screw tightened at a large torque, set it to a higher torque scale.
2. The numbers from zero to eight on the torque scale are reference number only and not an indication of actual torque output.

Our company reserves the right to modify the product without prior notice.

ED-B512(22)L(P)2(12)(17)L(P)H2-S-2411D-K2

ED-B512L2, ED-B522L2

BRUSHLESS FULL AUTO SHUT-OFF AC220, LEVER-START, ELECTRIC SCREWDRIVER (DIRECT PLUG IN)



ED-B512L2, ED-B522L2

BRUSHLESS FULL AUTO SHUT-OFF AC220, LEVER-START, ELECTRIC SCREWDRIVER (DIRECT PLUG IN)

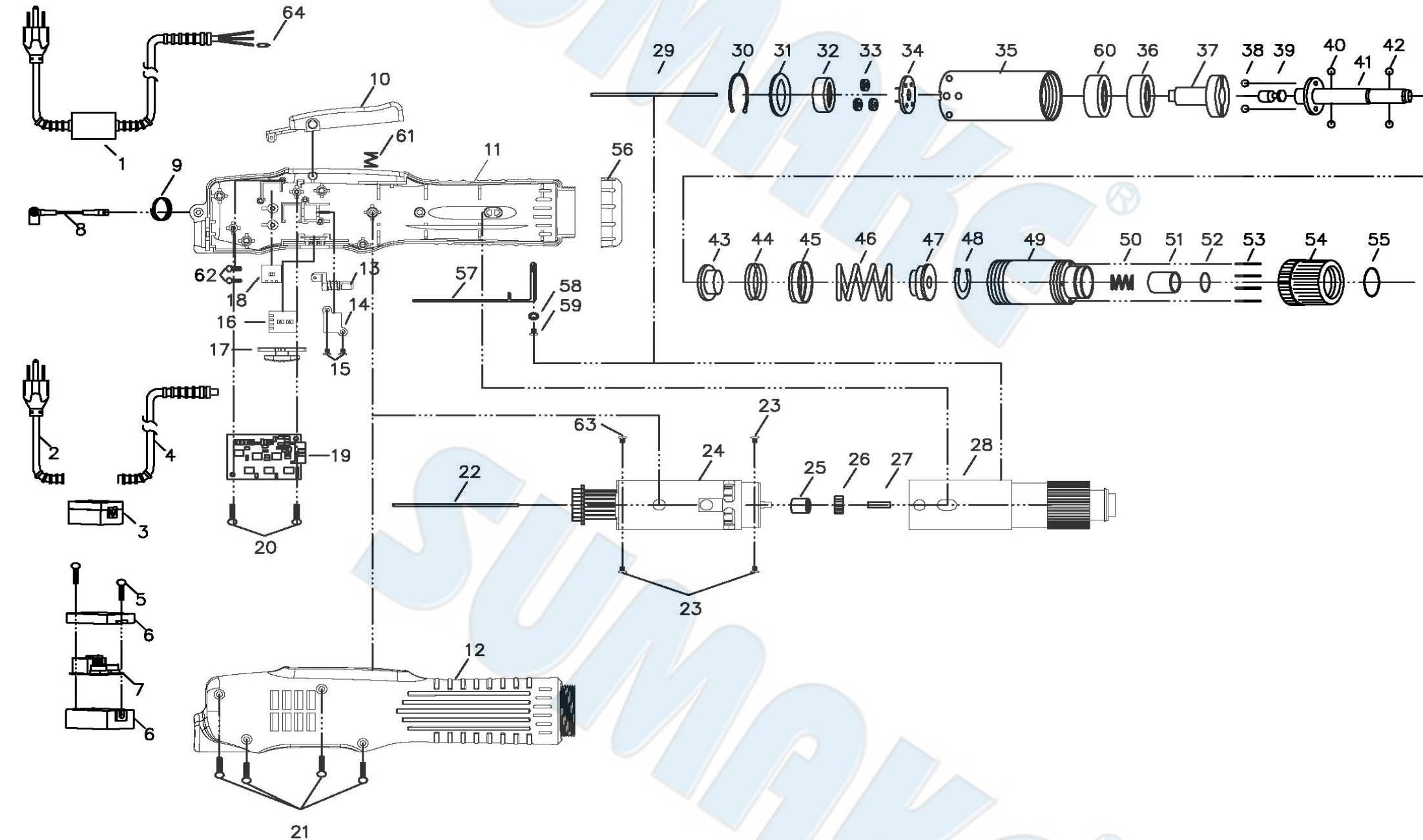
PARTS LIST

No.	Parts No.	Description	Q'ty
1	EPAM30005-A	Cord Assy-America Plug	1
	EPAM30005-E	Cord Assy-Europe Plug	1
	EPAM30005-F	Cord Assy-Chinese Plug	1
	EPAM30005-I	Cord Assy-India Plug	1
	EPAM30005-U	Cord Assy-British Plug	1
2	EPAA30007-1	Cord 1 Ft With Us Plug	1
	EPAA30007-2	Cord 1 Ft With Europe Plug	1
	EPAA30007-3	Cord 1 Ft With Chinese Plug	1
	EPAA30007-5E	Cord 1 Ft With India Plug	1
	EPAA30007-5	Cord 1 Ft With British Plug	1
3	EPEJ30004-2F	Emc-Box Assembly	1
4	EPAA30013	Cord 9"	1
5	EPCH90152-1F	Screw	2
6	EPEC30006	Emc-Box Case Only	1
7	EPEG31451	P.C.B.	1
8	EPP12104-3	Retaining Clip	1
9	EPCJ20011	Suspension Ring	1
10	EPC50023	Trigger Assembly	1
11	EPC40800-F	Housing-Underside-Grey	1
12	EPCA93119	Housing-Upside-Grey	1
13	EPC50152-3	Push Rod	1
14	EPC80001	Fixture	1
15	EPCH30200	Screw	2
16	EPEG31421-15F	Pcb-Changeover	1
17	EPCI50212-14	F/R Switching Element For ED-B512L2	1
	EPCI50212-15	F/R Switching Element For ED-B522L2	1
18	EPEG31420F	P.C.B.	1
19	EPEG31138-F	P.C.B.	1
20	EPCH90154	Screw For P.C.B.	2
21	EPCH20102	Screw For Housing	3
22	EPMI90582-1	Pilot Rod-Lb	1
	EPMI90582-2	Pilot Rod-La,C.D	1
23	EPCH20102-24	Screw For Motor	5
24	EPMO60006-1	Motor Assembly	1
25	EPM11322-1	Gear For ED-B512L2	1
	EPM11322	Gear For ED-B522L2	1
26	EPMG91081	Pilot Rod	1
27	EPGZJ51901-22A	Clutch Assembly For ED-B512L2 Hex. 5mm Type(Opt.)	1
	EPGZJ51901-22B	Clutch Assembly For ED-B512L2 Hex. 6.35mm Type (Opt.)	1
	EPGZJ51901-22C	Clutch Assembly For ED-B512L2 Φ4mm Type (Opt.)	1
	EPGZJ51901-22D	Clutch Assembly For ED-B512L2 Φ5mm Type (Opt.)	1
	EPGZJ51901-23B	Clutch Assembly For ED-B512L2 Hex. 6.35-B9.5mm	1
	EPGZJ51901-20A	Clutch Assembly For ED-B522L2 Hex. 5mm Type(Opt.)	1
	EPGZJ51901-20B	Clutch Assembly For ED-B522L2 Hex. 6.35mm Type (Opt.)	1
	EPGZJ51901-20D	Clutch Assembly For ED-B522L2 Φ5mm Type (Opt.)	1
28	EPGZJ51901-21B	Clutch Assembly For ED-B522L2 Hex. 6.35-B9.5mm	1
	EPMI31221	Pilot Rod For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPMI33241	Pilot Rod For Hex. 6.35mm Type	1
29	EPGK20231	"C" Ring	1
30	EPGI20251-1	Iron Washer	1
31	EPGH20241	Idle Gear For ED-B512L2	4
	EPGH21221-2	Idle Gear For ED-B522L2	4

No.	Parts No.	Description	Q'ty
32	EPGG20271	Gear Seat	1
33	EPG20101	Central Gear For ED-B512L2	1
	EPG20104	Central Gear For ED-B522L2	1
34	EPGH20241	Idle Gear For ED-B512L2	4
	EPGH21221-2	Idle Gear For ED-B522L2	4
35	EPGG20271	Gear Seat	1
36	EPGAJ91284-2	Gear Case	1
37	EPGN30321	Main Bearing	1
38	EPGCJ30341-5	Cam	1
39	EPGP30351	Steel Balls	2
40	EPGUJ30361	Stop Pilot	1
41	EPGP30371	Steel Balls For Hex. 5mm, Φ4mm, Φ5mm Type	2
	EPGP30351	Steel Balls For Hex. 6.35mm Type	2
	EPGDJ30381A	Shaft For Hex. 5mm Type	1
	EPGDJ30381B	Shaft For Hex. 6.35mm Type	1
	EPGDJ30381C	Shaft For Φ4mm Type	1
	EPGDJ30381D	Shaft For Φ5mm Type	1
42	EPGDJ30381B-2	Shaft For Hex. 6.35-B9.5mm Type	1
	EPGP20331	Steel Balls-2mm For Hex. 5mm, Φ5mm Type	2
	EPGP21291B	Steel Balls-2.5mm For Hex. 6.35mm, Φ4mm Type	2
	EPGFJ30401	Waring Plate For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGFJ30401B	Waring Plate For Hex. 6.35mm Type	1
43	EPGO30541-2	Spring For ED-B512L2	1
44	EPGOJ30531	Spring Cap For ED-B512L2	1
45	EPGE50411-4	Waring Spring For ED-B512L2 5mm, Φ4mm, Φ5mm Type	1
	EPGE50411-5	Waring Spring For ED-B512L2 Hex. 6.35mm Type	1
46	EPGE30418-1	Waring Spring For ED-B522L2 Hex. 6.35mm Type	1
	EPGYJ30421	Waring Spring Base For Hex. 5mm, Φ4mm, Φ5mm Type	1
47	EPGYJ30421B	Waring Spring Base For Hex. 6.35mm Type	1
48	EPGK20231B	"C"-Ring For Hex. 6.35mm Type	1
49	EPGBJ30441-12A	Clutch Case For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGBJ30441-1A	Clutch Case For Hex. 6.35mm Type	1
50	EPGO30452	Bit Spring For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGO20391B	Bit Spring For Hex. 6.35mm Type	1
51	EPGJJ30461	Bit Sleeve For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGJJ3046B	Bit Sleeve For Hex. 6.35mm Type	1
52	EPGQ30471	"C" Ring For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGQ21361	"C" Ring For Hex. 6.35mm Type	1
53	EPL30481-1	Torque Adjust Pin	4
54	EPGMJ30491	Torque Adjust Ring	1
55	EPGS30501	"C" Ring	1
56	EPCD20111-1	Coupler	1
57	EPCH30681-4	Grounding Means	1
58	EPCH20102-8	Washer	1
59	EPCH20514-1	Screw	1
60	EPGN30435	Main Bearing	1
61	EPW10201-1	Insulating Washer	1
62	EPCK28031-1	Trigger Spring	1
63	EPCH30201	Screw For P.C.B.-Start	2
64	EPCH30201-4	Screw For Motor	1
65	EPE30702-2	Diode	1

ED-B512LH2, ED-B517LH2

BRUSHLESS FULL AUTO SHUT-OFF AC220, LEVER-START, HIGH SPEED ELECTRIC SCREWDRIVER (DIRECT PLUG IN)



ED-B512LH2, ED-B517LH2

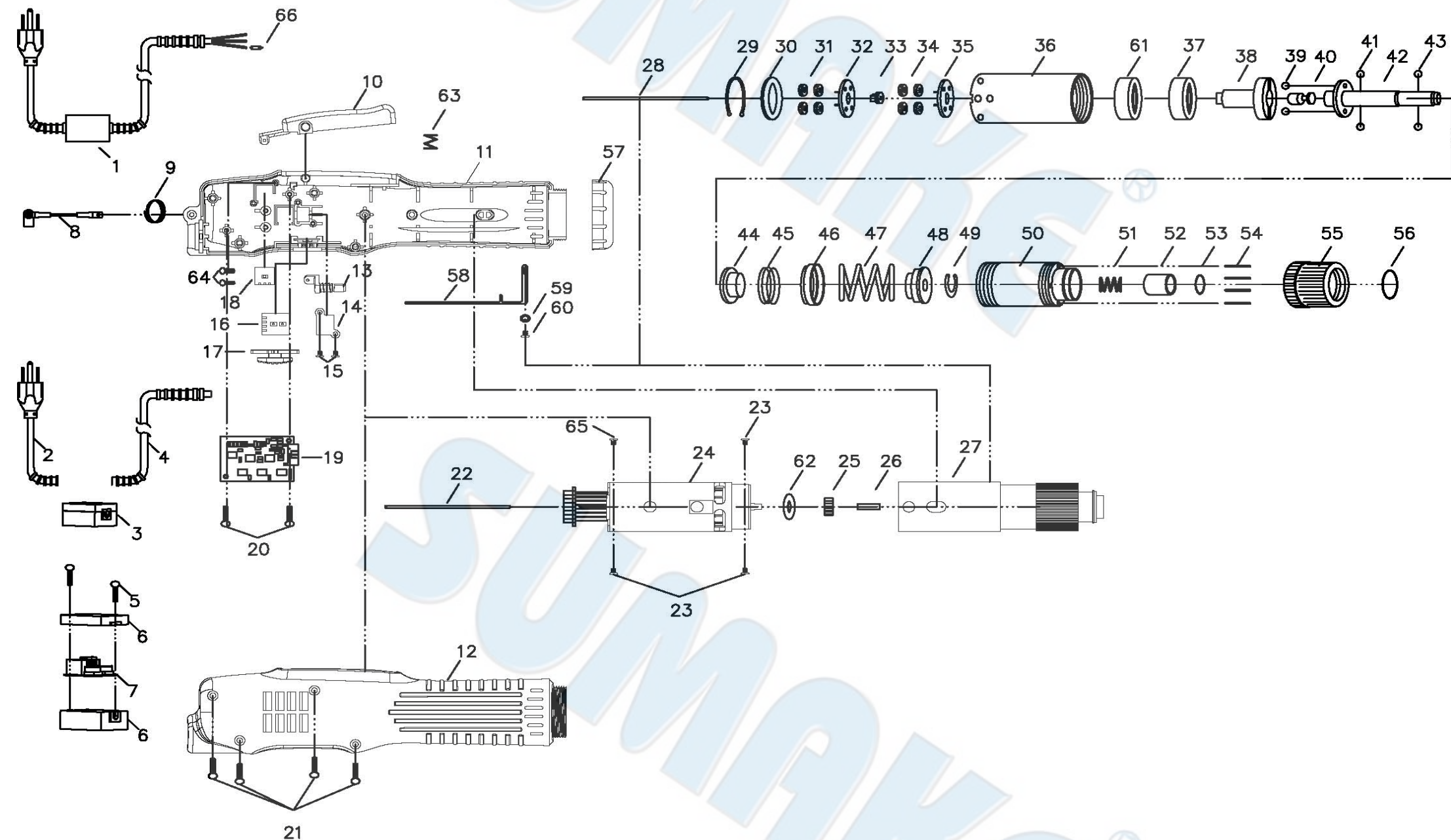
BRUSHLESS FULL AUTO SHUT-OFF AC220, LEVER-START, HIGH SPEED ELECTRIC SCREWDRIVER (DIRECT PLUG IN)

PARTS LIST

No.	Parts No.	Description	Q'ty	No.	Parts No.	Description	Q'ty
1	EPAM30005-A	Cord Assy-America Plug	1	32	EPG21302	Washer	1
	EPAM30006-E	Cord Assy-Europe Plug	1	33	EPGH20241-1	Idle Gear	3
	EPAM30007-F	Cord Assy-Chinese Plug	1	34	EPGG20271-1	Gear Seat	1
	EPAM30008-I	Cord Assy-India Plug	1	35	EPGAJ91284-3	Gear Case	1
	EPAM30009-U	Cord Assy-British Plug	1	36	EPGN30321	Main Bearing	1
2	EPAA30007-1	Cord 1 Ft With US Plug	1	37	EPGCJ30341-5	Cam	1
	EPAA30007-2	Cord 1 Ft With Europe Plug	1	38	EPGP30351	Steel Balls	2
	EPAA30007-3	Cord 1 Ft With Chinese Plug	1	39	EPGUJ30361	Stop Pilot	1
	EPAA30007-5E	Cord 1 Ft With India Plug	1	40	EPGP30371	Steel Balls For Hex. 5mm, Φ4mm, Φ5mm Type	2
	EPAA30007-5	Cord 1 Ft With British Plug	1		EPGP30351	Steel Balls For Hex. 6.35mm Type	2
3	EPEJ30004-2F	Emc-Box Assembly	1	41	EPGDJ30381A	Shaft For Hex. 5mm Type	1
4	EPAA30013	Cord 9"	1		EPGDJ30381B	Shaft For Hex. 6.35mm Type	1
5	EPCH90152-1F	Screw	2		EPGDJ30381C	Shaft For Φ4mm Type	1
6	EPEC30006	EMC-Box Case Only	1		EPGDJ30381D	Shaft For Φ5mm Type	1
7	EPEG31451	P.C.B.	1		EPGDJ30381B-2	Shaft For Hex. 6.35-B9.5mm Type	1
8	EPP12104-3	Retaining Clip	1	42	EPGP20331	Steel Balls-2mm For Hex. 5mm, Φ5mm Type	2
9	EPCJ20011	Suspension Ring	1		EPGP21291B	Steel Balls-2.5mm For Hex. 6.35mm, Φ4mm Type	2
10	EPCC50023	Trigger Assembly	1	43	EPGFJ30401	Waring Plate For Hex. 5mm, Φ4mm, Φ5mm Type	1
11	EPC40800-F	Housung-Underside-Grey	1		EPGFJ30401B	Waring Plate For Hex. 6.35mm Type	1
12	EPCA93119	Housing-Upside-Grey	1	44	EPGO30541-3	Spring For ED-B512LH2	1
13	EPCE50152-3	Push Rod	1		EPGO30544	Spring For ED-B517LH2	1
14	EPCE80001	Fixture	1	45	EPGOJ30531	Spring Cap	1
15	EPCH30200	Screw	2	46	EPGE50411-4	Waring Spring For ED-B512LH2 Hex. 5mm, Φ4mm, Φ5mm Type	1
16	EPEG31421-15F	P.C.B.-Changeover	1		EPGE50411-5	Waring Spring For ED-B512LH2 Hex. 6.35mm Type	1
17	EPCI50212-14	F/R Switching Element	1		EPGE30413-9	Waring Spring For ED-B517LH2 Hex. 5mm, Φ4mm, Φ5mm Type	1
18	EPEG31420F	P.C.B.	1		EPGE30413-12	Waring Spring For ED-B517LH2 Hex. 6.35mm Type	1
19	EPEG31138-F	P.C.B.	1		EPGYJ30421	Waring Spring Base For Hex. 5mm, Φ4mm, Φ5mm Type	1
20	EPCH90154	Screw For P.C.B.	2	47	EPGYJ30421B	Waring Spring Base For Hex. 6.35mm Type	1
21	EPCH20102	Screw For Housing	3	48	EPGK20231B	"C"-Ring For Hex. 6.35mm Type	1
22	EPMI90582-1	Pilot Rod For Hex. 6.35mm Type	1	49	EPGBJ30441-12A	Clutch Case For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPMI90582-2	Pilot Rod For Hex. 5mm, Φ4mm, Φ5mm Type	1		EPGBJ30441-1A	Clutch Case For Hex. 6.35mm Type	1
23	EPCH20102-24	Screw For Motor	5	50	EPGO30452	Bit Spring For Hex. 5mm, Φ4mm, Φ5mm Type	1
24	EPMO60006	Motor Assembly	1		EPGO20391B	Bit Spring For Hex. 6.35mm Type	1
25	EPM20102-1	Gear Coupler	1	51	EPGJJ30461	Bit Sleeve For Hex. 5mm, Φ4mm, Φ5mm Type	1
26	EPMI11324	Gear	1		EPGJJ3046B	Bit Sleeve For Hex. 6.35mm Type	1
27	EPMG30081-1	Pilot Rod	1	52	EPGQ30471	"C" Ring For Hex. 5mm, Φ4mm, Φ5mm Type	1
28	EPGZJ51901-18A	Clutch Assembly For ED-B512LH2 Hex. 5mm Type(Opt.)	1		EPGQ21361	"C" Ring For Hex. 6.35mm Type	1
	EPGZJ51901-18B	Clutch Assembly For ED-B512LH2 Hex. 6.35mm Type (Opt.)	1	53	EPGL30481-1	Torque Adjust Pin	4
	EPGZJ51901-18C	Clutch Assembly For ED-B512LH2 Φ4mm Type (Opt.)	1	54	EPGMJ30491	Torque Adjust Ring	1
	EPGZJ51901-18D	Clutch Assembly For ED-B512LH2 Φ5mm Type (Opt.)	1	55	EPGS30501	"C" Ring	1
	EPGZJ51901-19BF	Clutch Assembly For ED-B512LH2 Hex. 6.35-B9.5mm	1	56	EPCD20111-1	Coupler	1
	EPGZJ51903-6A	Clutch Assembly For ED-B517LH2 Hex. 5mm Type(Opt.)	1	57	EPCH30681-4	Grounding Means	1
	EPGZJ51903-6B	Clutch Assembly For ED-B517LH2 Hex. 6.35mm Type (Opt.)	1	58	EPCH20102-8	Washer	1
	EPGZJ51903-6C	Clutch Assembly For ED-B517LH2 Φ4mm Type (Opt.)	1	59	EPCH20514-1	Screw	1
	EPGZJ51903-6D	Clutch Assembly For ED-B517LH2 Φ5mm Type (Opt.)	1	60	EPGN30321	Main Bearing	1
	EPGZJ51903-7BF	Clutch Assembly For ED-B517LH2 Hex. 6.35-B9.5mm	1	61	EPCK28031-1	Trigger Spring	1
29	EPMI31221	Pilot Rod For Hex. 5mm, Φ4mm, Φ5mm Type	1	62	EPCH30201	Screw For P.C.B.-Start	2
	EPMI33241	Pilot Rod For Hex. 6.35mm Type	1	63	EPCH30201-4	Screw For Motor	1
30	EPGK20231	"C" Ring	1	64	EPE30702-2	Diode	1
31	EPGI20251-1	Iron Washer	1				

ED-B512L2, ED-B522L2

BRUSHLESS FULL AUTO SHUT-OFF AC220, LEVER-START, ELECTRIC SCREWDRIVER (DIRECT PLUG IN)



ED-B512L2, ED-B522L2

BRUSHLESS FULL AUTO SHUT-OFF AC220, LEVER-START, ELECTRIC SCREWDRIVER (DIRECT PLUG IN)

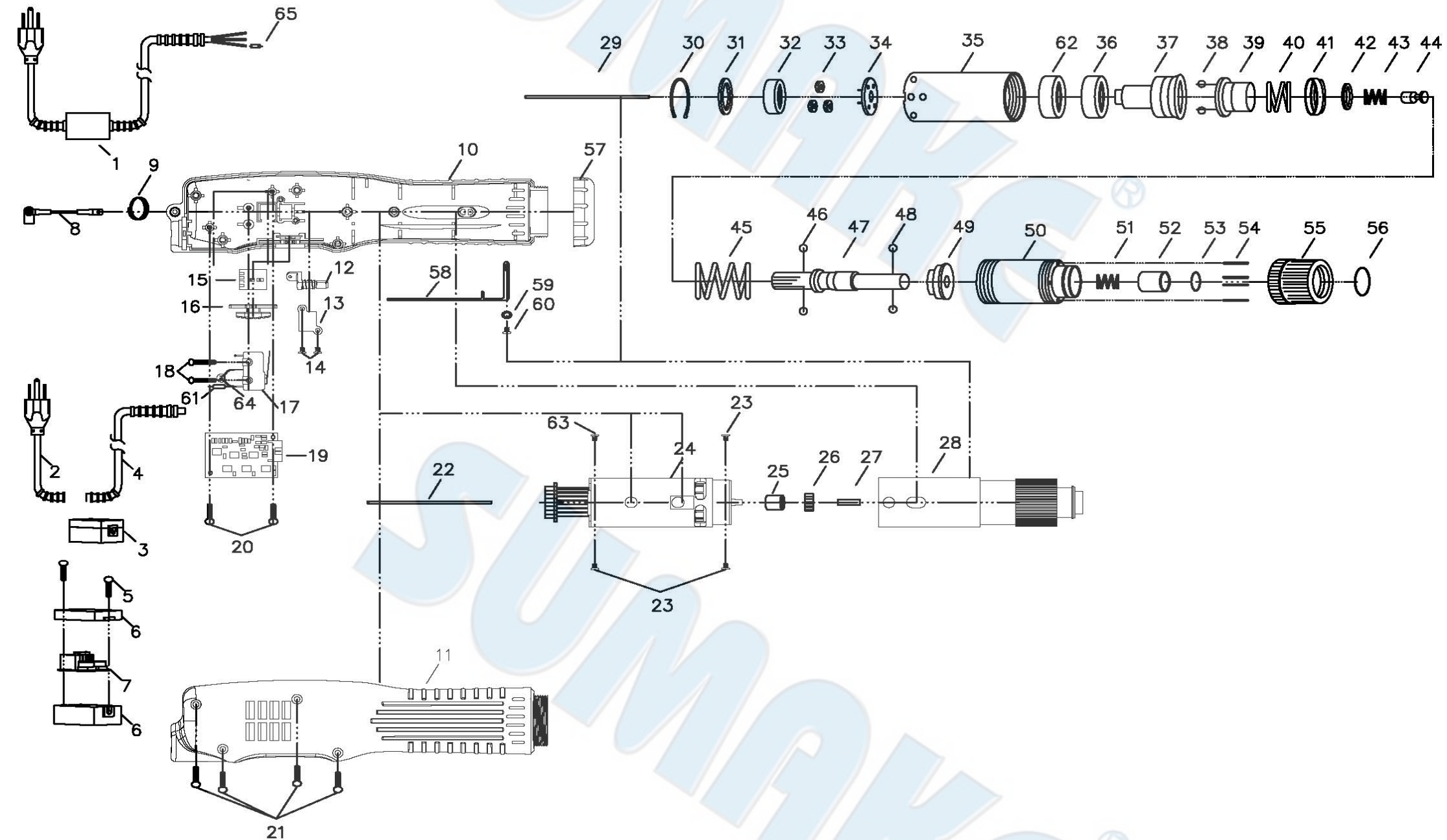
PARTS LIST

No.	Parts No.	Description	Q'ty
1	EPAM30005-A	Cord Assy-America Plug	1
	EPAM30005-E	Cord Assy-Europe Plug	1
	EPAM30005-F	Cord Assy-Chinese Plug	1
	EPAM30005-I	Cord Assy-India Plug	1
	EPAM30005-U	Cord Assy-British Plug	1
2	EPAA30007-1	Cord 1 Ft With Us Plug	1
	EPAA30007-2	Cord 1 Ft With Europe Plug	1
	EPAA30007-3	Cord 1 Ft With Chinese Plug	1
	EPAA30007-5E	Cord 1 Ft With India Plug	1
	EPAA30007-5	Cord 1 Ft With British Plug	1
3	EPEJ30004-2F	Emc-Box Assembly	1
4	EPAA30013	Cord 9"	1
5	EPCH90152-1F	Screw	2
6	EPEC30006	Emc-Box Case Only	1
7	EPEG31451	P.C.B.	1
8	EPP12104-3	Retaining Clip	1
9	EPCJ20011	Suspension Ring	1
10	EPC50023	Trigger Assembly	1
11	EPC40800-F	Housing-Underside-Grey	1
12	EPCA93119	Housing-Upside-Grey	1
13	EPCE50152-3	Push Rod	1
14	EPCE80001	Fixture	1
15	EPCH30200	Screw	2
16	EPEG31421-15F	Pcb-Changeover	1
17	EPCI50212-14	F/R Switching Element For ED-B512L2	1
	EPCI50212-15	F/R Switching Element For ED-B522L2	1
18	EPEG31420F	P.C.B.	1
19	EPEG31138-F	P.C.B.	1
20	EPCH90154	Screw For P.C.B.	2
21	EPCH20102	Screw For Housing	3
22	EPMI90582-1	Pilot Rod-Lb	1
	EPMI90582-2	Pilot Rod-La,C.D	1
23	EPCH20102-24	Screw For Motor	5
24	EPMO60006-1	Motor Assembly	1
25	EPM11322-1	Gear For ED-B512L2	1
	EPM11322	Gear For ED-B522L2	1
26	EPMG91081	Pilot Rod	1
27	EPGZJ51901-22A	Clutch Assembly For ED-B512L2 Hex. 5mm Type(Opt.)	1
	EPGZJ51901-22B	Clutch Assembly For ED-B512L2 Hex. 6.35mm Type (Opt.)	1
	EPGZJ51901-22C	Clutch Assembly For ED-B512L2 Φ4mm Type (Opt.)	1
	EPGZJ51901-22D	Clutch Assembly For ED-B512L2 Φ5mm Type (Opt.)	1
	EPGZJ51901-23B	Clutch Assembly For ED-B512L2 Hex. 6.35-B9.5mm	1
	EPGZJ51901-20A	Clutch Assembly For ED-B522L2 Hex. 5mm Type(Opt.)	1
	EPGZJ51901-20B	Clutch Assembly For ED-B522L2 Hex. 6.35mm Type (Opt.)	1
	EPGZJ51901-20D	Clutch Assembly For ED-B522L2 Φ5mm Type (Opt.)	1
28	EPGZJ51901-21B	Clutch Assembly For ED-B522L2 Hex. 6.35-B9.5mm	1
	EPMI31221	Pilot Rod For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPMI33241	Pilot Rod For Hex. 6.35mm Type	1
29	EPGK20231	"C" Ring	1
30	EPGI20251-1	Iron Washer	1
31	EPGH20241	Idle Gear For ED-B512L2	4
	EPGH21221-2	Idle Gear For ED-B522L2	4

No.	Parts No.	Description	Q'ty
32	EPGG20271	Gear Seat	1
33	EPG20101	Central Gear For ED-B512L2	1
	EPG20104	Central Gear For ED-B522L2	1
34	EPGH20241	Idle Gear For ED-B512L2	4
	EPGH21221-2	Idle Gear For ED-B522L2	4
35	EPGG20271	Gear Seat	1
36	EPGAJ91284-2	Gear Case	1
37	EPGN30321	Main Bearing	1
38	EPGCJ30341-5	Cam	1
39	EPGP30351	Steel Balls	2
40	EPGUJ30361	Stop Pilot	1
41	EPGP30371	Steel Balls For Hex. 5mm, Φ4mm, Φ5mm Type	2
	EPGP30351	Steel Balls For Hex. 6.35mm Type	2
	EPGDJ30381A	Shaft For Hex. 5mm Type	1
	EPGDJ30381B	Shaft For Hex. 6.35mm Type	1
	EPGDJ30381C	Shaft For Φ4mm Type	1
	EPGDJ30381D	Shaft For Φ5mm Type	1
42	EPGDJ30381B-2	Shaft For Hex. 6.35-B9.5mm Type	1
	EPGP20331	Steel Balls-2mm For Hex. 5mm, Φ5mm Type	2
	EPGP21291B	Steel Balls-2.5mm For Hex. 6.35mm, Φ4mm Type	2
	EPGFJ30401	Waring Plate For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGFJ30401B	Waring Plate For Hex. 6.35mm Type	1
43	EPGO30541-2	Spring For ED-B512L2	1
44	EPGOJ30531	Spring Cap For ED-B512L2	1
45	EPGE50411-4	Waring Spring For ED-B512L2 5mm, Φ4mm, Φ5mm Type	1
	EPGE50411-5	Waring Spring For ED-B512L2 Hex. 6.35mm Type	1
46	EPGE30418-1	Waring Spring For ED-B522L2 Hex. 6.35mm Type	1
	EPGYJ30421	Waring Spring Base For Hex. 5mm, Φ4mm, Φ5mm Type	1
47	EPGYJ30421B	Waring Spring Base For Hex. 6.35mm Type	1
48	EPGK20231B	"C"-Ring For Hex. 6.35mm Type	1
49	EPGBJ30441-12A	Clutch Case For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGBJ30441-1A	Clutch Case For Hex. 6.35mm Type	1
50	EPGO30452	Bit Spring For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGO20391B	Bit Spring For Hex. 6.35mm Type	1
51	EPGJJ30461	Bit Sleeve For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGJJ3046B	Bit Sleeve For Hex. 6.35mm Type	1
52	EPGQ30471	"C" Ring For Hex. 5mm, Φ4mm, Φ5mm Type	1
	EPGQ21361	"C" Ring For Hex. 6.35mm Type	1
53	EPL30481-1	Torque Adjust Pin	4
54	EPGMJ30491	Torque Adjust Ring	1
55	EPGS30501	"C" Ring	1
56	EPCD20111-1	Coupler	1
57	EPCH30681-4	Grounding Means	1
58	EPCH20102-8	Washer	1
59	EPCH20514-1	Screw	1
60	EPGN30435	Main Bearing	1
61	EPW10201-1	Insulating Washer	1
62	EPCK28031-1	Trigger Spring	1
63	EPCH30201	Screw For P.C.B.-Start	2
64	EPCH30201-4	Screw For Motor	1
65	EPE30702-2	Diode	1

ED-B512PH2, ED-B517PH2

BRUSHLESS FULL AUTO SHUT-OFF AC220, PUSH TO START, HIGH SPEED ELECTRIC SCREWDRIVER (DIRECT PLUG IN)



ED-B512PH2, ED-B517PH2

BRUSHLESS FULL AUTO SHUT-OFF AC220, PUSH TO START, HIGH SPEED ELECTRIC SCREWDRIVER (DIRECT PLUG IN)

PARTS LIST

No.	Parts No.	Description	Q'ty
1	EPAM30005-A	Cord Assy-America Plug	1
	EPAM30006-E	Cord Assy-Europe Plug	1
	EPAM30007-F	Cord Assy-Chinese Plug	1
	EPAM30008-I	Cord Assy-India Plug	1
	EPAM30009-U	Cord Assy-British Plug	1
2	EPAA30007-1	Cord 1 Ft With Us Plug	1
	EPAA30007-2	Cord 1 Ft With Europe Plug	1
	EPAA30007-3	Cord 1 Ft With Chinese Plug	1
	EPAA30007-5E	Cord 1 Ft With India Plug	1
	EPAA30007-5	Cord 1 Ft With British Plug	1
3	EPEJ30004-2F	Emc-Box Assembly	1
4	EPAA30013	Cord 9"	1
5	EPCH90152-1F	Screw	2
6	EPEC30006	EMC-Box Case Only	1
7	EPEG31451	P.C.B.	1
8	EPP12104-3	Retaining Clip	1
9	EPCJ20011	Suspension Ring	1
10	EPC40801-F	Housing-Underside-Grey	1
11	EPCA93120	Housing-Upside-Grey	1
12	EPCE50152-3	Push Rod	1
13	EPCE80001	Fixture	1
14	EPCH30200	Screw For Fixture	2
15	EPEG31421-15F	P.C.B.	1
16	EPCI50212-14	F/R Switching Element	1
17	EPH10201	Shut Off Switch	1
18	EPCH90151-1	Screw	1
19	EPEG31138-F	P.C.B.	1
20	EPCH90154	Screw	2
21	EPCH20102	Screw	3
22	EPMI90582-2	Pilot Rod	1
23	EPCH20102-24	Screw For Motor	5
24	EPMO60006	Motor Assembly	1
25	EPM20102-1	Gear Coupler	1
26	EPM11324	Gear	1
27	EPMG30081-1	Pilot Rod	1
28	EPGZJ51902-23A-J	Clutch Assembly For ED-B512PH2 Hex. 5mm Type(Opt.)	1
	EPGZJ51902-23B-J	Clutch Assembly For ED-B512PH2 Hex. 6.35mm Type (Opt.)	1
	EPGZJ51902-23C-J	Clutch Assembly For ED-B512PH2 ϕ 4mm Type (Opt.)	1
	EPGZJ51902-23D-J	Clutch Assembly For ED-B512PH2 ϕ 5mm Type (Opt.)	1
	EPGZJ51902-24B-J	Clutch Assembly For ED-B512PH2 Hex. 6.35-B9.5mm	1
	EPGZJ51904-9A	Clutch Assembly For ED-B517PH2 Hex. 5mm Type(Opt.)	1
	EPGZJ51904-9B	Clutch Assembly For ED-B517PH2 Hex. 6.35mm Type (Opt.)	1
	EPGZJ51904-9C	Clutch Assembly For ED-B517PH2 ϕ 4mm Type (Opt.)	1
	EPGZJ51904-9D	Clutch Assembly For ED-B517PH2 ϕ 5mm Type (Opt.)	1
	EPGZJ51904-10BF	Clutch Assembly For ED-B517PH2 Hex. 6.35-B9.5mm	1
29	EPMI30241	Pilot Rod	1
30	EPGK20231	"C" Ring	1

No.	Parts No.	Description	Q'ty
31	EPGI20251-1	Iron Washer	1
32	EPG21302	Washer	1
33	EPGH20241-1	Idle Gear	3
34	EPGG20271-1	Gear Seat	1
35	EPGAJ91284-3	Gear Case	1
36	EPGN30321	Main Bearing	1
37	EPGXJ33319-5	Shaft Guide	1
38	EPGP30351	Steel Balls	2
39	EPGFJ33317	Waring Plate	1
40	EPGO30541	Spring For ED-B512PH2	1
	EPGO30544	Spring For ED-B517PH2	1
41	EPGOJ30531	Spring Cap	1
42	EPGVJ33316	Inner Spring Cap	1
43	EPGO33315-2	Inner Spring For ED-B512PH2	1
	EPGO33315	Inner Spring For ED-B517PH2	1
44	EPGUJ30361	Stop Pilot	1
45	EPGE30414	Wring Spring For ED-B512PH2	1
	EPGE30415-5	Wring Spring For ED-B517PH2	1
46	EPGP30371	Stell Balls	2
47	EPGDJ33319A	Shaft For Hex. 5mm Type	1
	EPGDJ33319B	Shaft For Hex. 6.35mm Type	1
	EPGDJ33319C	Shaft For ϕ 4mm Type	1
	EPGDJ33319D	Shaft For ϕ 5mm Type	1
	EPGDJ33319B-2	Shaft For Hex. 6.35-B9.5mm Type	1
48	EPGP20331	Bit Pilot For Hex. 5mm, ϕ 5mm, Hex. 5mm/ ϕ 5mm Type	2
	EPGP21291B	Bit Pilot For Hex. 6.35mm, ϕ 4mm Type	2
49	EPGYJ33313	Wring Spring Base	1
50	EPGBJ20381-8	Clutch Case For Hex. 5mm, ϕ 4mm, ϕ 5mm, Hex. 5mm/ ϕ 5mm Type	1
	EPGBJ20381-9	Clutch Case For Hex. 6.35mm Type	1
51	EPGO30452	Bit Spring For Hex. 5mm, ϕ 4mm, ϕ 5mm, Hex. 5mm/ ϕ 5mm Type	1
	EPGO20391B-J	Bit Spring For Hex. 6.35mm, ϕ 4mm Type	1
52	EPGJJ30461	Bit Sleeve For Hex. 5mm, ϕ 4mm, ϕ 5mm, Hex. 5mm/ ϕ 5mm Type	1
	EPGJJ3046B	Bit Sleeve For Hex. 6.35mm Type	1
53	EPGQ30471	"C" Ring For Hex. 5mm, ϕ 4mm, ϕ 5mm, Hex. 5mm/ ϕ 5mm Type	1
	EPGQ21361	"C" Ring For Hex. 6.35mm Type	1
54	EPGL30481-1	Torque Adjust Ping	4
55	EPGMJ30491	Torque Adjust Ring	1
56	EPGS30501	"C"Ring	1
57	EPCD20111-1	Coupler	1
58	EPCH30681-4	Grounding Means	1
59	EPCH20102-8	Washer	1
60	EPCH20514-1	Screw	1
61	EPE30703	Diode	1
62	EPGN30321	Main Bearing	1
63	EPCH30201-4	Screw For Motor	1
64	EPE30403-1	Ceramics Capacitor	1
65	EPE30702-2	Diode	1

SUMAKE[®]

Professional & Industrial

ELECTRIC SCREWDRIVER OPERATION AND MAINTENANCE MANUAL



MAKE JOBS BETTER THAN EVER

INSTRUCTION

Congratulations on your purchase and welcome to **SUMAKE**.

NOTICE

SUMAKE Screwdrivers are designed for installing threaded fasteners in light industrial and appliance manufacturing applications.

SUMAKE is not responsible for customer modification of tools for applications on which **SUMAKE** was not consulted.

WARNING

Important safety information enclosed.

Read all these instructions before placing tool in service or operation this tool and save these instructions. It is the responsibility of the employer to place the information in this manual into the hands of the operator. Failure to observe the following warnings could result in injury. When using electric tools, Basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following:

1. General Safety Rules

WARNING! Read all instructions. Failure to follow all instructions listed below may result in electric shock fire and/or serious injury. The term "Electric Screwdriver" in all of the warning listed below refer to your mains operated Electric Screwdriver.

SAVE THESE INSTRUCTIONS

1. Electrical Safety

- (a) **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
- (b) Electric Screwdriver plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) Electric Screwdrivers. Unmodified plugs and matching outlets will reduce risk of electric shock.
- (c) **Don't expose Electric Screwdrivers to rain or wet conditions.** Water entering a Electric Screwdriver will increase the risk of electric shock.
- (d) Do not abuse the cord. Never use the cord to carrying, pulling or unplugging the Electric Screwdriver. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

2. Personal Safety

- (a) **Stay alert, watch what you are doing and use common sense when operating a Electric Screwdriver. Do not use Electric Screwdriver while you are tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating Electric Screwdrivers may result in serious personal injury.
- (b) **Avoid accidental starting. Ensure the switch is in the off position before plugging in.** Carrying Electric Screwdrivers with your finger on the switch or plugging in Electric Screwdrivers that have the switch on invites accidents.
- (c) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the Electric Tools in unexpected situations.

3. Electric Screwdriver Use and Care

- (a) **Do not force the Electric Screwdriver. Use the correct Electric Screwdriver for your application.** The correct Electric Screwdriver will do the job better and safer at the rate for which it was designed.
- (b) **Do not use Electric Screwdriver if switch does not turn it on or off.** Any Electric Screwdriver that cannot be controlled with the switch is dangerous and must be repaired.
- (c) **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the Electric Screwdrivers.** Such preventive safety measures reduce the risk of starting the Electric Screwdriver accidentally.
- (d) **Store idle Electric Screwdrivers out of reach of children and do not allow persons unfamiliar with the Electric Screwdriver or these instructions to operate the Electric Screwdriver.** Electric Screwdrivers are dangerous in the hands of untrained users.

4. Service

- (a) **Have your Electric Screwdriver serviced by qualified repair person using only identical replacement parts,** This will ensure that the safety of the Electric Screwdriver is maintained.

2. Operations Cautions

1. Whenever changing a bit, make certain the Forward / Reverse Switch is in the " OFF " position and tool is unplugged.
2. Do not allow chemicals such as acetone, benzene, thinner, trichloroethylene ketone, or other similar chemicals to come in contact with the screwdriver housing as damage will result.
3. Do not drop or abuse the screwdriver.
4. Do not adjust the torque setting higher than 8 on the torque scale.
5. Operation frequency: The original setting of the frequency is 1 sec on / 3 sec off. The number of screw fastened is about 15 pcs. Over frequently using makes the motor overheated and damage to screwdriver.
Enough heat-dissipation is good for screwdriver.
Slow speed Duty Cycle Conversion (for reference)
Based on 1000 rpm, 1 second ON/3 seconds OFF. For example, the duty cycle for 350rpm,
 $1000-350=650$, $650/1000\%=65\%$
 $ON=1*1.65=1.65$, $OFF=3*1.65=4.95$ (rounded value) =2 seconds ON / 5 seconds OFF
This tool is intended for a duty cycle of 2.0 sec on, 5.0 sec off.

Slow speed (rpm)	operation frequency	Slow speed (rpm)	operation frequency	Slow speed (rpm)	operation frequency
900	1.0 ON 3.0 OFF	600	1.0 ON 3.0 OFF	300	2.0 ON 5.0 OFF
850	1.0 ON 3.0 OFF	550	2.0 ON 5.0 OFF	250	2.0 ON 5.0 OFF
800	1.0 ON 3.0 OFF	500	2.0 ON 5.0 OFF	200	2.0 ON 5.0 OFF
750	1.0 ON 3.0 OFF	450	2.0 ON 5.0 OFF	150	2.0 ON 5.0 OFF
700	1.0 ON 3.0 OFF	400	2.0 ON 5.0 OFF	100	2.0 ON 5.0 OFF
650	1.0 ON 3.0 OFF	350	2.0 ON 5.0 OFF		

6. Do not use this screwdriver for tightening wood screws. This is " Metal Assembly Screw Driver "
7. Do not operate the Forward / Reverse Switch the motor is running.
8. Whenever a tool is not being used, move the Forward / Reverse Switch to the "OFF" position and unplug the screwdriver.
9. Please grasp the plug of power cord while plugging in or out the plugs of connecting cord of Electric Screwdriver and power cord.
10. Please fix the Power Supply to avoid any danger of pulling and dragging the power cord.
11. In case of the Power Supply is overheated or overloaded with maximum current rating of fuse, the high-speed fuse will be melt down and cut off the power. If the Power Supply continues to jump off or has an abnormal switching reaction, please stop the operation immediately and send back the Power Supply for repair.
12. When Electric Screwdriver is running, if slides Forward/Reverse Switch instantly, device will generate the protection program to force Electric Screwdriver stop.

CAUTION

1. Do not drop or abuse the tool.
2. Whenever a tool is not being used, position the Power Switch to the "OFF" position and unplug the power cord.

3. Description of Operation

Attaching / detaching bit and bit type

Push up the holder clamp by finger tip, and it will be unlocked. Thus, the bit can be freely attached and detached (single finger notion type).

1. Insert the power plug into a receptacle and set the change cover switch to "F" position.
2. Apply the bit to the screw head and press the lever or push main body to, then the switch will be turned ON to start the motor running.
3. When the screw is tightened and reach the torque that you had set, The tool will stopped automatically.
4. To reset the tool by releasing the lever to the original position or releasing the bit from the screw head.
5. To return the screw, set the changeover switch to "R" position.

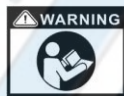


WARNING ! DO NOT OPERATE THIS TOOL WITHOUT PROTECTIVE EARTH CONNECTED

4. Grounding Instructions

The tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a three-conductor cord and three-prong grounding-type plug to fit the proper grounding-type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal.

Green and yellow ----- Earth, Blue ----- Neutral, Brown ----- Live



5. Installation Instructions

1. Use the Power Supply voltage recommended in the specification of this manual.
2. When using a commercial Power Supply be sure to set up circuit and safety breakers. You must also properly ground the mechanisms.
3. The temperature and humidity should be kept at appropriate levels.
4. Do not set up the Power Supply in a room that has poor ventilation and where it may be exposed to dust and metallic flakes.
5. Do not put heavy object on top of Power Supply or pile thing on it.
6. Attach the Power Supply securely to a flat, stable surface. If the Power Supply is put a high place, take special care to ascertain that there is no danger of it falling.
7. Keep bystanders away. Do not permit unauthorized personnel to operate this Power Supply.
8. Do not set up the Power Supply near high voltage machinery or in an excessively noisy environment.
9. Avoid setting up or storing the Power Supply in wet or oily environments or where it might be exposed to corrosive or flammable gases.
10. We emphasize that the Power Supply should be placed in stable, fixed location.

6. Servicing

Maintenance and Inspection:

1. The screwdriver must be operated in top condition, one day working hour must be not more than eight hours.
2. Periodically check for wear of motor carbon brush, one day for eight hours use is normal, replace it after every five to six months.
3. Please note don't let the motor and Power Supply get over heated, every minute use 10~15 screws to operate.
4. The frequency use of this electric screw driver is over than eight hours a day, still it needs periodically testing and treatment. Every 5-6 months.
5. Inspect tool cords periodically and if damaged, have them repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged.
6. Do not remove any labels. Replace any damaged label.

CAUTION

1. The use of other than genuine **SUMAKE** replacement parts may result in decreased tool performance and increased maintenance, and may invalidate all warranties.
2. All repairs and maintenance of this tool and its word must be performed by an authorized service center.
3. **SUMAKE** is not responsible for customer modification of tools for applications on which **SUMAKE** was not consulted.
4. Repairs should be made only by authorized, trained personnel. Consult your nearest **SUMAKE** authorized service center.
5. It is the responsibility of the employer to place the information in this manual into the hands of the operator.

IMPORTANT

1. Within warranty period, any quality issue please contact with **SUMAKE** distributors and do not take apart screwdrivers without authorization, otherwise warranty will NOT be covered.
2. Any repair and maintenance task has to follow **SUMAKE** directly training education.

SAVE THESE INSTRUCTIONS DO NOT DESTROY



ELECTRIC SCREWDRIVER



CORDLESS SCREWDRIVER

www.SUMAKE.com