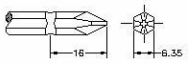
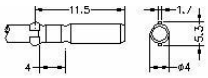
SUMAKE®

Professional & Industrial

※Specification

MODEL		EA-BNK203L6	EA-BNK207L6	EA-BNK210L6
Input voltage(DC)		DC 24V OR 32V		
Power Consumption		25W		
Torque	(kgf.cm)	0.2~3.5	0.5~7.0	1.0~10
	(Lbf.in)	0.17~3.04	0.43~6.08	0.87~8.68
	(N.m)	0.02~0.34	0.05~0.69	0.10~0.98
Repeatable Torque Accuracy (%)		±3%		
Torque Adjustment		Stepless		
Torque Adjustment	HI	1000	1000	1000
	LO	700	700	700
Screw Size Dia	Machine screw(mm)	1.0~2.3	1.4~2.6	1.6~3.0
	Tapping screw(mm)	1.0~2.0	1.4~2.3	1.6~2.6
Weight (g)		400		
Length (mm)		205		
Model of Torque Fixing Ring		EAA-TL8, EAA-TL8/E (ESD)		
Power supply		EAA-MCTDS5		
Model of Suspension Rack		EAA-HD5		
Bit Type		 HEX 6.35mm	 Ø4mm	

* 1N.m=10.2Kgf.cm 1N.m=8.98Lbf.in

※Accessories

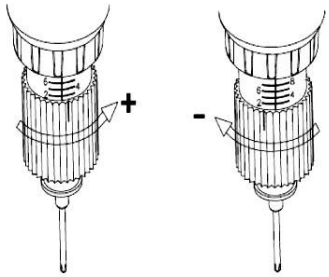
1. BIT Type:

No. 00 · · · Bit use in dia 1.3~1.8mm screw
No. 0 · · · · Bit use in dia 1.6~2.0mm screw
No. 1 · · · · Bit use in dia 2.0~2.6mm screw
No. 2 · · · · Bit use in dia 3.0~4.0mm screw

EA-BNK203L6	with BIT	M3	Ø4×40	00# & 0#	& 1#	1 Pce. Each
EA-BNK207L6	with BIT	M3	Ø4×40	0# & 1#	& 1#	1 Pce. Each
EA-BNK210L6	with BIT	M3	Ø4×40	1# & 2#		1 Pce. Each

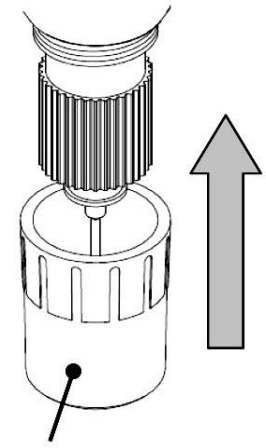
2. Suspension rack and Torque fixing ring acceptable for use with the tool are available from **SUMAKE** catalogue.

※Torque Adjustment Operation

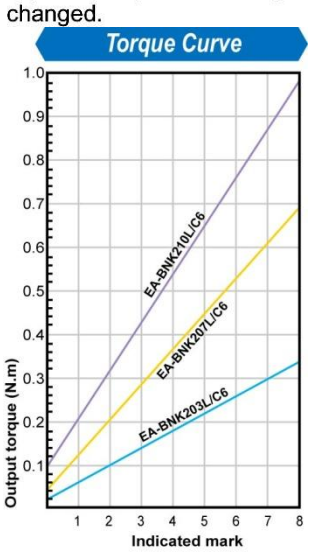


To adjust the torque on these screwdrivers. Proceed as follows :

1. Determine the torque output of the tool by checking a tightened Fastener with a torque wrench.
2. Increase or decrease the torque by rotating the Spring Adjusting Ring. Rotating the Ring clockwise(**+**) to a higher number on the torque Scale increase torque output while rotating the Ring 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 of 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 ring at the end.
5. The relationship between torque scale and bit torque is as shown Ring, in the torque diagram. The figures of torque scale do not indicate bit torque values. However, the clamping torque of screw itself is different form 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 torque checker measures the torque of screwdriver. The clamping torque of screw itself is different from the clamped conditions(KC). Understand the correlation between clamping torque values and the torque checker values perform the torque control properly.
7. 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.



Put on TORQUE FIX RING(KC), can prevent the adjusted torque from being changed.



CAUTION

1. Also in reverse rotation, the clutch is turned 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 number from zero to eight on the Torque Scale are reference number only and not an indication of actual torque output.

EU Declaration of Conformity (DOC)

We: **SUMAKE INDUSTRIAL CO., LTD.**

4F, No. 351, Yangguang St., Neihu District, Taipei City, Taiwan

declare in sole responsibility that the equipment

Equipment： ELECTRIC SCREWDRIVER

Model/ Serial No.： EA-BNK203L/C6, EA-BNK207L/C6, EA-BNK210L/C6

The object of the declaration described above is in conformity with the relevant union harmonization legislation:

- **Machinery Directive 2006/42/EC**
- **Electromagnetic Compatibility 2014/30/EU**
- **RoHS 2011/65/EU**

The following harmonised standards and technical specifications have been applied:

- **EN 62841-1:2015/AC:2015**
- **EN 62841-2-2:2014/AC:2015**
- **EN 55014-1:2017**
- **EN 55014-2:2015**
- **EN 61000-3-2:2014**
- **EN 61000-3-3:2013**

AS/NZS CISPR 14.1:2013

Data:

Noise level:	Sound pressure level: Load: 75.3 dB(A) Sound power level: Load: 86.3 dB(A)
Vibration level:	No Load: < 2.5 m/s²

Name and Signature/Position

Mike Su – Managing Director

Date and Place

2021/3/18

Taipei, Taiwan

EA-BNK2/C6-D-2103D-K2

SUMAKE®

Professional & Industrial

ELECTRIC SCREWDRIVER

OPERATION AND MAINTENANCE MANUAL

MAKE JOBS BETTER THAN EVER

EA(ED)(ES)-I-2110C-K2

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 injure. 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