

# **Electric Screwdriver Instructions**

SD - CA 2000 L F D Q ESD

- S D: *SUDDNG* Products
  - A: Brushless Economic Type
    - CA: Brushless Intelligent Type
    - DA: Brushless Variable Speed Type
- 2000: Custom Model
- Start Mode
  - L: Trigger start Type
  - P: Push start Type
  - F: Rapid
    - S: Normal Type
- Screw Bits Models
  - A: 5mm HEX B:1/4"HEX
  - C: Ø4 D: Ø5
- Q: With a Vacuum Suction Part
- ESD: Anti-static Specifications

# Please read the instructions carefully before operating

## A)Workplace

- 1) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- 2) Do not operate Electric Screwdriver in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Electric screwdriver creat sparks which may ignite the dust or gas.
- Keep children and bystanders away while operating a power screwdriver. Distractions can cause you to lose control.

#### **B)**Electrical Safety

- Electric screwdriver plugs must match the outlet. Never modify the plug in any way. Do not use any adapter
  plugs with grounded Electric Screwdriver. Original plugs and matching outlets will reduce risk of electric
  shock.
- 2) Avoid body contact with grounded surfaces such as pipes, radiators and refrigerator. There is an increased risk of electric shock If your body is grounded.
- Do not expose Electric Screwdriver to rain or wet conditions. Water entering a power screwdriver will increase the risk of electric shock.
- 4) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power screwdriver. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- 5) When operating electric screwdriver outdoors, use an extension cord suitable for outdoor use which will reduce the risk of electric shock.

### C)Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. 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 Screwdriver may result in serious personal injury.
- 2) Use Safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries. Rubber gloves and non-skid footwear are recommended when working outdoors.
- 3) Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying Electric Screwdriver with your fingers on the switch or plugging in Electric Screwdriver that have the switch on invites accidents.
- 4) Remove any adjusting keys or wrench before turning the Electric Screwdriver on. A wrench or a key that is left attached to a rotating part of the Electric Screwdriver may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the Electric Screwdriver in unexpected situations.
- 6) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery, or long hair can be caught in moving parts.

#### D) Use and care of electric screwdriver

- 1) Do not force the Electric Screwdriver. Use the correct Electric Screwdriver for your application. The correct Electric Screwdriver will do the job more effective and safer at the rate for which it was designed.
- Do not use Electric Screwdriver if switch does not turn it on or off. Any Power tool that cannot be controlled with the switch is dangerous and must be repaired.
- 3) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the electric screwdriver. Such preventive safety measures reduce the risk of accidental starting of electric screwdriver.
- 4) Store idle electric screwdriver out of reach of children and do not allow unfamiliar with the electric screwdriver or these instructions to operate the electric screwdriver. Electric screwdriver in the hands of untrained users is dangerous.
- 5) Maintenance of electric screwdriver. Check for misalignment or binding of moving parts and any other condition that may affect the electric screwdrivers operation. If damaged, have the electric screwdriver repaired before use.
- 6) Use the electric screwdriver, accessories and tool bits etc., In accordance with the instructions and in the manner intended for the particular type of the electric screwdriver, taking into account the working conditions and the work to be performed.

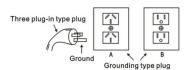
## **Operating instructions**

- 1. When replacing the screw bit, make certain that the electric screwdriver 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 electric screwdriver. Best with the balancer to hang up the Electric screwdriver when operating. If no balancer, better to keep on holder.
- 4. Handling screwdriver head: just the fingertips to push the screwdriver to free up cap to load or unload head screwdriver, release the fingers to make screwdriver cap homing head screwdriver can be fixed.
- 5. Plug the power cord to a power outlet.
  - Note: The power cord or wet hands may cause electric shock hazard.
- The torque output value is adjust by the adjust ring on the top of the electric screwdriver. The scale of the body is not stands for the actual torque output, please refer to the torque labeled diagram or measured by Torque Meter.
  - Note: Do not adjust the torque setting higher than 8 on the torque scale.
- 7. Tightening the screws with Push to start series, please switch to the "F" position (if the screw is in the opposite way, please change to the "R" position). Aligning the screw bit to screw, and push down the electric screwdriver to start running. (If level start series should be press down the level switch to start electric screwdriver). When the torque is locked, the clutch will automatically trip, the motor power will be automatically off and the electric screwdriver will stop running.
- 8. Loosen screw with Push to start, please switch to the "R" position (If the screw is in the opposite way, please reverse the switch to "F" position). Once the screw is loosen, please up the electric screwdriver to remove (if used with level to start series, please press the level switch to start the electric screwdriver).

- Operating frequency: electric screwdriver rated intermittent operation time of 0.8 sec / 2.4 seconds (ON / OFF). Every minute use about 20 screws to operate, the high frequency of use would cause serious damage due to the motor get over heated.
- 10. Operation for 900 self—tapping screws mostly perhour.
- 11. Do not use this Electric Screwdriver for tightening wood screws. This is "Metal Assembly Screwdriver."
- 12. Do not operate the Forward / Reverse Switch the motor is running.
- 13. Keep the electric screwdriver unplugged whenever it is not being used.

#### **Grounding Instructions**

- The electric screwdriver should be grounded while in use to protect the operator from electric shock. Notice!
   To ensure the grounding result, the grounding conductor of the power cord must be well connected with the
   grounding terminal of power facility. The grounding wires in this tool can not only earth the electric leakage
   safely, but can eliminate ESD-the electrostatic that electric screwdriver occurred while in use.
- 2 . The grounding is the most important task a user. Periodically, depends on the working condition and circumstance, for maintaining a good function the user has to check the grounding condition every 3-6 months by an electric meter and following simple steps; Set the Ohm meter to level R\*100(Ohm). Touching 2 test rods ("+"&"-") together and reset the meter to "0". Using the Red ("+") rod to touch the grounding wire on the plug of controller's cord, and the Black ("-") rod to the end of bit head. It stands for the grounding is normal if the meter is read as close as to "0". For getting a normal indication on the meter while the testing, need to press the test rods firmly to the testing objects.



## **Torque Adjustment**

- Determine the torque output of the electric screwdriver first and then manually rotate torque adjustment ring to the desired position.
- 2. Increase or decrease the torque by 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. 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.
- The relationship between torque scale and bit torque is as show ring, in the torque diagram. The figures of torque scale do not indicate bit torque values.
- 4. The clamping torque of screw itself is different from type, size and the material of the screws. It is necessary

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- to measure the torque by Torque Meter.
- 5. Under the same torque scale, the torque of the reverse "R" will larger than the torque of forward "F", which helps removing the screws without adjusting the torque adjust ring. When the screw tightening torque is larger than the reverse torque, if the clutch has tripped and the screws is fail to loosen, it needs to adjust to a larger torque to loosen the screws.

#### **Protection function**

- In order to prevent abuse of electric screwdriver, the electric screwdriver will automatically stop for continuous using more than 10 seconds.
- 2. When using an electric screwdriver overload, then the overload protection function starts to lock the electric screwdriver. The lock can be released after 2 minutes turn off.
- 3. When using the electric screwdriver locking the direction of rotation, the reversing switch will not work during at this time. Since the operation forcibly reversing switch will cause the current mutation. This features protect the electronic components of electric screwdriver and power adapter from impact damage

#### **Notice A**

- 1. When torque adjustment, electric screwdriver should be stop running.
- 2. The torque scale on the body is only for torque labeled diagram reference, which does not mean the output torque value of the electric screwdriver.
- 3. Mechanical wear condition of electric screwdriver, depending on the use of torque, time and vary the frequency. The bigger torque, the longer using and the more times, then the faster it wears. The new electric screwdriver used on scale 4 for one month (8 hours a day, operating frequency with 12pcs screw/min), about 3-5% torque decay (on scale 8 about 5-7% torque decay). By using time growth will gradually reduce the degree of attenuation and stabilized. The user can measured the torque output periodically by torque meter to meet the needs for attenuation compensation torque.

#### **Additional instructions**

- The electric screwdriver must be operated in top condition. One day working hour must be not more than
  eight hours.
- It needs periodically testing and treatment with internal cleaning and updated lubricant when electric screwdriver used for 6 months or 1000 hours reached for maintaining the life of the electric screwdriver, safety and torque accuracy.
- 3. Clutch should be regularly updated special lubricants to make it smooth and to reduce transmission wear
- 4. Do not exceed the rated frequency of operation (0. 8 seconds / 2. 4 seconds ON/OFF) to avoid serious damage by overheating of the motor.
- All repairs and maintenance of this electric screwdriver should be consult with your nearest SUDONG authorized service center or contact the dealer you purchased.
- 6. SUDONG is not responsible for customer disassembling repair by unauthorized SUDONG service center.
- 7. It is the responsibility of the employer to place the information in this manual into the hands of the operator to read, do not attempt to repair the electric screwdriver.

# Service

- 1. Contact the dealer you purchased with for repairing.
- 2. Please refer to the following content to try to handle, if still cannot fix it, please contact your dealer.

Trouble	Reason	Solve
1. cannot start sometime	• Power cord is	Please connect power cord
	connected correctly	correctly
	● Is the power cord	Please stop using and
	burned	arrange to repair
2. small torque, cannot	Torque adjustment	Please carefully observe the
tighten screw completely	already adjust to the	output torque curve, and
	correct position	properly adjusted

# **Notice**

- SUDONG is not responsible for customer modification of electric screwdriver and tearing up the security lables.
- The use of other than genuine SUDONG replacement parts may result in decreased tool performance and increased maintenance, and may invalidate all warranties.
- All repairs and maintenance of electric screwdriver must be performed by our authorized service center or contact our dealers.