



产品 // 使用说明书

PRODUCT INSTRUCTION MANUAL



深圳市捷泰达电子科技有限公司
SHENZHEN GIANTSTAR ELECTRONICS TECHNOLOGY CO., LTD.

使用說明書

User's Manual

尊敬的客戶,您好!感謝使用本公司生產的無刷電動起子,為了維護您的權益,保證您正確的使用以及人身安全,操作前請詳細閱讀說明書,沒有按照以下列舉的內容而使用電動起子可能導致您的使用權限無法得到有效的保障,甚至可能引發對人身產生的安全隱患,如觸電、着火等嚴重傷害,請務必在使用前詳細閱讀並按要求使用電動起子。

一. 工作場地

1. 務必保持工作場地清潔和明亮,混亂和黑暗的使用環境可能會引發安全事故。

2. 待旁觀者離開后再操控電動起子,使用過程中請保持專注,電動起子運轉過程中請不要轉移視線,分心會使你放鬆對電動起子的控制,從而引發意外情況。

二. 電氣安全

1. 插座必須與電動起子插頭適配,不相匹配的接觸易導致接觸不良以及容易產生電火花,同時務必使用帶有接地良好的電源插座(三孔),使用接地不良或沒有接地線的插座,電動起子所帶的感應電以及操作過程中所產生的靜電將得不到釋放,將會大大增加觸電以及損壞敏感電子元器件的風險;AC 電源線的三插接入市電插座時,請注意手指不要接觸電源線三插頭的金屬部分,觸碰到會導致觸電危險。

2. 不得將電動起子暴露在雨中或潮濕環境中,在此類環境中使用電動起子將增加觸電危險。

3. 使用中勿用力拉扯或過度彎折電源線,這樣易導致電源線內芯折斷而發生接觸不良的情況;同時應遠離油、稀釋劑、銳邊或運動部件,接觸這些物品易導致電源線的芯線外皮破損,從而新增觸電的危險。

4. 當在戶外使用電動起子時,務必使用合戶外使用的外接電線,需要使用延長綫時,務必確保所使用的延長綫的質量以及接地的良好性,這樣將避免觸電危險。

三. 人身安全

1. 保持警覺:當使用電動起子時需專注所從事的工作并保持清醒;切勿在精神疲倦,服用對精神有影響的藥物、酒後等情況下操作電動起子,此時可能易引發無法預料的安全事故;在

Dear customer, Thank you for using our company to produce brushless electric screwdrivers. In order to protect your rights and ensure your correct use and personal safety, please read the manual carefully before using the electric screwdriver without following the contents listed below. As a result, your use rights cannot be effectively guaranteed, and may even cause potential safety hazards to the person, such as electric shock, fire and other serious injuries. Please read carefully before use and use the electric screwdriver as required.

I. Workplace

1. Make sure to keep the workplace clean and bright as the chaotic and dark environment may cause safety hazard.

2. Wait for the onlookers to leave before operating the electric screwdriver. Please maintain focus during the use. Don't divert attention during the operation of the electric screwdriver. Distraction will make you relax the control of the electric screwdriver thereby leading to accident.

II. Electrical safety

1. The socket must be fitted with the electric screwdriver plug. The mismatched contact is easy to cause poor contact and easy to generate electric spark. Meanwhile, make sure to use a power socket with good grounding. When a socket with poor grounding or no grounding wire is used, electric screwdriver's induced power and the static electricity generated during the operation will not be released, which will greatly increase the risk of electric shock and damage to sensitive electronic components. When the three-pin plugs of the AC power cord are connected to the mains socket, please be careful not to touch the metal part of the three-pin plug of power cord to avoid electric shock when touched.

2. Electric screwdrivers must not be exposed to rain or moisture as the use of electric screwdrivers in such environments increases the risk of electric shock.

3. Don't pull or over-bend the power cord during use. This may cause the core of the power cord to break and cause poor contact. Meanwhile keep it away from oil, thinner sharp edges or moving parts. Contact with these items may cause the outer layer of the core wire of power cord and increase the risk of electric shock.

4. When using an electric screwdriver outdoors, be sure to use an external cable suitable for outdoor use. When using an extension cord, ensure the quality of the extension cord used and the good grounding so as to avoid the risk of electric shock.

使用電動起子時，在扭力較大時務必穩妥地握住電動起子，握持不牢時，電動起子易在手中打轉，此時電源線易纏繞在手腕上，導致電源線損壞，同時可能導致手腕扭傷；當鎖付時所產生的反作用力大於鎖付產品按鎖付方式放置所產生的摩擦力時，必須以外力輔助固定鎖付產品，否則鎖付時產品半徑裏的東西將會飛出，這樣可能造成人身傷害。

2. 在電動起子通電之前，應拿掉所有調節鑰匙或扳手。遺留在電動起子上的其他配件在電動起子使用過程中可能會給操作者帶來物理傷害或電氣傷害；特別注意需要對電源進行調速後，需將調整用的起子取出後方可啓動電動起子。

3. 操作時應注意脚下，時刻保持身體平衡，這樣在出現意外情況下也能很好地控制電動起子。

4. 着裝適當：不要穿帶附帶較多絲或孔的衣服以及易纏繞的飾品，同時讓你的頭髮、衣服和袖子遠離起子頭部分的旋轉部件，這些物件在電動起子工作時可能會卷入起子頭部分，從而給操作者帶來安全隱患。

四、注意事項

1. 不要隨意調整或更改電動起子的出廠參數，應在使用說明書設定的範圍內使用電動起子，選用適當的額定設計值的電動起子會使工作更有效、更安全。如果開關不能接通或關斷工具電源，則不能使用該電動起子，不受開關控制的電動起子是可能會帶來安全隱患，必須立即維修，故障排除後方可繼續使用。

2. 進行任何調節、更換附件或貯存電動起子之前，必須從電源上拔掉插頭，這樣有助於減少電動起子突然起動帶來的意外情況。閒置電動起子務必貯存在兒童所及範圍之外，並且不要讓不熟悉電動起子或對使用說明不了解的人操作電動起子，電動起子在不了解其性能狀況的用戶手中可能會造成安全隱患。

3. 務必按照使用說明書以及所使用的電動起子的類型來操作，依據作業對象來合理選用電動起子、附件和起子頭等，將電動起子用於與使用說明不符的操作可能會導致危險情況。

五、產品特點

1. 採用高性能直流無刷馬達，具有低干擾、低噪音、低振動、超長壽命、免維護、符合環保要求等特點。

2. 控制開採用霍爾磁感應開關，無接觸、

III. Personal safety

1. Stay vigilant: When using an electric screwdriver, you should concentrate on the work engaged and stay awake don't operate the electric screwdriver in a mental fatigue or after taking drugs that affect your mind or drinking which may cause unpredictable safety accidents; when using an electric screwdriver be sure to hold the electric screwdriver securely when the torque is large. When the grip is not strong, the electric screwdriver is easy to rotate in the hand. At this time, the power cord is easily wrapped around the wrist, causing the power cord to be damaged. It may also cause a sprain of the wrist; when the reaction force generated by the lock is greater than the friction generated by the lock product placed in the lock mode, the external force must be used to assist the fixed lock product, otherwise the product in the product radius when the lock is made will fly out, which may cause personal injury.

2. Remove all adjustment keys or wrenches before powering on the electric screwdriver. Other accessories left on the electric screwdriver may cause physical or electrical injury to the operator during the use of the electric screwdriver. Please adjust the power supply speed, and then remove the screwdriver for adjustment to activate the electric screwdriver.

3. Mind your step during operation and keep the body balanced at all times so that the electric screwdriver can be well controlled in case of accident.

4. Dress properly: Don't wear clothes with more silk or holes and easy-wrap accessories, while keeping your hair clothes and sleeves away from the rotating parts of the screwdriver head. These items may get caught in the head part of the screwdriver in the work of the electric screwdriver, which poses a safety hazard to the operator.

IV. Notes

1. Don't arbitrarily adjust or change the factory parameters of the electric screwdriver. The electric screwdriver should be used within the range set by the manual. Selection of the electric screwdriver with the appropriate rated design value will make the work more effective and safer. If the switch cannot turn the tool power on or off, the electric screwdriver cannot be used. The electric screwdriver that is not controlled by the switch may pose a safety hazard. It must be repaired immediately before use.

2. Before any adjustment, replacement of accessories or storage of the electric driver, the plug must be unplugged from the power supply, which helps to reduce the accidents caused by the sudden start of the electric driver. The idle

無機械磨損，具有超長的使用壽命。

3. 離合器部分的零配件全部為精密 CNC 加工而成，另外選材優良，配以科學的金屬後處理，具有精度高、穩定度高、低噪音、低磨損、壽命長的特點。

4. 內部無刷馬達及減速箱均經過特別設計可有效防止電動起子因長期連續使用產生過熱現象，有效降低馬達溫度，保持握持處溫度正常。

5. 本電動起子的的所有功能性電氣接口，均為插拔結構，後續維修無需烙鐵，需要更換的電源板、主控制板、剎車板、啓動板、正反開關板，包括馬達及離合器整組等均可手動拔插，秒速更換完成；使得維修本起子將不需要專業技術，可有效地提高維修效率降低維修成本。

6. 反轉開關採用具有專利設計的磁鐵定位技術：定位穩定、動效果穩定、使用壽命超長的特點；剎車開關採用具有專利設計的可調整式杠杆剎車技術，具有超寬的調整範圍，在不更換配件的情況下即可解決機械磨損對剎車的影響。

7. 外形配合人體工學的專利設計，有效的提高了握持的舒適度，可降低工作疲勞度，提供生產效率。

8. 採用高精度、高穩定的可微調式的開關電源，使得電動起子的轉速在一定範圍內可無段速調整，有效地保持了產品的靈活性。

六. 操作須知

1. 當更換起子頭或微調轉速時，請關閉電源適配器上的開關。化學物品如：丙酮、苯、稀釋劑、酮類、三氯乙烯等等，切勿接觸電動螺絲起子，這類物質易腐蝕電動起子的外殼及電源線。

2. 小心使用電動起子，勿使掉落或受強烈撞擊，使用時最好用平衡器吊起來，若電動起子無法吊起來時，可使用起子架來放置，放置在工作臺面時，不要放在邊緣處，放置方向不要與邊緣方向相同，未穩妥放置可導致電動起子因跌落到損壞，同時易導致操作人員身體受到傷害。

3. 裝卸螺絲刀頭：只需以指尖將起子頭帽往上推即可自由的將螺絲刀頭裝上或卸下，放開手指使起子頭帽歸位即可將起子歸還。

4. 壓板式起子進行鎖緊螺絲動作時請將正反開關切到“→”的位置（若螺絲為反牙規格，則須將正反開關切換至“←”的位置），將螺絲刀頭對準螺帽的中心位置，手按開關壓板後電動螺絲起子即可啓動運轉，當螺絲鎖緊達設

electric screwdriver must be stored outside the reach of children, and do not let people who are not familiar with the electric screwdriver or do not know the operating instructions operate the electric screwdriver. The electric screwdriver may cause potential safety hazards in the hands of users who do not know its performance.

3. Make sure to follow the manual and the type of electric screwdriver used to operate. Reasonably use electric screwdrivers, accessories and screwdriver head according to the working object. Operation of the electric screwdriver for operation that is inconsistent with the manual may result in a dangerous situation.

V. Product features

1. High-performance and environmental friendly DC brushless motor featuring low interference, low noise low vibration, long life, no maintenance is adopted.

2. The control switch adopts Hall magnetic induction switch with no contact no mechanical wear and an extremely long service life.

3. The parts of the clutch part are all made of precision CNC. The other materials are excellent, with scientific metal post-processing, featuring high precision, high stability, low noise, low wear and long service life.

4. Internal motor and gearbox are specially designed It can effectively prevent the electric screwdriver from overheating due to long-term continuous use, effectively reduce the temperature of the motor, and keep the holding temperature normal.

5. All functional electrical interfaces of the electric screwdriver are plug-and-pull structure. There is no need for a soldering iron for subsequent maintenance. The power board, main control board, brake board, starter board, front and reverse switch board, including motor and clutch, that need to be replaced can be manually inserted and removed with replacement in one second; the maintenance of the screwdriver will not require professional technology, which can effectively improve the maintenance efficiency and reduce the maintenance cost.

6. The reverse switch adopts patented magnet positioning technology: stable positioning, stable dynamic effect and long service life; The brake switch adopts the patented contact less photoelectric induction brake technology, which has the characteristics of high sensitivity, good stability and long service life, and effectively improves the reliability and service life of the product.

7. With the patented design of ergonomics, the shape can effectively improve the comfort of holding, reduce work fatigue and improve production efficiency.

定扭力時，離合器會自動跳脫，馬達會立即斷電並及時剎車，讓電動螺絲起子停止運轉，單顆螺絲鎖付完成；當需要取出螺絲時，只需將正反開關切換到與鎖緊時相反的方向，然後按動開關壓板即可取出螺絲。

5. 操作頻率：本機額定斷續運行時間為 0.8 秒/2.4 秒 (ON/OFF)。即每分鐘操作鎖螺絲的數量約為 20 顆，過高的使用頻率會使馬達發熱量增加，握持處溫度偏高。

6. 操作運行中嚴禁切換正反轉開關。

七. 接地說明

1. 電源插座的接地線需和大地可靠的連接，即電源插座的地線孔與大地間的電壓基本為零（可通過測量插座地線孔與旁邊的鐵窗戶、桌子、水管等與大地已可靠連接的導電物件的電壓來判斷，當電壓高于 36V 時必須先檢修插座的接地情況。因為此時正常接地良好的設備接到此插座上都會存在較高的漏電壓，這樣會給人身帶來安全隱患。

2. 電動起子只有連接到接地良好的電源插座上，對操作者和作業對象來說才是安全的；當觸碰到起子上的金屬部件有觸電感覺時，務必立即停止使用，交由維修人員查找漏電原因，待漏電故障排除后再使用。

3. 操作者可以用簡單的方法判定電動起子接地是否正常：通過測量電動起子的傳動軸與電源地線部分的電阻來判定，正常情況下，電阻應小于 10 歐姆，當電阻偏高時需交由專業技術人員維修，待阻值正常后方可使用。

八. 扭力調整

1. 扭力輸出的大小可通過電動起子下端的扭力調整環來調節，離合器下筒的刻劃段數並不代表實際的扭力大小，粗略扭力大小可參考扭力表示圖預估得到，精確扭力必須以扭力測試儀實際測量結果為準。

2. 旋轉扭力調整環可以增加或減少扭力輸出：順時針方向調至較高刻度，代表增加扭力；逆時針方向調至較低刻度，代表減少扭力。

3. 當不確定鎖付對象所需扭力大小時應循序漸進，先用小扭力試鎖螺絲，再逐漸增至較大扭力，直至達到滿意鎖付效果為止。

4. 鎖緊螺絲所需的扭力依其鉚合狀況或材質不同而有所差異，必要時可用扭力計量測及調整電動螺絲起子的扭力

5. 電動螺絲起子經調整好扭力后，將外殼前鎖環松開取下，換上扭力護套（選配），這樣

8. The micro adjustable switching power supply with high precision and stability is adopted, so that the speed of the electric driver can be adjusted without segment speed within a certain range, effectively maintaining the flexibility of the product.

VI Operating instructions

1. Please turn off the switch on the power adapter when replacing the screwdriver head or adjusting the speed. Chemicals such as acetone, benzene, diluent, ketones, trichloroethylene, etc. do not touch the electric screwdriver. These substances are easy to corrode the shell and power cord of the electric screwdriver.

2. Be careful in using the electric screwdriver. Don't drop or impact it with strong force. It is best to use a balance to lift it. If the electric screwdriver cannot be lifted, use a screwdriver rack to place it. When placing it on the work surface, don't place it along the edge. The direction of placement should not be the same as the direction of the edge. Failure to place it securely can cause the electric screwdriver to be damaged due to dropping, and it can easily cause injury to the operator.

3. Install or remove the screwdriver blade: Simply push the screwdriver head cap up with your fingertips to freely attach or remove the screwdriver head, and release the finger to return the screwdriver head cap to fix the screwdriver head.

4. When the pressure plate type screwdriver is used to lock the screw, please switch the reverse switch to the "→" position (if the screw is the reverse tooth specification, the reverse switch must be switched to the "←" position), and the screwdriver head will be aligned to the center position of the nut. After pressing the switch pressure plate, the electric screwdriver can start the operation. When the screw locks to the set torque, the clutch will automatically trip, the motor will immediately power off and brake in time, so that the electric screwdriver stops running, single screw lock is completed; when you need to remove the screw, just switch the reverse switch to the opposite direction to the lock, then press the switch pressure plate to remove the screw.

5. Operating frequency: The rated intermittent running time of this unit is 0.8 sec/2.4 sec (ON/OFF). That is, the number of lock screws per minute is about 20, and the excessive use frequency will increase the heat generated by the motor and the temperature at the grip is high.

6. It is forbidden to switch the reverse switch during operation.

VII. Grounding instructions

1. The grounding wire of the power socket needs to be reliably

可避免人為擅意旋轉扭力調整環而讓原設定的扭力值遭到變動。

6. 在相同的扭力刻度下，退出的扭力會較大於擰緊的扭力，在不調整扭力調整環的情況下，有助於螺絲的拆卸；特殊情況下螺絲緊度大於反轉扭力，離合器已經跳脫並且控制部分也剎車時，而螺絲仍無法鬆開時，需調整電動螺絲起子至較大扭力，方可退出螺絲，調整後電動起子的扭力較預設值有所偏大，不可馬上使用，需在扭力測試儀上校正扭力後，方可繼續使用。

九. 其它说明

1. 進行扭力調整時，應先停止電動螺絲起子運轉。電動螺絲起子的機械磨損狀況，依使用者之使用扭力、時間或頻率而有所差異，使用扭力越大、時間越長或頻率越高則磨損越快新品在刻度4使用一個月後(每日8時，操作頻率20Pcs/min)約有3-5%的扭力衰減(刻度8則有5-7%的衰減)，依使用時間的增長，其衰減程度會逐漸減少並趨於穩定，使用者可定期使用扭力計量測電動螺絲起子的扭力輸出值是否符合需要，適時補償衰減的扭力。

2. 此電動螺絲起子的最佳使用狀況是每日不超過8小時。

3. 當電動螺絲起子使用時數達1000小時或約半年時間，須進行機身內部清潔、加潤滑油等等的保養或檢查動作，以維持電動螺絲起子的壽命、安全和扭力精準度。

4. 離合器應定期補充專用的潤滑脂，使其傳動順暢以便降低磨損。電動螺絲起子的維修保養工作可就近交由本公司指定之售後服務中心或聯絡原購買的經銷商送往當地服務中心處理。

十. 售後服務

1. 本公司生產的無刷系列電動起子自銷售日起提供整機一年免費保修服務(易損件除外)，為提高售後服務品質，如客戶有需求，我司可提供技術指導，以便客戶自主掌握維修技術；

2. 客戶維修產品時需出示機身編號，機身編號缺失以及撕毀無效標籤破壞保修服務即刻失效；另外未經本公司許可，客戶若將電動螺絲起子交由非本公司指定的售後服務中心維修或自行拆解處理，保修服務亦即刻失效，後續維修我司將酌情提供有償服務。客戶自主維修的電動起子請配合使用原廠零件，使用非原廠零件維修而造成電動起子發生故障或品質不良，本公司恕不負責。

3. 本公司保留以上所有條款的最終解釋權。

connected to the earth, that is, the voltage between the grounding hole of the power socket and the earth is basically zero(it can be measured by the voltage of ground hole of the socket and the iron window table, water pipe and other reliably connected conductive objects. When the voltage is higher than 36,the grounding of the socket must be checked first,because the device with good grounding at this time will have a high leakage voltage when it is connected to the socket, which will bring safety hazards to operator);

2.The electric screwdriver is only safe for operator and working object when connected to a well-grounded power socket. When the metal parts touching the screwdriver give sense of an electric shock be sure to stop using it immediately and hand it over to the maintenance personnel. Find the cause of the leakage and use it after the leakage fault is removed.

3.The operator can use a simple method to determine whether the grounding of the electric screwdriver is normal: it can be determined by measuring the resistance between the transmission shaft and the power ground wire of the electric screwdriver. Under normal circumstances, the resistance should be less than 10 ohms. When the resistance is high, it needs to be repaired by professional technicians. It can be used only after the resistance value is normal.

VIII. Torque adjustment

1.The torque output can be adjusted by the torque adjusting ring at the lower end of the electric driver. The number of scribbled segments of the lower barrel of the clutch does not represent the actual torque. The rough torque can be estimated by referring to the torque representation diagram. The accurate torque must be subject to the actual measurement result of the torque tester.

2.Rotating the torque adjusting ring can increase or decrease the torque output: adjust it clockwise to a higher scale, which means to increase the torque; Turning counterclockwise to a lower scale means reducing torque.

3.When you are not sure about the required torque of the lock object, you should proceed step by step.First, try to lock the screw with a small torque, and then gradually increase the torque to a large torque until the satisfactory lock effect is achieved.

4.The torque required to lock the screws varies depending on the riveting condition or material. If necessary, the torque can be measured and adjusted to adjust the torque of the electric screwdriver.

5.After adjusting the torque of the electric screwdriver loosen and remove the front lock ring of the outer casing and replace it with the torque sheath (optional), so as to avoid artificially rotating the torque adjustment ring and changing the original set torque value.

6.Under the same torque scale, the exiting torque will be larger than the locking torque,and the screw can be disassembled without adjusting the torque adjustment ring; in special cases, when the screw tightness is greater than the reverse torque the clutch has tripped, the control part is also braked and the screw still cannot be loosened. the electric screwdriver must be adjusted to a large torque to remove the screw After adjustment,the torque of the electric screwdriver is larger than the preset value, and cannot be used immediately. The torque must be corrected on the torque tester before continuing to use.

IX. Notes

1.When adjusting the torque, first stop the electric screwdriver.The mechanical wear condition of the electric screwdriver is different depending on the torque, time or frequency of the user.The greater torque leads to the longer time or higher frequency and faster wear the new product suffers from about 3-5% of the torque attenuation (scale 8 has a 5-7% attenuation) after being used for one month at scale 4 (8 o'clock every day, operating frequency 20Pcs/min). As the use of time increases, its attenuation will gradually reduce and tend to stabilize.The user can periodically use the torque measurement to measure whether the torque output value of the electric screwdriver is in accordance with the needs, and timely compensate the attenuated torque.

2.The best use condition of this electric screwdriver is no more than 8 hours per day.

3.When the electric screwdriver is used for 1000 hours or about half a year, maintenance or inspection of the internal cleaning of the fuselage,lubrication, etc shall be carried out to maintain the life, safety and torque accuracy of the electric screwdriver.

4.The clutch should be replenished with special grease on a regular basis to make the drive smoother to reduce wear The maintenance work of the screwdriver can be delivered to after-sales service center designated by the company or to the local service center for processing by contacting the dealer of original purchase.

X. After-sales service

1.The company's production of brushless series electric driver since the date of sales to provide a one-year free warranty service (Excluding wearing parts), in order to

improve the quality of after-sales service, such as customer demand, our company can provide technical guidance, so that customers master maintenance technology;

2.The customer shall show the fuselage number when repairing the product. If the fuselage number is missing or invalid label is torn and damaged, the warranty service will be immediately invalid. In addition, without the permission of the company, if the customer sends the electric screwdriver to the after-sales service center not designated by the company for maintenance or self-disassembly, the warranty service will immediately become invalid, and we will provide paid service for subsequent maintenance as appropriate. Please cooperate with the use of the original factory parts, the use of non-original parts maintenance caused by the failure of the electric driver or poor quality, the company will not be responsible.

3.The company reserves the right of final interpretation of all the above terms.

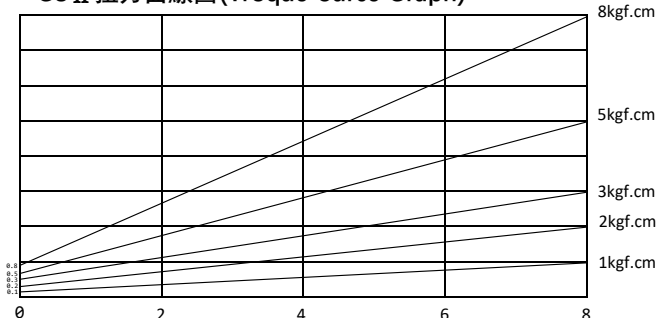
GS II 系列性能參數

輸入電壓		DC 30V				
額定功率		25W				
規格型號		KD100ML	KD200ML	KD300ML	KD500ML	KD800ML
扭力範圍	kgf.cm	0.1-1.0	0.2-2	0.3-3	0.5-5	1-8
	N.m	0.0098-0.098	0.0196-0.196	0.029-0.29	0.049-0.49	0.098-0.98
	Lbf.in	0.087-0.867	0.1734-1.734	0.260-2.61	0.434-4.33	0.867-8.67
扭力精度(%)		±5	±5	±5	±5	±5
扭力調整		無段式	無段式	無段式	無段式	無段式
空載轉速(rpm)		100-1000	100-1000	100-1000	100-1000	100-1000
適用螺絲直徑(mm)	機械牙(mm)	1.0-1.5	1.0-2.3	1.0-2.3	1.4-2.6	1.6-3.0
	自攻牙(mm)	1.0-1.5	1.0-2.0	1.0-2.0	1.4-2.3	1.6-2.6
適用起子頭		φ4/φ5/HEX6.35(1/4")	φ4/φ5/HEX6.35(1/4")	φ4/φ5/HEX6.35(1/4")	φ4/φ5/HEX6.35(1/4")	φ4/φ5/HEX6.35(1/4")

GS II Series Performance parameters

Input voltage		DC 30V				
Rated power		25W				
Specifications		KD100ML	KD200ML	KD300ML	KD500ML	KD800ML
Torque range	kgf.cm	0.1-1.0	0.2-2	0.3-3	0.5-5	1-8
	N.m	0.0098-0.098	0.0196-0.196	0.029-0.29	0.049-0.49	0.098-0.98
	Lbf.in	0.087-0.867	0.1734-1.734	0.260-2.61	0.434-4.33	0.867-8.67
Torque accuracy(%)		±5	±5	±5	±5	±5
Torque adjustmen		Continuous adjustable	Continuous adjustable	Continuous adjustable	Continuous adjustable	Continuous adjustable
No-load speed(rpm)		100-1000	100-1000	100-1000	100-1000	100-1000
Applicable screw diameter	Mechanical teeth(mm)	1.0-1.5	1.0-2.3	1.0-2.3	1.4-2.6	1.6-3.0
	Self-tappingteeth(mm)	1.0-1.5	1.0-2.0	1.0-2.0	1.4-2.3	1.6-2.6
Applicable screwdriver head		φ4/φ5/HEX6.35(1/4")	φ4/φ5/HEX6.35(1/4")	φ4/φ5/HEX6.35(1/4")	φ4/φ5/HEX6.35(1/4")	φ4/φ5/HEX6.35(1/4")

GS II 扭力曲線圖(Torque Curcve Graph)



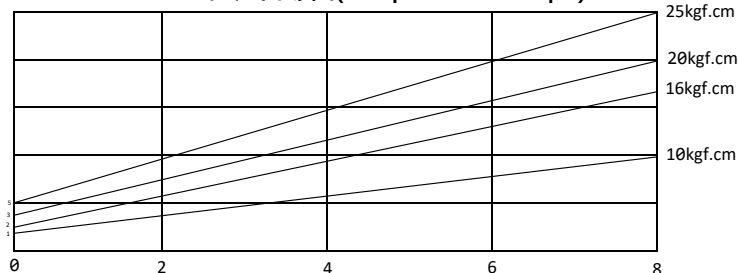
GB II 系列性能參數

輸入電壓		DC 30V			
額定功率		72W			
規格型號		KD110ML/KD110MLS	KD216ML/KD216MLS	KD320ML/KD320MLS	KD525ML
扭力範圍	kgf.cm	1-10	2-16	3-20	5-25
	N.m	0.098-0.98	0.196-1.57	0.294-1.96	0.490-2.45
	Lbf.in	0.867-8.68	1.734-13.87	2.601-17.34	4.339-21.69
扭力精度(%)		±5	±5	±5	±5
扭力調整		無段式	無段式	無段式	無段式
空載轉速(rpm)		1000/2000	1000/2000	1000/2000	1000
適用螺絲直徑(mm)	機械牙(mm)	2.0-3.0	2.3-3.5	2.6-4.0	3-4.5
	自攻牙(mm)	1.6-2.6	2.0-3.0	2.6-3.5	2.6-4.0
適用起子頭		φ4/φ5/HEX5/6.35(1/4")	φ4/φ5/HEX5/6.35(1/4")	φ4/φ5/HEX5/6.35(1/4")	φ4/φ5/HEX5/6.35(1/4")

GB II Series Performance parameters

Input voltage		DC 30V			
Rated power		72W			
Specifications		KD110ML/KD110MLS	KD216ML/KD216MLS	KD320ML/KD320MLS	KD525ML
Torque range	kgf.cm	1-10	2-16	3-20	5-25
	N.m	0.098-0.98	0.196-1.57	0.294-1.96	0.490-2.45
	Lbf.in	0.867-8.68	1.734-13.87	2.601-17.34	4.339-21.699
Torque accuracy(%)		±5	±5	±5	±5
Torque adjustmen		Continuous adjustable	Continuous adjustable	Continuous adjustable	Continuous adjustable
No-load speed(rpm)		1000/2000	1000/2000	1000/2000	1000
Applicable screw diameter	Mechanical teeth(mm)	2.0-3.0	2.3-3.5	2.6-4.0	3-4.5
	Self-tappingteeth(mm)	1.6-2.6	2.0-3.0	2.6-3.5	2.6-4.0
Applicable screwdriver head		φ4/φ5/HEX5/6.35(1/4")	φ4/φ5/HEX5/6.35(1/4")	φ4/φ5/HEX5/6.35(1/4")	φ4/φ5/HEX5/6.35(1/4")

GB II 扭力曲線圖(Torque Curcse Graph)



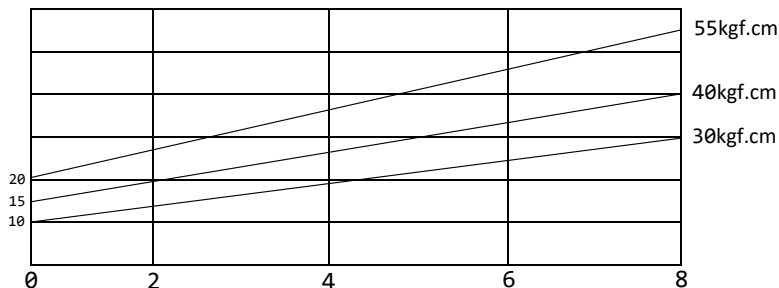
GD II 系列性能參數

輸入電壓		DC 36V		
額定功率		100W		
規格型號		KD1030ML/KD1030MLS	KD1540ML	KD2055ML
扭力範圍	kgf.cm	10-30	15-40	20-50
	N.m	0.98-2.94	1.47-3.92	1.96-4.9
	Lbf.in	8.67-26.1	13-34.68	17.34-43.35
扭力精度(%)		±5	±5	±5
扭力調整		無段式	無段式	無段式
空載轉速(rpm)		900/2000	900	500
適用螺絲直徑(mm)	機械牙	2.6-4.0	3.0-4.5	3.5-5.0
	自攻牙	2.6-3.5	2.6-4.0	3.0-4.5
適用起子頭		HEX6.35mm(1/4')	HEX6.35mm(1/4')	HEX6.35mm(1/4')

GD II Performance parameters

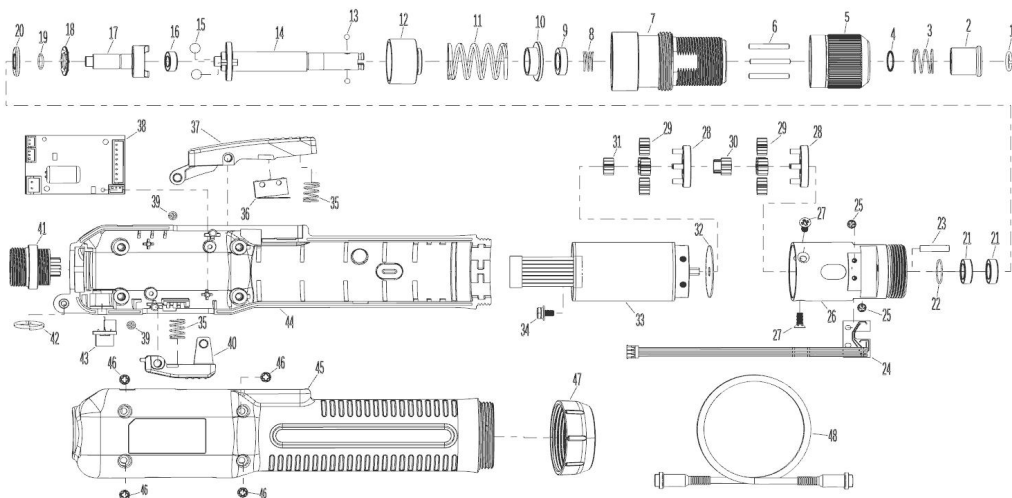
Input voltage		DC 36V		
Rated power		100W		
Specifications		KD1030ML/KD1030MLS	KD1540ML	KD2055ML
Torque range	kgf.cm	10-30	15-40	20-50
	N.m	0.98-2.94	1.47-3.92	1.96-4.9
	Lbf.in	8.67-26.1	13-34.68	17.34-43.35
Torque accuracy(%)		±5	±5	±5
Torque adjustmen		Continuous adjustable	Continuous adjustable	Continuous adjustable
No-load speed(rpm)		900/2000	900	500
Applicable screw diameter	Mechanical teeth	2.6-4.0	3.0-4.5	3.5-5.0
	Self-tappingteeth	2.6-3.5	2.6-4.0	3.0-4.5
Applicable screwdriver head		HEX6.35mm(1/4')	HEX6.35mm(1/4')	HEX6.35mm(1/4')

GD II 扭力曲線圖(Troque Curce Graph)



GS II 系列無刷電動起子零件分解圖

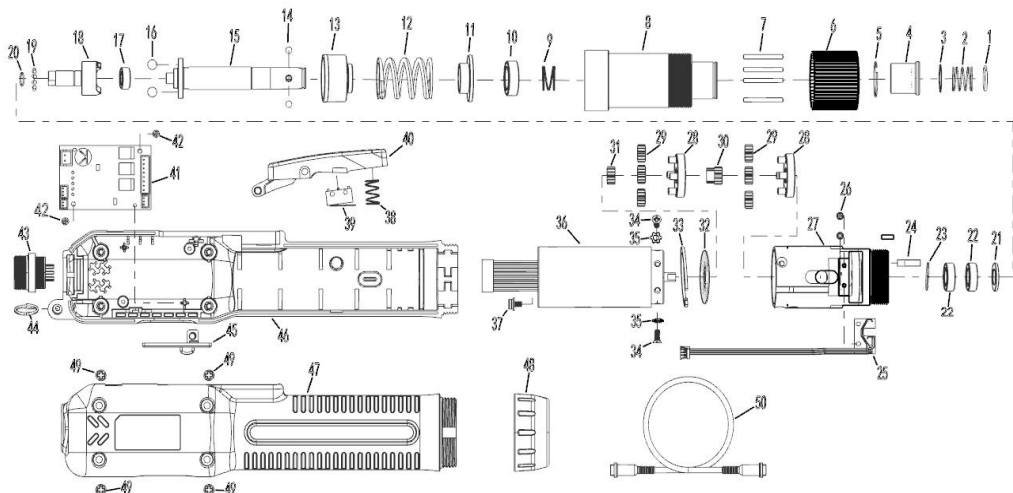
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編號	系統料號	零件名稱	Parts Name	數量	編號	系統料號	零件名稱	Parts Name	數量
1	R.00.7001	C型環	C-Ring	1	24	R.00.3071	剎車開關板	Brake plate	1
2	R.00.5249	起子帽套	Bit Sleeve	1	25	R.00.7332	螺絲(PM1.6)	Screw(PM1.6)	2
3	R.00.7010	帽套彈簧	Bit Spring	1	26	R.00.5242	齒輪箱整組	Gear Case	1
4	R.00.7282	墊片	Gasket	1	27	R.00.7206	螺絲	Screw(KM2.5)	3
5	R.00.5020	扭力調整筒	Torque Adjust Ring	1	28	R.00.6061	齒輪盤	Gear Plate	2
6	R.00.5029	扭力調整棒	Torque Adjust Pin	3	29	R.00.6062	行星齒輪	Planet Gear	8
7	R.00.5245	下離合器筒	Clutch Case	1	30	R.00.6063	中心齒	Center Gear	1
8	R.00.7220	接地彈簧	Spring	1	31	R.00.6064	馬達齒	Main Gear	1
9	R.00.7180	軸承	Bearing	1	32	R.00.7345	墊片(φ21.3)	Gasket	1
10	R.00.5248	下止推盤	Lower Thrust Plate	1	33	R.00.1017	馬達整組	Motor Assembly	1
11	R.00.7341	1公斤扭力彈簧	Spring	1	34	Z.00.1194	螺絲	Screw(M2.5)	1
	R.00.7342	2公斤扭力彈簧	Spring		35	R.00.7030	按板彈簧	Spring	2
	R.00.7343	3公斤扭力彈簧	Spring		36	R.00.3004	微動開關	Switch	1
12	R.00.8050	上止推盤整組	Upper Thrust Plate	1	37	R.00.2124	正轉按板(黑)	Trigger-FWD	1
13	R.00.7160	鋼珠(φ2.0)	Stell Ball(φ2.0)	2	38	R.00.3076	控制板	Control Board	1
14	R.00.5250	傳動軸(φ4)	Shaft	1	39	R.00.7070	螺絲(PA2.0)	Screw(PA2.0)	2
15	R.00.7165	鋼珠(φ4.0)	Stell Ball(φ4.0)	2	40	R.00.2125	反轉按板(黑)	Trigger-REV	1
16	R.00.7339	軸承	Bearing	1	41	R.00.8047	航空頭整組(G)	6PIN Plug	1
17	R.00.5243	凸輪	Cam	1	42	R.00.7038	吊環	Ring	1
18	R.00.7256	平面軸承鋼保	Cage	1	43	R.00.3054	電位器整組	Potentiometer	1
19	R.00.7347	O型圈(φ6*0.5)	O-ring(φ6*0.5)	1	44	R.00.2126	外殼下(象牙白)	Shell-Lower	1
20	R.00.7148	大孔片	Cage	1	45	R.00.2127	外殼上(象牙白)	Shell-Upper	1
21	R.00.7180	軸承	Bearing	2	46	R.00.7059	螺絲	Screw(M2.5)	4
22	R.00.7363	O型圈(φ9*0.5)	O-ring(φ9*0.5)	1	47	R.00.2123	前鎖環(黑色)	Coupler	1
23	R.00.8051	剎車銷整組	Brake Pin	1	48	R.00.4002	電源線	Power Cord	1

GB II 系列無刷電動起子零件分解圖

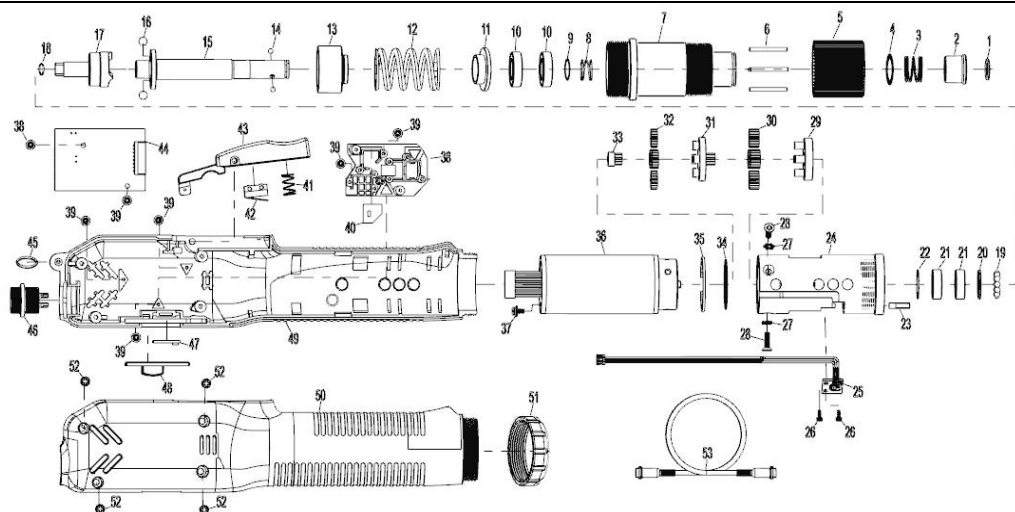
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編號	系統料號	零件名稱	Parts Name	數量	編號	系統料號	零件名稱	Parts Name	數量
1	R.00.7329	C型環 (φ5)	C-Ring	1	25	R.00.3071	剎車开关板	Brake plate	1
2	R.00.7350	帽套彈簧	Bit Spring	1	26	R.00.7332	螺絲(PM1.6)	Screw(PM1.6)	2
3	R.00.7100	墊片	Gasket	1	27	R.00.8053	齒輪箱整組	Gear Case	1
4	R.00.5224	φ5起子帽套	Bit Sleeve	1	28	R.00.6057	齒輪盤	Gear Plate	2
5	R.00.7007	C型環(φ15.5)	C-Ring	1	29	R.00.6058	行星齒輪	Planet Gear	8
6	R.00.5017	扭力調整筒	Torque Adjust Ring	1	30	R.00.6059	中心齒	Center Gear	1
7	R.00.5161	扭力調整棒	Torque Adjust Pin	4	31	R.00.6060	馬達齒	Main Gear	1
8	R.00.5220	下離合器筒	Clutch Case	1	32	R.00.7328	墊片	Gasket	1
9	R.00.7261	接地彈簧	Spring	1	33	R.00.7233	卡簧(φ24)	Snap Ring	1
10	R.00.7144	軸承	Bearing	1	34	R.00.7206	螺絲	Screw(KM2.5)	3
11	R.00.5223	下止推盤	Lower Thrust Plate	1	35	R.00.7109	菊花墊片	Gasket	3
12	R.00.7336	10公斤扭力彈簧	Spring	1	36	R.00.1016	馬達整組	Motor Assembly	1
	R.00.7337	16公斤扭力彈簧	Spring		37	Z.00.1194	螺絲	Screw(M2.5)	1
	R.00.7338	20公斤扭力彈簧	Spring		38	R.00.7030	彈簧	Spring	1
	R.00.7351	25公斤扭力彈簧	Spring		39	R.00.3004	微動開關	Switch	1
13	R.00.8049	上止推盤整組	Upper Thrust Plate	1	40	R.00.2120	啟動按板(黑色)	Trigger	1
14	R.00.7353	鋼珠(φ2.88)	Stell Ball(φ2.88)	2	41	R.00.3070	控制板	Control Board	1
15	R.00.5225	傳動軸(φ5)	Shaft(φ5)	1	42	R.00.7070	螺絲(PA2.0)	Screw(PA2.0)	2
16	R.00.7327	鋼珠(φ4.4)	Stell Ball(φ4.4)	2	43	R.00.8047	航空頭整組(G)	6PIN Plug	1
17	R.00.7227	軸承	Bearing	1	44	R.00.7038	吊環	Ring	1
18	R.00.5219	凸輪	Cam	1	45	R.00.2106	正反開關(黑色)	Chang over-Switch	1
19	R.00.7160	鋼珠(φ2.0)	Stell Ball(φ2.0)	15	46	R.00.2121	外殼下(象牙白)	Shell-Lower	1
20	R.00.7331	O型圈(φ7*0.5)	O-ring(φ7*0.5)	1	47	R.00.2122	外殼上(象牙白)	Shell-Upper	1
21	R.00.7229	大孔片	Cage	1	48	R.00.2104	前鎖環(黑色)	Coupler	1
22	R.00.7135	軸承	Bearing	2	49	R.00.7061	螺絲(PM3.0)	Screw(PM3.0)	4
23	R.00.7354	O型圈(φ11*0.5)	O-ring(φ11*0.5)	1	50	R.00.4002	電源線	Power Cord	1
24	R.00.5226	剎車銷整組	Brake Pin	1	/				

GD II 系列無刷電動起子零件分解圖

V1.0



編號	系統料號	零件名稱	Parts Name	數量	編號	系統料號	零件名稱	Parts Name	數量
1	R.00.7329	C型環	C-Ring	1	28	R.00.7061	螺絲(M3.0)	Screw(KM3.0)	3
2	R.00.5261	起子帽套	Bit Sleeve	1	29	R.00.6075	輸出盤	Gear Plate	1
3	R.00.7277	起子帽套彈簧	Bit Spring	1	30	R.00.6068	行星齒(18T)厚	Planet Gear	4
4	R.00.7100	不銹鋼墊片	Gasket	1	31	R.00.6076	中心齒輪盤整組	Center Gear	1
5	R.00.5265	扭力調整筒	Torque Adjust Ring	1	32	R.00.6067	行星齒(18T)薄	Planet Gear	4
6	R.00.5264	扭力調整棒	Torque Adjust Pin	4	33	R.00.6070	馬達主齒	Main Gear	1
7	R.00.5257	下離合器筒	Clutch Case	1	34	R.00.7262	不銹鋼墊片	Gasket	1
8	R.00.7261	接地彈簧	Spring	1	35	R.00.7124	孔用卡簧	Snap Ring	1
9	R.00.7352	不銹鋼墊片	Gasket	1	36	R.00.1009	馬達整組	Motor Assembly	1
10	R.00.7205	61800ZZ軸承	Bearing	2	37	Z.00.1194	螺絲	Screw(M2.5)	1
11	R.00.5260	下止推盤	Lower Thrust Plate	1	38	R.00.2009	固定座	Fixed Seet	1
12	R.00.7359	55公斤扭力彈簧	Spring	1	39	R.00.7320	自攻螺絲(M1.6)	Screw(M1.6)	7
13	R.00.8062	上止推盤整組	Upper Thrust Plate	1	40	R.00.3017	啟動開關板	Start-PCB	1
14	R.00.7164	鋼珠(φ2.5)	Stell Ball(φ2.5)	2	41	R.00.7360	按板彈簧	Spring	1
15	R.00.5262	傳動軸	Shaft	1	42	R.00.3004	微動開關	Switch	1
16	R.00.7165	鋼珠(φ4.0)	Stell Ball(φ4.0)	3	43	R.00.2018	按板	Trigger	1
17	R.00.5256	凸輪	Cam	1	44	R.00.2019	控制板	Control Board	1
18	R.00.7360	O型圈(φ8*0.5)	O-ring(φ8*0.5)	1	45	R.00.7038	吊環	Ring	1
19	R.00.7162	鋼珠(φ3.0)	Stell Ball(φ3.0)	12	46	R.00.8047	航空頭整組(G)	6PIN Plug	1
20	R.00.7149	大孔片	Cage	1	47	R.00.3020	正反轉開關板	Changeover-PCB	1
21	R.00.7264	688ZZ軸承	Bearing	1	48	R.00.2059	正反開關	Chang over-Switch	1
22	R.00.7356	O型圈(φ13*0.5)	O-ring(φ13*0.5)	1	49	R.00.2026	外殼(下)	Shell-Lower	1
23	R.00.5226	剎車銷整組	Brake Pin	1	50	R.00.2042	外殼(上)	Shell-Upper	1
24	R.00.8061	齒輪箱整組	Gear Case	1	51	R.00.2003	前鎖環	Coupler	1
25	R.00.3080	剎車開關板	Brake plate	2	52	R.00.7061	螺絲(PM3.0)	Screw(PM3.0)	4
26	R.00.7332	螺絲(PM1.6)	Screw(PM1.6)	3	53	R.00.4002	電源線	Power Cord	1
27	R.00.7110	菊花墊片	Gasket	3	/				

產品型號

(Product number):

產品序號

(Serial number):

購買日期

(Purchase Date):

用戶名稱

(User name):

购买渠道

(Sellers):

紧 密 连 接 转 动 未 来



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