

電動螺絲起子操作手冊

OPERATION AND MAINTENANCE MANUAL

AC-TYPE 全自動手按

AC-TYPE 全自動下壓

AC-TYPE 半自動手按

DC-TYPE 全自動手按

DC-TYPE 全自動下壓

AC-TYPE Automatic Trigger Start Series

AC-TYPE Automatic Push Start Series

AC-TYPE Semi-Automatic Trigger Start Series

DC-TYPE Automatic Trigger Start Series

DC-TYPE Automatic Push Start Series

奇力速工業股份有限公司

KILEWS INDUSTRIAL CO., LTD.

http://www.kilews.com



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操作前請閱讀全部說明(內附零件分解圖)

警告 🛕

在進行本電動螺絲起子任何維修之前,須將電源線自插座拔離。 若非合格維修技師,請勿嘗試修理本電動螺絲起子

使用電動螺絲起子時,應遵守下列基本安全措施,以避免失火、觸電和人身傷害等危險。

1. 工作場所要保持乾淨。

雜亂的區域及工作場所易造成傷害。

2. 注意工作場所的環境。

勿將電動螺絲起子或其配件置放於水邊,工作場所應照明良好。

3. 閒人勿近。

除非指派,勿讓他人任意操作此電動螺絲起子。

4. 收好不使用的工具。

不使用此電動螺絲起子時應將其收好,存放于乾爽安全處。

5. 勿強押雷動螺絲起子。

爲確保電動螺絲起子之功能及安全性,使用時請勿強壓之。

6. 使用正確機型的電動螺絲起子。

勿以小型電動螺絲起子或附件去操作須以重型電動螺絲起子完成的工作。 勿使用此電動螺絲起子於非其設定之用途,如:鑽孔等。

7. 操作此雷動螺絲起子時要穿著適官。

勿穿著太寬鬆之衣物或珠寶,以免遭工具勾扯而造成危險。

8. 小心使用電源線。

不可使用電源線拉提電動螺絲起子,或將電源線從插座猛拉開。

避免電源線接觸到熱源、油污或化學劑等物品,或磨擦到尖銳的物品邊緣。

9. 固定工作物。

作業員應將工作物固定,安全操作電動螺絲起子。

10. 細心維護工具。

定期檢查電動螺絲起子的電源線,遇有損壞應由指定之服務部門修理;機身需保持乾淨,避免油污弄髒。

11. 拔掉電動螺絲起子的插頭。

不使用電動螺絲起子時或更換零件時應拔掉電源線插頭。

12. 避免意外起動電動螺絲起子。

注意使用電壓是否符合該機型使用,在插上電動螺絲起子的電源插頭時須先確認開關處於"OFF"的狀態。

13. 保持警覺。

注意正在做的事,在進一步使用工具前應先仔細檢查安全措施或其他零件是否破損,以確定工具能如原設計的正常使用。



注 意 ▲

請勿任意分解、拆裝此電動螺絲起子,否則保證無效。

電動螺絲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螺絲起子發生故障或品質不良,從而導致一切保證失效,本廠恕不負責。

操作須知

- 1. 當更換螺絲刀頭時應先確定正反開關在"OFF"的位置,且將電源插頭拔離插座。
- 2. 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外殼,以免遭到破壞。
- 3. 小心使用電動螺絲起子,勿使掉落或受撞擊,使用時最好用平衡器吊起來,若電動螺絲起子無法吊 起來時,可使用起子架來放置。
- 4. 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螺絲刀頭固定。

注意: 裝卸螺絲刀頭時請確實斷電或將開關置於 "OFF"的位置。

5. 將電源線接上電源插座。

注意: 電源線插頭或手部潮濕會導致觸電危險。

6. 扭力輸出的大小可由電動螺絲起子下端的扭力調整環調整之,機身的刻劃段數並不代表實際的扭力輸出,請參考扭力標示圖或以扭力計量測及調整所需扭力。

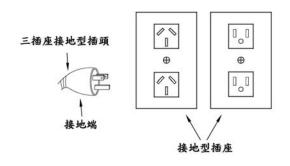
注意:請勿將扭力調整超過刻度"8"。

- 7. ※爲壓板式起子時要進行鎖緊螺絲動作,請將正反開關切到 "F"的位置(若螺絲爲反牙規格,則須將正反開關切換至 "R"的位置),對準螺絲刀頭與螺絲的位置,手按開關壓板後電動螺絲起子即可啟動運轉;當螺絲鎖緊達設定扭力時,離合器會自動跳脫,馬達會斷電並及時刹車,讓電動螺絲起子停止運轉。
 - ※為下壓式起子若要進行鎖緊螺絲動作,請將正反開關切到 "F"的位置(若螺絲為反牙規格,則須將正反開關切換至 "R"的位置),對準螺絲刀頭與螺絲的位置,下壓電動螺絲起子即可啟動運轉;當螺絲鎖緊達設定扭力時,離合器會自動跳脫,馬達會斷電並及時刹車,讓電動螺絲起子停止運轉。
- 8. ※若為壓板式起子,鬆脫拔起螺絲時則僅需將正反開關切換至 "R"的位置(若螺絲為反牙規格, 則須將正反開關切換至 "F"的位置),按上述程式操作,於螺絲鬆開後,放開開關壓板即可。 ※若為下壓式起子,松脫拔起螺絲時則僅需將正反開關切換至 "R"的位置(若螺絲為反牙規格, 則須將正反開關切換至 "F"的位置),按上述程式操作,於螺絲鬆開後,提高電動螺絲起子即可停 止運轉。
- 9. 操作頻率: 本機額定斷續運行時間爲 1 秒/3 秒(ON/OFF)。即每分鐘操作鎖螺絲的數量約 15 只,過高的使用頻率會使馬達過熱造成嚴重損壞,請給予起子適當的休息散熱。
- 10. 請勿使用本電動螺絲起子鎖木螺絲。
- 11. 操作運行中嚴禁切換正反轉開關。
- 12. 無論何時,只要不使用電動螺絲起子,均應將正反開關置於 "OFF"位置。



接地說明

- 1. 電動螺絲起子於使用中應確實接地,以免操作者觸電。
- 2. 操作者可以用簡單的方法檢查接地是否正常: 拿一般三用電錶,將電錶檔位切換到歐姆檔*10 的位置,將電錶正、負測試棒接觸,進行歸零調整;之後,將紅色測試棒接觸電源線的接地端,另一黑色測試棒則接觸在電動螺絲起子尾端起子頭帽內側,稍微施力;此時電錶指標大幅擺動,顯示阻值介於 0~10 歐姆間,即表示接地正常,若指針不動或阻值遠大於 10 歐姆以上,即表示接地不正常,應及時予以檢修。
- ※注意: 電源插座的接地線需確實和電源設備的接地端相連接才有接地作用; 地線可將電動螺絲起子所產生的靜電(ESD)消除。



其他說明

- 1. 此電動螺絲起子的最佳使用狀況是每日不超過8小時。
- 2. 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、換碳刷、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、安全和扭力精確度(無碳刷馬達不在此限)。
- 3. 定期檢查馬達兩端的碳刷損耗情形,如果碳刷長度不到 2~3mm 就要換新的碳刷,碳刷磨損的速率 與電動螺絲起子使用的頻率成正比。
- 4. 電動螺絲起子內部應定期清潔,以避免積碳破壞絕緣強度,引起漏電的危險。
- 5. 離合器應定期補充專用的潤滑油,使其傳動順暢減低磨損。
- 6. 不要超出額定運轉的頻率(0.8 秒/3.2 秒 ON/OFF) ,以免造成馬達過熱所引發的嚴重損壞。
- 7. 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連絡原購買的經銷商送往 當地服務中心處理。
- 8. 客戶若將電動螺絲起子交由非本公司指定之服務中心維修或自行拆解修理,因此所造成的品質不良 將無法獲得應有的保證服務。
- 9. 電動螺絲起子的管理部門有責任將本手冊交予操作員或使用者閱讀,切勿嘗試自行修理本電動螺絲起子。



請妥善保存此說明書



NOTICE

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

KILEWS is not responsible for customer modification of tools for applications on which KILEWS 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:



Important Safety Instructions

WARNING! Read all instructions Failure to follow all instructions listed below may result in electric shock fire and/or serious injure. The term "power tool" in all of the warning listed below refer to your mains operated (corded) power tool or battery operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

- 1) Electrical Safety
- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) Do not operate power tools in explosive atmosphere, such as in the presence of flammable liquids, gases or dust. Power tools creat sparks which may ignite the dust of fumes..
- c) Keep children, and bystanders away while operating a power tool. Distractions can cause you to lose control.
- 2) Electrical Safety
- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord to carrying, pulling or unplugging the power tool.

 Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of cord suitable for outdoor use reduces the risk of electric shock.
- 3) Personal Safety
- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use power tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) **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.
- c) Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- d) Remove any adjusting keys or wrench before turning the power tool on. A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) 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
- g) **Secure work.**Use clamps or a vice to hold the work. It is safer than using your hand and frees both hands to operate the tool.
- h) If devices are provided for the connection of dust extraction and collection facilitys, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.



4) Power tool Use and Care

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use power tool 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.
- c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
 - Do not let visitors touch the tool or extension cord. All visitors should be kept away from work area.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are cause by poorly maintained power tools. Inspect extension cords periodically and replace, if damaged.
- f) **Keep cutting tools sharp and clean**, Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tools, accessories and tool bits ect., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

5) SERVICE

a) Have your power tool serviced by qualified repair person using only indentical replacement parts, This will ensure that the safety of the power tool is maintained.

Additional information shall be provide

- a) Instruction for putting into use
 - 1. Setting-up or fixing power tool in a stable position as appropriate for power tools which can be mounted on a support.
 - 2. Assembly
 - 3. Connection to power supply, cabling, fusing, socket type and earthing requirements.
 - 4. Illustrated description of functions.
 - 5. Limitations on ambient conditions.
 - 6. List of contents.
- b) Operating Instructions.
 - 1. Setting and testing.
 - 2. Tool changing.
 - 3. Clamping of work.
 - 4. Limits on size of work piece.
 - 5. General instructions for use.
- c) Maintenance and servicing.
 - 1. Regular cleaning, maintenance, and lubrication.
 - 2. Servicing by manufacture or agent, list of addresses.
 - 3. List of user-replaceable parts.
 - 4. Special tools which may be required.

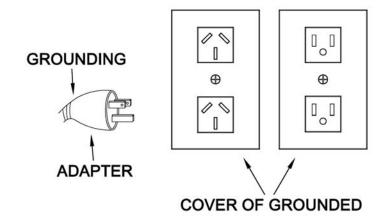




DO NOT OPERATE THIS TOOL WITHOUT PROTECTIVE EARTH CONNECTED

Grounding Instructions

- 1 This tool 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. This tool is equipped with grounding conductors. The Green(or Green and Yellow)conductor in the Power Cord is the grounding wire. Never connect Green (or Green and Yellow) to a live terminal. The grounding wires in this tool can not only earth the electric leakage safely, but also can eliminate ESD-the electrostatic that tool 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 in testing, need to press the test rods firmly to the testing objects.
- 3 The instrument QC of the tool is performed before the tool ex-factory. The grounding continuity test is conducted by input 26A voltage to the end of earth terminal, and subject to the resistance value lower than 0.3Ohm.





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.



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



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) select such a bit whose shank is equal to the size shown below.

- ☑ Insert the power plug into a receptacle and set the changeover switch to "**F**" position.
- ☑ 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.
- ☑ When the screw is tighten and reach the torque that you had set, The tool will stopped automatically.
- ☑ To reset the tool by releasing the lever to the original position or releasing the bit From the screw head.
- ☑ To return the screw, set the changeover switch to "R" position.

Servicing

Maintenance and Inspection:

- 1. The screw driver 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 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 KILEWS 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. KILEWS is not responsible for customer modification of tools for applications on which KILEWS was not consulted.
- 4. Repairs should by made only by authorized, trained personnel. Consult your nearest KILEWS authorized service center.
- 5. It is the responsibility of the employer to place the information in this manual into the hands of the operator.

DO NOT ATTEMPT TO REPAIR THIS ELECTRIC SCREW DRIVER

CAUTION

SAVE THESE INSTRUCTIONS
DO NOT DESTROY



※主要技術參數

機	型	SK-9131P	SK-9131PF	SK-9231P	SK-9231PF				
輸入電壓		AC 110V~120V	50Hz / 60Hz	AC 220V~240V 50Hz / 60Hz					
額定功率			60	W					
	(kgf.cm)	5~20	5~13	5~20	5~13				
扭 力	(Lbf.in)	4.34~17.35	4.34~11.24	4.34~17.35	4.34~11.24				
	(N.m)	0.49~1.96	0.49~1.27	0.49~1.96	0.49~1.27				
扭力精	度 (%)		±3	%					
扭力	調整		無段式						
空轉速 n0: (1	r/min) ±10%	1000	2000	1000	2000				
無負荷	電流(A)	0.3A	0.3A	0.2A	0.2A				
適用螺絲直	機械牙	2.6~4.0	2.0~3.5	2.6~4.0	2.0~3.5				
徑(mm)	自攻牙	2.6~3.5	2.0~3.0	2.6~3.5	2.0~3.0				
重量	(g)	620							
長度	(mm)	264							
適用扭力固定環		KC-2							
適用起子架		KH-3、(KC & KH-1)							
適用起子頭		A	A B B B B B B B B B B B B B B B B B B B						
		HEX 5mm	HEX 5mm, HEX 6.35mm						

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

※標准配件

1 · 起子頭 (BIT)型號: NO.00# 適用於直徑 1.3~1.8mm 螺絲

NO. 0# 適用於直徑 1.8~2.0mm 螺絲

NO. 1# 適用於直徑 2.0~2.6mm 螺絲

NO. 2# 適用於直徑 3.0~4.0mm 螺絲

SK-9131P; SK-9231P 配附 BIT 1# & 2# 各 1 支

SK-9131PF; SK-9231PF 配附 BIT 1# & 2# 各 1 支

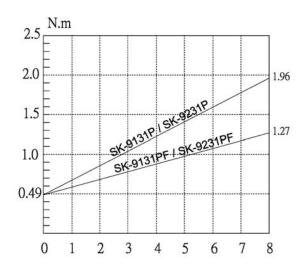
2· 起子吊簧(30cm)一條。



※扭 力 調 整

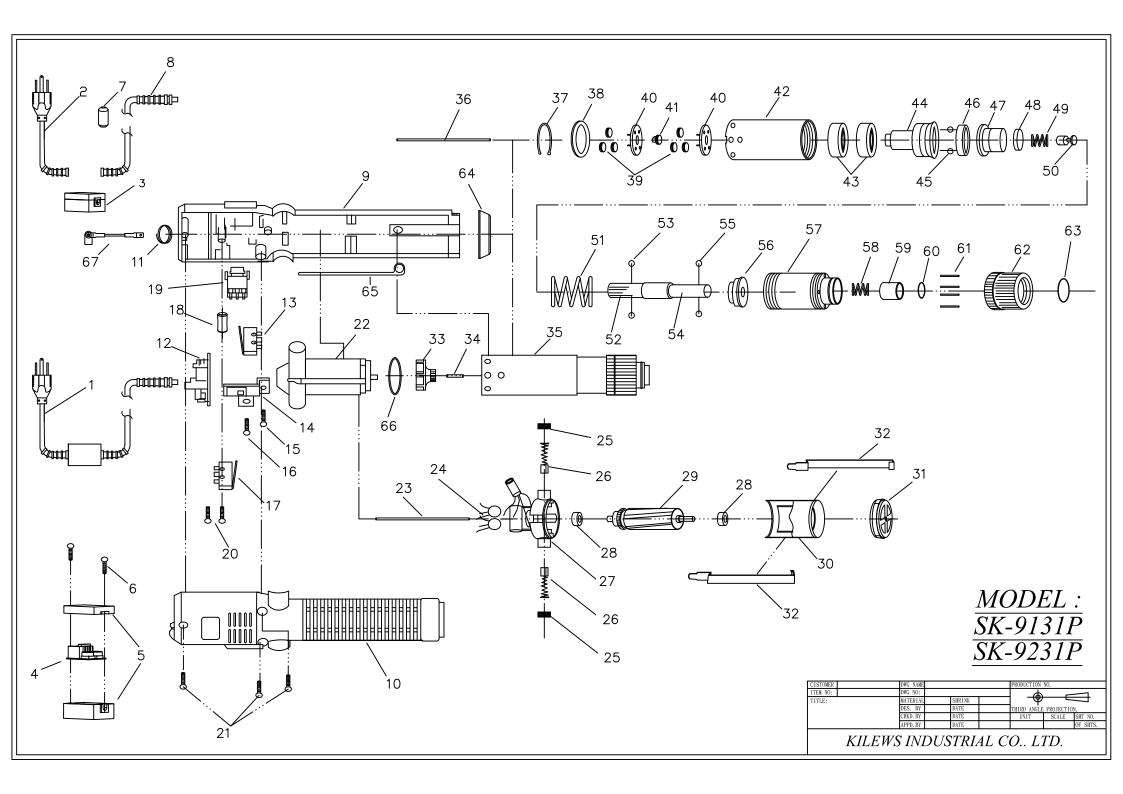
- 1. 先行決定扭力大小,再用手旋轉扭力調整環至所需扭力位置。
- 2. 旋轉扭力調整環以增加或減少扭力輸出:順時針方向調至較高刻度,代表增加扭力。逆時針方向調至較低刻度,代表減少扭力。
- 3. 很多因素會影響扭力輸出。操作本電動螺絲起子時應循序漸進,先用小扭力試鎖螺絲,再漸漸增至較大扭力。
- 4. 扭力刻度與電動螺絲起子扭力的相互關係如扭力標示圖所示。扭力刻度的數值並非電動螺絲起子實際扭力的 強弱,需對應電動螺絲起子型式以比對概略的扭力輸出值。
- 5. 鎖緊螺絲所需的扭力依其鉚合狀況或材質不同而有所差異,必要時可用扭力計量測及調整電動螺絲起子的扭力。 力。
- 6. 電動螺絲起子經調整好扭力後,將外殼前鎖環鬆開取下,換上扭力固定環,這樣可避免人爲擅意旋轉扭力調整環而讓原設定的扭力值遭到變動。
- 7. 在相同的扭力刻度下,反轉"R"的扭力會較大於正轉"F"的扭力,在不調整扭力調整環的情況下,有助於螺絲的拆卸;但是當螺絲緊度大於反轉扭力,離合器已經跳脫而螺絲仍無法鬆開時,仍需調整電動螺絲起子至較大扭力,方可鬆開螺絲。

8.

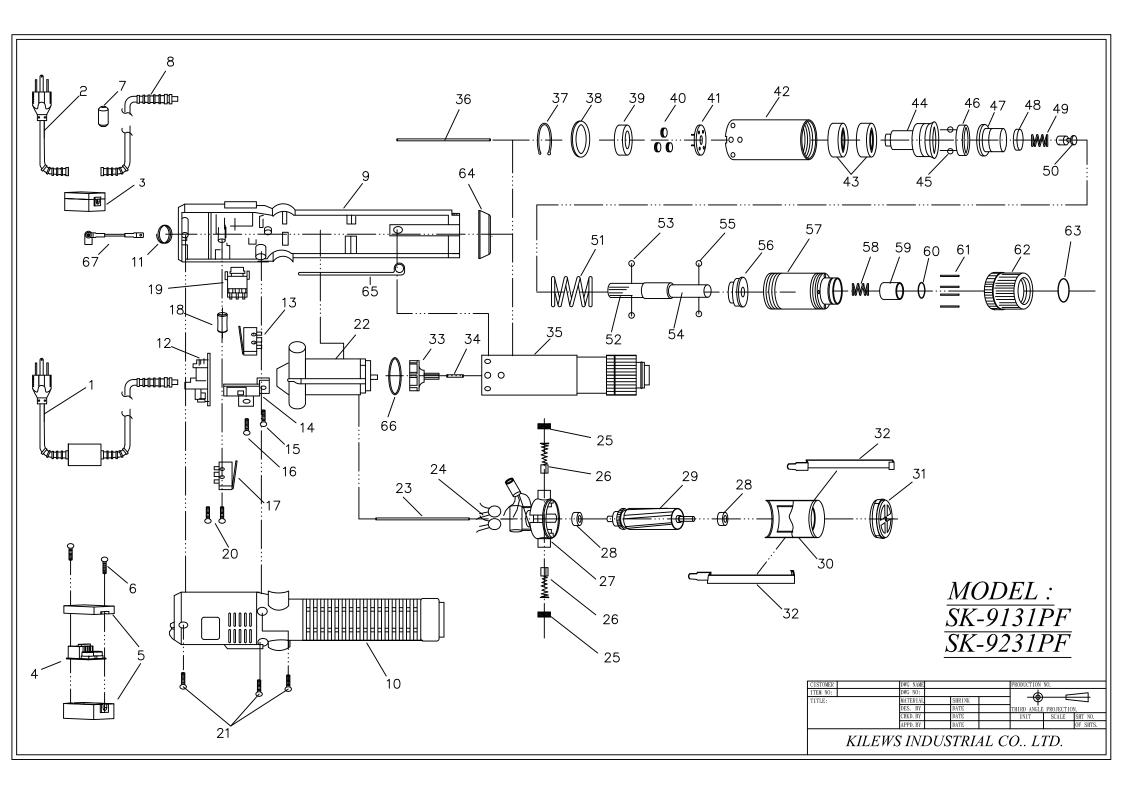


注 意▲

- 1. 進行扭力調整時,應先停止電動螺絲起子運轉。
- 2. 機身上的扭力刻度僅供與扭力標示圖參考,不代表電動螺絲起子的扭力輸出值。
- 3. 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12Pcs/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是否符合需要,適時補償衰減的扭力。



NO	PARTS NO	PARTS NAME-E	PARTS NAME-C	Q'ty	NO	PARTS NO	PARTS NAME-E	PARTS NAME-C	Q'ty
1	AC30001	Cord Assy-AMERICA Plug	電源線整組 美規	1		MJ90601	MOTOR YOKE ASSEMBLY	馬達鐵圈連磁鐵	1
	AF30001	Cord Assy-EUROPE Plug	電源線整組 歐規	1	31	MB21521A	MOTOR END COVER	馬達前蓋	1
	AG30001	Cord Assy-BRITISH Plug	電源線整組 英規	1	32	MA21491B	ASSEMBLING SPRING FOR	馬達固定鐵片	2
	AJ30001	Cord Assy-INDIA Plug	電源線整組 印規	1	33	MK21111	FAN	風扇	1
	AD30001-6	Cord Assy-AUSTRALIA Plug	電源線整組 澳規	1	34	MG91081	PILOT ROD	陶瓷棒	1
2	AA30007-1	Cord 1FT with AMERICA Plug	1呎長電源線 美規	1	35	GZ90091A	CLUTCH ASSEMBLY FOR "A"	離合器整組 (A)	1
	AA30007-2	Cord 1FT with EUROPE Plug	1呎長電源線 歐規	1		GZ90091B	CLUTCH ASSEMBLY FOR"B"	離合器整組 (B)	1
	AA30007-5	Cord 1FT with BRITISH Plug	1呎長電源線 英規	1		GZ90091AD	CLUTCH ASSEMBLY FOR "AD"	離合器整組 (AD)	1
	AA30007-5E	Cord 1FT with INDIA Plug	1呎長電源線 印規	1	36	MI90201	PILOT ROD	開關引導棒	1
	AA30007-1D	Cord 1FT with AUSTRALIA Plug	1呎長電源線 澳規	1	37	GK21181	"C" RING	齒輪固定 C環	1
3	EJ30002-2	EMC-BOX ASSEMBLY	EMC盒成品	1	38	GI21191	IRON WASHER	齒輪固定片	1
4	EG30005-3	P.C.B	PC板	1	39	GH20241	IDLE GEAR	游星齒輪	6
5	EC30006	EMC-BOX CASE ONLY	EMC盒 上下蓋	1	40	GG21231	GEAR SEAT	齒盤	2
6	CH90152-1	SCREW	螺絲	2	41	G20102	CENTRAL GEAR	中心齒	1
7	ED30004	FILTER	電磁夾	1	42	GA21241	GEAR CASE	上離合器筒	1
8	AA30009-1T	CORD 9"	9呎長電源線	1	43	GN21251	MAIN BEARING	離合器主軸承	2
9	CB90011-1	HOUSING-UNDERSIDE(ORANGE)	下蓋 (橙)	1	44	GX90303	SHAFT GUIDE	上離合器頭	1
10	CA90181-1	HOUSING-UPSIDE FOR (ORANGE)	上蓋 (橙)	1	45	GP30351	STEEL BALLS	跳脫鋼珠	2
11	CJ20011	SUSPENSION RING	起子吊環	1	46	GW21531	IRON RING	鐵墊圈	1
12	EG90111	CONTROL BOARD FOR "9131P"	PC板(9131P)	1	47	GF90321-1	WARING PLATE	扭力推盤	1
	EG90112	CONTROL BOARD FOR "9231P"	PC板(9231P)	1	48	GV90331	INNER SPRING CAP	內彈簧蓋	1
13	HB91061	START SWITCH	啓動開關	1	49	GO90341	INNER SPRING	下壓式內彈簧	1
14	CE90101-1	SWITCH BASE	三合一開關架半成品	1	50	GU30361	STOP PILOT	停止用酒杯	1
15	CH90121	SCREW	螺絲	1	51	GE90361-2	WRING SPRING	扭力彈簧	1
16	CH90131	SCREW	螺絲	1	52	GD91402	SHAFT	六角軸	1
17	HB30061	SHUT OFF SWITCH	停止開關	1		GP30351	STELL BALLS 4mm	酒杯鋼珠(4mm)	2
18	E31908	BRAKE RESISTOR FOR 9131P	刹車電阻(阻抗)-9131P	1	54	GT91401A	BIT HOLDER FOR "A"TYPE	起子頭(A)	1
	E31908-4	BRAKE RESISTOR FOR 9231P	刹車電阻(阻抗)-9231P	1		GT91401C	BIT HOLDER FOR "B"TYPE	起子頭(B)	1
19	HA90171	CHANGEOVER SWITCH	正反開關	1		GT91401AD	BIT HOLDER FOR "AD"TYPE	起子頭(AD)	1
20	CH90151-1	SCREW	螺絲	2	55	GP21291A	BIT PILOT FOR "A;AD"TYPE	起子頭帽鋼珠(A;AD)	2
21	CH20102	SCREW	螺絲	3		GP21291B	BIT PILOT FOR "B"TYPE	起子頭帽鋼珠(B)	2
22	MO90051	MOTOR ASSEMBLY FOR "9131P"	馬達整組(9131P)	1		GY21321	WRING SPRING BASE	止推盤	1
	MO90052	MOTOR ASSEMBLY FOR "9231P"	馬達成品 9231P	1		GB21331	CLUTCH CASE	下離合器筒	1
23	MI90481	PILOT ROD	開關引導棒	1	58	GO21341	BIT SPRING	起子頭帽彈簧	1
24	EB33610-2	CERAMICS CAPACITOR	陶瓷電容	2		GJ21351	BIT SLEEVE	起子頭帽	1
	MD20151	BRUSH CAP	碳刷蓋	2	60	GQ21361	"C" RING	起子頭帽 C環	1
26	MC21411	CARBON BRUSH FOR "9131P"	碳刷(9131P)	2		GL21371	TORQUE ADJUST PING	扭力調整棒	4
	MC20161	CARBON BRUSH FOR"9231P"	碳刷(9231P)	2		GM21381	TORQUE ADJUST RING	扭力調整環	1
27	ML90531	MOTOR TOP COVER FOR "9131P"	碳刷座(9131P)	1		GS21391	"C"RING	扭力環 C環	1
	ML90532	MOTOR TOP COVER FOR "9231P"	碳刷座(9231P)	1		CD21031	COUPLER	前鎖環	1
28	ME21481	ARMATURE BEARING	馬達軸承	2		CH30671-1	GROUNDING MEANS	接地線	1
29	MH90571	ARMATURE FOR "9131P"	電樞(9131P)	1		MF90061	INSULATE WASHER	墊圈	1
	MH90572	ARMATURE FOR "9231P"	電樞(9231P)	1	67	P12104	RETAINING CLIP	八公分固定線	1



NO	PARTS NO	PARTS NAME-E	PARTS NAME-C	Q'ty	NO	PARTS NO	PARTS NAME-E	PARTS NAME-C	Q'ty
1	AC30001F	Cord Assy-AMERICA Plug	電源線整組 美規	1	30	MJ90601	MOTOR YOKE ASSEMBLY	馬達鐵圈連磁鐵	1
	AF30001F	Cord Assy-EUROPE Plug	電源線整組 歐規	1	31	MB21521A	MOTOR END COVER	馬達前蓋	1
	AG30001F	Cord Assy-BRITISH Plug	電源線整組 英規	1	32	MA21491B	ASSEMBLING SPRING FOR	馬達固定鐵片	2
	AJ30001F	Cord Assy-INDIA Plug	電源線整組 印規	1	33	MK21111PF	FAN	風扇	1
	AD30001-6F	Cord Assy-AUSTRALIA Plug	電源線整組 澳規	1	34	MG30081-1	PILOT ROD	陶瓷棒	1
2	AA30007-1	Cord 1FT with AMERICA Plug	1呎長電源線 美規	1	35	GZ90091AF	CLUTCH ASSEMBLY FOR "LFA"	離合器整組 (LFA)	1
	AA30007-2	Cord 1FT with EUROPE Plug	1呎長電源線 歐規	1		GZ90091BF	CLUTCH ASSEMBLY FOR"LFB"	離合器整組 (LFB)	1
	AA30007-5	Cord 1FT with BRITISH Plug	1呎長電源線 英規	1		GZ90091ADF	CLUTCH ASSEMBLY FOR "LFAD"	離合器整組 (LFAD)	1
	AA30007-5E	Cord 1FT with INDIA Plug	1呎長電源線 印規	1	36	MI90201	PILOT ROD	開關引導棒	1
	AA30007-1D	Cord 1FT with AUSTRALIA Plug	1呎長電源線 澳規	1	37	GK21181	"C" RING	齒輪固定 C環	1
3	EJ30002-5	EMC-BOX ASSEMBLY	EMC盒成品	1	38	GI21191	IRON WASHER	齒輪固定片	1
4	EG30005	P.C.B	PC板	1	39	G21301	SPACER	快速墊圈	1
5	EC30006	EMC-BOX CASE ONLY	EMC盒 上下蓋	1	40	GH21221-1	IDLE GEAR	游星齒輪	3
6	CH90152-1	SCREW	螺絲	2	41	GG21231-1	GEAR SEAT	齒盤	1
7	ED30004	FILTER	電磁夾	1	42	GA21241	GEAR CASE	上離合器筒	1
8	AA30009-1T	CORD 9"	9呎長電源線	1	43	GN21251	MAIN BEARING	離合器主軸承	2
9	CB90011-1	HOUSING-UNDERSIDE(ORANGE)	下蓋 (橙)	1	44	GX90303	SHAFT GUIDE	上離合器頭	1
10	CA90181-1	HOUSING-UPSIDE FOR (ORANGE)	上蓋 (橙)	1	45	GP30351	STEEL BALLS	跳脫鋼珠	2
11	CJ20011	SUSPENSION RING	起子吊環	1	46	GW21531	IRON RING	鐵墊圈	1
12	EG90111	CONTROL BOARD FOR "9131P"	PC板(9131P)	1	47	GF90321-1	WARING PLATE	扭力推盤	1
	EG90112	CONTROL BOARD FOR "9231P"	PC板(9231P)	1	48	GV90331	INNER SPRING CAP	內彈簧蓋	1
13	HB91061	START SWITCH	啓動開關	1		GO90341	INNER SPRING	下壓式內彈簧	1
	CE90101-1	SWITCH BASE	三合一開關架半成品	1		GU30361	STOP PILOT	停止用酒杯	1
	CH90121	SCREW	螺絲	1		GE90361-4	WRING SPRING	扭力彈簧	1
	CH90131	SCREW	螺絲	1		GD91402	SHAFT	六角軸	1
	HB30061	SHUT OFF SWITCH	停止開關	1		GP30351	STELL BALLS 4mm	酒杯鋼珠(4mm)	2
18	E31908	BRAKE RESISTOR FOR 9131P	刹車電阻(阻抗)-9131P	1	54	GT91401A	BIT HOLDER FOR "A"TYPE	起子頭(A)	1
	E31908-4	BRAKE RESISTOR FOR 9231P	刹車電阻(阻抗)-9231P	1		GT91401C	BIT HOLDER FOR "B"TYPE	起子頭(B)	1
	HA90171	CHANGEOVER SWITCH	正反開關	1		GT91401AD	BIT HOLDER FOR "AD"TYPE	起子頭(AD)	1
20	CH90151-1	SCREW	螺絲	2	55	GP21291A	BIT PILOT FOR "A;AD"TYPE	起子頭帽鋼珠(A;AD)	2
21	CH20102	SCREW	螺絲	3		GP21291B	BIT PILOT FOR "B"TYPE	起子頭帽鋼珠(B)	2
22	MO90051	MOTOR ASSEMBLY FOR "9131P"	馬達整組(9131P)	1		GY21321	WRING SPRING BASE	止推盤	1
	MO90052	MOTOR ASSEMBLY FOR "9231P"	馬達成品 9231P	1	_	GB21331	CLUTCH CASE	下離合器筒	1
	MI90481	PILOT ROD	開關引導棒	1		GO21341	BIT SPRING	起子頭帽彈簧	1
24	EB33610-2	CERAMICS CAPACITOR	陶瓷電容	2	-	GJ21351	BIT SLEEVE	起子頭帽	1
	MD20151	BRUSH CAP	碳刷蓋	2		GQ21361	"C" RING	起子頭帽 C環	1
	MC21411	CARBON BRUSH FOR "9131P"	碳刷(9131P)	2		GL21371	TORQUE ADJUST PING	扭力調整棒	4
	MC20161	CARBON BRUSH FOR"9231P"	碳刷(9231P)	2		GM21381	TORQUE ADJUST RING	扭力調整環	1
	ML90531	MOTOR TOP COVER FOR "9131P"	碳刷座(9131P)	1	_	GS21391	"C"RING	扭力環 C環	1
	ML90532	MOTOR TOP COVER FOR "9231P"	碳刷座(9231P)	1		CD21031	COUPLER	前鎖環	1
	ME21481	ARMATURE BEARING	馬達軸承	2		CH30671-1	GROUNDING MEANS	接地線	1
	MH90571	ARMATURE FOR "9131P"	電樞(9131P)	1		MF90061	INSULATE WASHER	墊圈	1
	MH90572	ARMATURE FOR "9231P"	電樞(9231P)	1	67	P12104	RETAINING CLIP	八公分固定線	1