



USER MANUAL

使用說明書

CORDLESS 3/8" HIGH SPEED RATCHET WRENCH

鋰電無碳刷3/8"棘輪扳手



Be Xcellent

Located on the toolhousing are the model and serial numbers of your tool, please record these.

請您紀錄位於包裝盒上的工具型號與序號。

Model Number: _____
型號

Serial Number: _____
序號

WWW.BEXTOOL.COM

Made in Taiwan



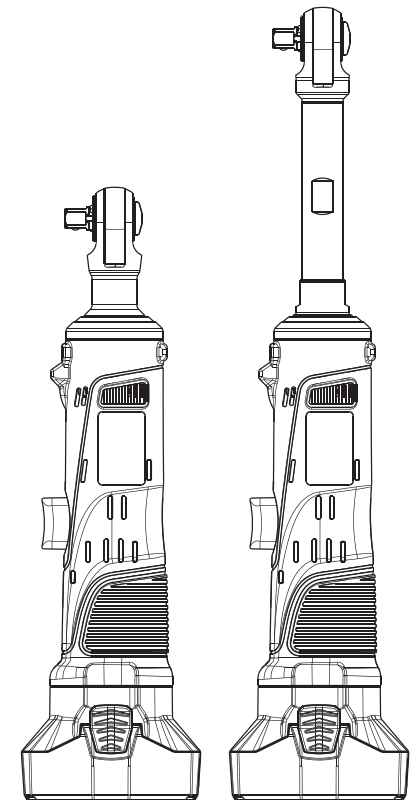
IMPROPER AND UNSAFE USE OF THIS TOOL WILL RESULT IN DEATH OR SERIOUS INJURY. IT IS VERY IMPORTANT THAT THE INTENDED OPERATOR OF THIS TOOL READS AND UNDERSTANDS THIS MANUAL BEFORE OPERATING THIS TOOL. KEEP THIS MANUAL AVAILABLE FOR OTHERS BEFORE THEY USE THE TOOL.



不當或不安全使用本工具可能導致死亡或嚴重傷害。
操作本工具的使用者務必在操作前仔細閱讀並理解本手冊內容。請將本手冊保留，供其他使用者在使用工具前參閱。





▲ **WARNING:** Please read the instructions and warnings for this tool carefully before use. Failure to do so could lead to serious injury.

▲ **重要事項:** 使用本工具前，請仔細閱讀操作說明與警告內容。
未遵守可能導致嚴重傷害。



RW103K
RW103LK

符號說明

配戴護目鏡	警告	使用前閱讀說明	配戴聽力防護具
			
直流電	額定每分鐘轉速 (RPM)	伏特	
D.C.	n XXXX min ⁻¹	V	

噪聲 – RW103K | RW103LK

依據 EN62841-2-2 決定之典型A加權噪音位準：
聲壓等級 (LpA)：79.7dB(A) | 83.3dB(A)
聲功率等級 (LWA)：90.7dB(A) | 94.3dB(A)
不確定性(K)：3dB(A) | 3dB(A)

註：此處敘明之噪音排放值為依照標準測試方法測量得出，可用於相互比較工具。
註：此處敘明之噪音排放值也可用於噪音暴露量之初步評估。

型號	RW103K	RW103LK
含電池尺寸(L)	304mm	393mm
含電池重量	1110g	1300g
空載轉速 n0	500rpm	500rpm
扭力	45ft-lb	45ft-lb

- ▲ 警告：配戴耳罩
- ▲ 警告：實際使用電動工具時的噪音值，可能因使用方法，特別是工件不同，其噪音排放值即可能於聲明的噪音值。
- ▲ 警告：請務必基於預測的實際使用條件(考慮操作周期的所有方面，如工具關閉時間、怠速運行時間和啟動時間)採取安全措施保護操作人員。

振動 – RW103K | RW103LK

依據 EN62841-2-2 決定之振動總值：
振動排放量 (ah)：3.19 m/ S2 | 2.46 m/ S2
不確定度(K)：1.50 m/ S2 | 1.50 m/ S2

註：此處敘明之振動總值為依照標準測試方法測量得出，可用於相互比較工具。
註：此處敘明之振動總值也可用於振動暴露量之初步評估。

- ▲ 警告：實際使用電動工具時的振動值，可能因使用方法，特別是工件不同而不同於聲明的振動值。
- ▲ 警告：請務必基於預測的實際使用條件(考慮操作周期的所有方面，如工具關閉時間、空轉時間和啟動時間)採取安全措施保護操作人員。

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一般電動工具安全警告

▲警告：請務必閱讀所有安全警告、說明、插圖、規格 若未遵守下列所有說明，可能導致觸電、火災及/或重傷。請保存所有警告及說明，以供日後參考。

警告中「電動工具」一詞是指由電源供電之(有線)電動工具或由電池供電(無線)之電動工具。

在進行緊固件可能接觸到隱藏線路或本身電線之操作時，需用絕緣的抓握面握住電動工具。緊固件接觸到「帶電」的電線時，可能使電動工具的裸露金屬部分「帶電」，導致操作人員觸電。

一般電動工具安全警告-工作區域安全

- a)保持工作區域整潔及光線充足。雜亂或黑暗的區域易導致事故發生。
- b)請勿在有爆炸可能性的環境中操作電動工具，例如於有易燃液體、氣體或粉塵的環境中操作。電動工具會產生火花，可能會點燃灰塵或煙霧。
- c)操作電動工具時，請兒童及旁觀者遠離現場。操作工具時分散注意力，會導致工具失去控制。

一般電動工具安全警告-用電安全

- a)電動工具的插頭必須與插座相配。切勿以任何方式改裝插頭。請勿將任何轉接插頭與接地的電動工具一起使用。未經改裝的插頭與相配的插座能減少觸電的風險。
- b)作業時避免身體接觸接地金屬的表面，如鐵管、散熱器、鍋爐、冰箱。若使用人員的身體接地，則觸電的風險會增加。
- c)請勿將電動工具暴露於下雨或潮濕的環境中。若電動工具進水，會增加觸電的風險。
- d)請勿不當使用電線。禁止使用電線去移動、拉動電動工具或拔掉電動工具的插頭。同時，請確保電線遠離熱源、油脂、銳利邊緣或活動零件等危險物品。電線如果損壞或糾纏，會增加觸電的風險。
- e)在戶外操作電動工具時，請使用適合戶外使用的延長線。使用適合戶外使用的電線，能減少觸電的風險。
- f)如果必須在潮濕的環境下操作電動工具，請使用帶有”接地故障電流漏電保護器”(GFCI)的電源。透過使用GFCI，可以降低觸電的風險。

一般電動工具安全警告：人身安全

- a)在使用電動工具時，必須始終保持警覺，專注於工作並運用基本常識。切勿在疲勞或受毒品、酒精或藥物影響下使用電動工具。即使稍有不慎，也可能導致嚴重的人身傷害。

- b)使用個人防護設備非常重要。必須戴上護目鏡以確保安全。在適當的情況下，使用防塵口罩、防滑安全鞋、安全帽或聽力保護裝置等防護設備，可以減少人身傷害的風險。
- c)請避免意外啟動工具。在連接電池、提起或攜帶工具之前，請確保開關處於關閉狀態。當攜帶電動工具時，若手指放在開關上，或開啟開關後接通電動工具的電源，可能會導致事故發生。
- d)在啟動電動工具之前，請先移除任何定位鍵或扳手。如果扳手或定位鍵遺留在電動工具的旋轉部位，可能會導致人身傷害。
- e)請避免伸手去拿取工具。請隨時保持適當的立足點和平衡。以確保在意外情況下能有效地控制電動工具。
- f)請穿著適當的衣服，避免穿著寬鬆的衣物或佩戴飾品。請把頭髮、衣服和手套遠離活動零件。寬鬆的衣服、飾品或長髮可能會被捲入活動零件，造成危險。
- g)若有連接除塵及集塵設施的裝置，請確保這些裝置已妥善連接並正確使用。使用粉塵收集裝置能減少與粉塵有關的危險。
- h)請勿因頻繁使用工具而自認熟練導致疏忽工具安全原則。即使是一個粗心的瞬間也可能造成嚴重傷害。請隨時保持警覺，嚴格遵守安全規定。
- i)使用電動工具時，請務必配戴護目鏡，以防眼睛受到傷害。護目鏡需符合美國 ANSI Z87.1 標準、歐洲 EN 166 標準或 澳洲／紐西蘭 AS/NZS 1336 標準。若 於澳洲／紐西蘭地區，法定需配戴面罩 以保護臉部。



一般電動工具安全警告-電動工具使用及保養

- a)請適當使用電動工具，不要誤用。請確保您使用的電動工具適用於您正在處理的對象。正確使用電動工具可以使其發揮最佳功效，并且能更安全地完成工作。
- b)若開關不能開啟及關閉，請不要使用該電動工具。任何不能用開關控制的電動工具皆很危險，必須進行維修。
- c)在進行任何調整、更換配件或存放電動工具之前，請將插頭從電源上拔下及/或將電池組從電動工具上拔下。此預防性的安全措施能減少意外啟動電動工具的風險。
- d)請將閒置的電動工具存放在兒童接觸不到的地方，請勿讓不熟悉電動工具或本說明的人操作電動工具。電動工具在未經訓練的使用人員手中頗為危險。
- e)請注意保養電動工具。在使用前，請檢查活動零件是否有錯位或打結、零件是否有斷裂，以及

- e) 任何可能影響電動工具操作的狀況。如果發現損壞，請在使用前修復電動工具。維護不當的電動工具常常是事故的原因之一。
- f) 請務必保持切割工具銳利並清潔。若保養得當，切割工具的邊緣會更鋒利，不易打結且更容易控制。
- g) 請按照本說明使用電動工具、配件、鑽頭等，並同時考慮到工作條件以及要進行的工作。若將電動工具用於與其設計目的不同的操作中，可能會導致危險情況。
- h) 請保持握柄和抓握表面乾燥、清潔、無油、無脂。手柄與握把表面油滑無法安全操作電動工具。

一般電動工具安全警告-電池工具的使用和保養

- a) 請務必只使用製造商指定的充電器進行充電。不要混用僅適用於不同電池組規格的充電器，否則可能會增加火災風險。
- b) 請使用所特別指定的電池組來啟動電動工具。使用其他未指定的電池組可能會對使用人員造成傷害並有引發火災的風險。
- c) 當電池組未使用時，請將其儲存在遠離其他金屬物體，如迴紋針、硬幣、鑰匙、釘子、螺絲或其他小型金屬物體的地方。這些物品可能會意外連通電池終端而造成短路，進而導致火災或燒傷。
- d) 在錯誤使用的情況下，電池中的液體可能會噴出，請避免接觸。若接觸到液體，應用水沖洗。若液體接觸到眼睛，應立即就醫。電池中噴出的液體可能會引起皮膚刺激或燒傷。
- e) 請勿使用已損壞或改裝的電池組或工具。損壞或改裝過的電池組可能會產生不正常的情況，最終有造成火災、爆炸或受傷的風險。
- f) 請勿將電池組或工具暴露在火中或過高溫度下。避免可能會導致電池損壞或爆炸。
- g) 請遵循所有充電說明，僅在指定的溫度範圍內為電池組或工具充電。不當充電或在規定範圍外的溫度下充電，可能會損壞電池並增加火災風險。

一般電動工具安全警告-檢修

- a) 請尋求合格的維修人員進行檢修，並僅使用與原配零件完全相同的替換零件。這樣可以確保您的電動工具得以安全維護。
- b) 切勿自行檢修損壞的電池組。電池組檢修只能由製造商或已授權的維修人員進行。

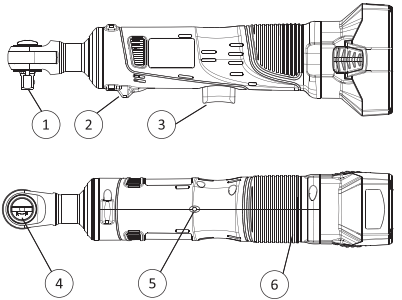
電動棘輪扳手之特別安全規則

請使用常識並在使用工具時保持謹慎。請了解您無法預見可能導致危險的每一種情況。如果不理解這些操作說明或此工作超出能力範圍，請停止使用本工具並聯繫服務中心或受過培訓的專業人員以取得更多資訊或訓練。

規格

型號	RW103K	RW103LK
方形驅動頭	3/8" (9.53mm)	3/8" (9.53mm)

功能描述



1	驅動頭
2	照明燈
3	扳機
4	正反轉開關閥
5	指示燈
6	握柄

裝配

▲ 警告：只能使用該電池指定之充電器進行充電。關於具體的充電說明，請閱讀充電器及電池附加的操作手冊。

- 移除/放入電池
若要移除電池，請按解除鈕並將電池組由工具上拉開。
若要放入電池，請將電池組滑入工具主體。請確保電池組已滑至定位並確實扣上。

▲ 警告：在更換或移除配件之前，請一定要取下電池組。

▲ 警告：請只使用專門為本工具推薦的配件。其他配件可能造成危險。

安裝和拆卸附件

這些工具僅適用於為棘輪扳手設計的附件（衝擊套筒）。其他套筒可能會碎裂或折斷，從而造成人員受傷

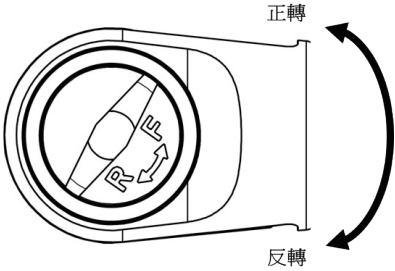
- a) 僅使用合適的驅動頭。
- b) 要安裝套筒或其他附件，請將附件與驅動頭對齊並將其固定至工具上。
- c) 要卸下附件，請將附件從驅動頭上拉下。

操作

▲警告：為減少嚴重人身傷害的風險，在進行任何調整或拆除/安裝配件或附件之前，請關閉設備並取出電池組。意外啟動可能造成人身傷害。

正反轉開關

使用前請檢查旋轉方向。



啟動、停止和控制速度

本工具可以在從0到全速的任何速度下操作。

- 若要**啟動**本工具，按壓扳機即可。
註：扣動扳機便能打開 LED 燈。
註：當達到最大扭矩時，棘輪扳手將自動關閉。
- 若要**改變**運轉速度，增加或減少施加於扳機的壓力。扳機按壓的越深，速度便越快。
- 若要**停止**工具，放開扳機。

電池規格及安全

EB14020-A1	
額定電壓	14.4V
額定容量	2Ah
電池類型	鋰電池
尺寸	長 x 寬 x 高 89x59x105(mm)

- 請勿將電池扔進火中，也請勿加熱電池。
- 請勿拆解或改裝電池組。
- 請勿將電池放在高溫處 (60°C 或以上)
- 防止電池進水或受潮。
- 請勿對電池施加強烈的衝擊，也請勿使電池墜地。
- 請勿將導線直接焊接於電池體上。
- 請勿加熱或焊接電池終端。
- 請勿用某種金屬短接電池的「+」及「-」終端。
- 請勿於超出交貨規格上描述之條件下進行充電。
- 請勿對電池進行反向充電或反向連接。
- 充電時，請使用專用充電器(EC1412-A1)。
- 請定期檢查電池容量，當電池的電壓低於終端電壓，可能導致其容量下降，且無法恢復。
- 若電池存放超過三個月，應再次檢查電池的剩餘容量，並將電池充電。
備註：請參考技術資料表中的電池規格。


充電器規格及安全

電池充電器規格	
充電器	EC1412-A1
電池模式	EB14020-A1
輸出電壓	16.6V
保護等級	電氣保護等級II
交流電供電電壓	100VAC~240VAC
電源頻率	50Hz~60Hz
操作溫度	0°C 至 45°C
存放溫度	-20°C 至 70°C

充電狀態指示器			
	狀態	紅色LED	綠色LED
1	待機狀態	關	閃爍 (0.5秒亮，0.5秒滅)
2	安裝電池組以及充電	開	關
3	CV恆壓充電模式	關	閃爍 (0.1秒亮，0.1秒滅)
4	CC恆流充電模式	開	關
5	充電完成	關	開
6	溫度錯誤保護	紅色 LED閃爍	
7	異常保護	紅色及綠色LED燈同時常亮	

電池及充電器安全

- 保持工作區域整潔及光線充足。雜亂或黑暗的區域易導致事故發生。
- 請勿在有爆炸可能性的環境中運作充電器，例如於有易燃液體、氣體或粉塵的環境中操作。充電器會產生火花，可能會點燃灰塵或煙霧。
- 電源線的插頭必須與插座相配。以任何方式改裝插頭皆不被允許。未經改裝的插頭與相配的插座能減少觸電的風險。
- 作業時避免身體接觸接地金屬的表面，如鐵管、散熱器、鍋爐、冰箱。若使用人員的身體接地，則觸電的風險會增加。
- 請勿以不正確的方式使用電源線。不要使用電線來移動、拉動充電器，或拔掉充電器的插頭。請確保電線遠離熱源、油、尖銳的邊緣或移動的零件。損壞或糾結的電線會增加觸電的風險。
- 請務必在乾燥處使用電池充電器。若電氣設備進水，會增加觸電的風險。
- 充電器僅能為經批准與本充電器一起使用的專用電池充電。
- 若充電器的外殼或電源線有缺陷，請不要使用該充電器。
- 請將閒置的充電器放置在兒童無法觸及的地方。不要讓不熟悉充電器或本說明的人操作充電器。充電器在未經過訓練的使用人員手中是相當危險的。
- 請小心保養充電器。請檢查以確保沒有任何部分破裂或損壞，導致充電器無法正常運作的狀況。若有損壞，請於使用前維修完成。
- 請遵照本說明及本特定型號的規定使用相應的充電器和電池。如果將充電器用於與其目的不同的應用中，可能會導致危險情況。
- 請只使用製造商指定的充電器進行充電。若將適用於一種電池組的充電器與另一種電池組一起使用，可能有產生火災的風險。
- 請務必注意在不使用時，將電池和充電器置於遠離迴紋針、硬幣、鑰匙、釘子、螺絲或其他小型金屬物體的安全位置，以避免這些物體意外觸及電池端子或充電器接觸點而導致短路。
- 請避免電池終端或充電接觸點發生短路，因為這可能導致人身傷害 (例如燒傷) 或火災。
- 若電池因錯誤使用而發生洩漏，可能會噴出液體，請避免接觸。若不小心接觸到液體，請用清水沖洗。若液體接觸到眼睛時，應立即就醫。由於電池洩漏的液體可能會引起皮膚刺激或燒傷。
- 請確保電池與充電器置放於穩固、安全的位置。如果電池或充電器不慎掉落，可能會對自己或他人造成人身傷害的風險。

- 避免觸摸接觸點。
- 已達使用期限的電池必須以安全和適當的方式處理，以避免對環境造成污染。
- 本充電器不適合給生理、感官或精神能力下降、缺乏經驗、知識不足的人(包括兒童)使用，除非有負責其安全的人進行監督或指導如何使用本設備。
- 必須指示兒童不要玩弄該設備。
- 注意確保電池未受機械損傷。
-  請勿將損壞的電池繼續使用或進行充電，例如有裂縫、斷裂、彎曲或接觸點被推入或拉出的電池。
- 若電源線或延長線在運作時被損壞，請不要觸摸它們。將電源線插頭從電源插座上拔下來。損壞的電源線或延長線有觸電的危險。
- 當充電器骯髒或潮溼時，切勿操作之。在不利的條件下，充電器表面附著之溼氣或灰塵，尤其是來自導電材料的灰塵，可能會帶來觸電的風險。因此，骯髒或累積許多灰塵的充電器，應定期送至服務中心進行檢查，特別是其經常用於處理導電材料的情況。

維護

▲警告：為降低受傷風險，在進行任何維護之前，一定要拔掉充電器的插頭，並從充電器或工具中取出電池組。切勿拆解工具、電池組或充電器。所有維修皆要聯繫經銷商。

保養工具

- 請實行定期維護計畫，使工具、電池組、充電器皆處於良好狀態。
- 請檢查工具是否有問題，如過度的噪音、活動零件是否錯位或打結、零件是否斷裂，或任何其他可能影響工具操作的狀況。如有問題，送回經銷商進行維修。
- 若在電池組充滿電的情況下，工具仍不能啟動或以全功率運作，請清潔電池組上的接觸點。
- 若工具仍然不能正常運作，請將工具、充電器和電池組送至維修機構進行維修。

▲警告：為減少人身傷害與損害的風險，切勿將工具、電池組或充電器浸泡在液體中，或讓液體在其內部流動。

清潔

- 請清潔通風口的灰塵和碎屑。
- 請保持握柄清潔、乾燥，且無油、無脂。
- 請只使用溫和的肥皂和濕布進行清潔，因為某些清潔劑與溶劑對塑膠及其他絕緣零件是有害的。其中包括汽油、松節油、香蕉水、油漆稀釋劑、含氯清潔溶劑、氨、含氨的家用清潔劑。
- 切勿在工具周圍使用易燃或可燃的溶劑。

維修

如需維修，請將工具、電池組、充電器送回最近的經銷商。

保護狀態顯示

當發生保護時，工具的指示燈會以閃爍方式提示，詳細說明如下表所示：





【備註】以間隔1.5秒，閃爍頻率0.25秒方式閃爍。

故障特徵	發生異常	故障排除
連續閃爍1次。	■ 電池電壓保護。	■ 移開工件，重新安裝電池，然後按壓扳機。 ■ 更換充滿電的電池，然後按壓扳機。 ■ 如果問題仍然存在，請聯繫服務人員。
連續閃爍2次。	■ 工具電池溫度保護。 ■ 工具馬達溫度保護。 ■ 工具控制板溫度保護。	■ 移開工件，重新安裝電池，然後按壓扳機。 ■ 卸下電池，等待溫度降低並重新安裝電池。 ■ 如果問題仍然存在，請聯繫服務人員。
連續閃爍3次。	■ 工具電流過載。	■ 移開工件，重新安裝電池，然後按壓扳機。 ■ 如果問題仍然存在，請聯繫服務人員。
該工具無法工作而電池狀態沒有閃爍。	■ 工具馬達控制異常。	■ 移開工件，重新安裝電池，然後按壓扳機。 ■ 如果問題仍然存在，請聯繫服務人員。

若發生上述情況以外之故障情形，請停止使用本工具，並聯絡當地經銷商進行維修。
若出現除上述表格描述狀況以外之情形，請將工具寄回工具製造商/經銷商

電話:+886-4-2359-8877
地址:臺中市西屯區工業區36路24號

Explanation of symbols

Wear eye protectors	Warning	Read instruction before use	Wear hearing protectors
			
Direct current	Rated Revolutions per Minute (RPM)	Volts	
D.C.	n XXXX min ⁻¹	V	

Noise – RW103K | RW103LK

The typical A-weighted noise level determined according to EN62841-2-2:
 Sound pressure level (LpA):79.7dB(A) | 83.3dB(A)
 Sound power level (LWA):90.7dB(A) | 94.3dB(A)
 Uncertainty (K):3dB(A) | 3dB(A)

Mode No	RW103K	RW103LK
Dimension (L) with battery	304mm	393mm
Weight with battery	1110g	1300g
No Load RPM n0	500rpm	500rpm
Torque Range	45ft-lb	45ft-lb

NOTE : The declared noise emission value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

NOTE : The declared noise emission value(s) may also be used in a preliminary assessment of exposure.

▲ WARNING : Wear ear protection

▲ **WARNING** : The noise emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

▲ **WARNING** : Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Vibration – RW103K | RW103LK

The vibration total value determined according to EN62841-2-2:
 Vibration emission (ah) : 3.19 m/ S2 | 2.46 m/ S2
 Uncertainty (K) : 1.50 m/ S2 | 1.50 m/ S2

NOTE : The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

NOTE : The declared vibration total value(s) may also be used in a preliminary assessment of exposure.

▲ **WARNING** : The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

▲ **WARNING** : Be sure to identify safety measure to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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General power tool safety Warning

▲ WARNING Read all safety warnings, instructions, illustrations and specifications. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.**

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring or its own cord. Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

General Power Tool Safety Warnings -Work area safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

General Power Tool Safety Warnings

-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) **Do not 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 for 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 a cord suitable for outdoor use reduces the risk of electric shock.

f) **If operating a power tool in a damp location is unavoidable, use a residual current device (GFCI) protected supply.** Use of an GFCI reduces the risk of electric shock.

General Power Tool Safety Warnings- Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a 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 personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off- position before connecting to battery, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key 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 jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.
- i) **Always wear protective goggles to protect your eyes from injury when using power tools. The goggles must comply with ANSI Z87.1 in the USA, EN 166 in Europe, or AS/NZS 1336 in Australia/New Zealand. In Australia/New Zealand, it is legally required to wear a face shield to protect your face, too.**



General Power Tool Safety Warnings- 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 the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) **Store idle power tools out of the 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.
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- 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 tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

General Power Tool Safety Warnings-Battery tool use and care

- a) **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b) **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- c) **When battery pack is not in use, keep it**

away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

d) **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

e) **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.

f) **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.

g) **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

General Power Tool Safety Warnings-Service

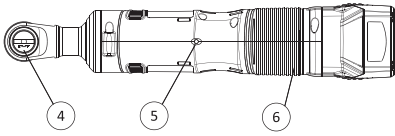
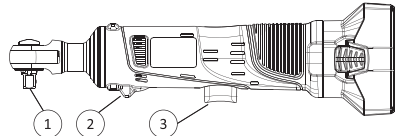
- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
- b) **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

Specific safety rules for Ratchet wrenches

- **Always use common sense and be cautious when using tools.** It is not possible to anticipate every situation that could result in a dangerous outcome. Do not use this tool if you do not understand these operating instructions or you feel the work is beyond your capability; contact authorized service providers or a trained professional for additional information or training.

Function Description

Model No	RW103K	RW103LK
Square drive anvil	3/8" (9.53mm)	3/8" (9.53mm)



1	Square drive anvil
2	LED Light
3	Trigger
4	Forward/Reverse toggle
5	Indicator Light
6	Handle

ASSEMBLY

▲ WARNING : To reduce the risk of serious personal injury, turn unit off and remove the battery pack before making any adjustments or removing / installing attachments or accessories. An accidental start-up can cause injury

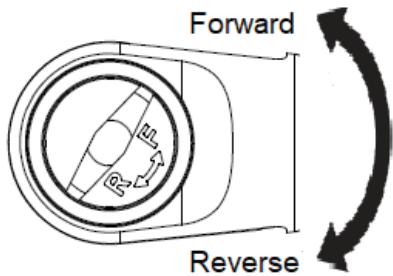
- **▲ Recharge only with the charger specified for the battery. For specific charging instructions, read the operator's manual supplied with your charger and battery.**
- **Removing/Inserting the Battery**
To remove the battery, push in the release buttons and pull the battery pack away from the tool.
To insert the battery, slide the pack into the body of the tool. Make sure it latches securely into place.
- **▲ Always remove battery pack before changing or removing accessories.**
- **Only use accessories specifically recommended for this tool. Others may be hazardous.**
- **Attaching and Removing Accessories**
These tools are intended only for use with accessories designed for Ratchet (Impact Socket). Other sockets could shatter or break, causing injury.
 - a) Use only appropriate Square Drive Sockets.
 - b) To attach a socket or other accessory, align the accessory with the drive anvil and push it firmly onto the tool.
 - c) To remove the accessory, pull the accessory off the drive anvil.

OPERATION

▲ **WARNING** : To reduce the risk of serious personal injury, turn unit off and remove the battery pack before making any adjustments or removing / installing attachments or accessories.

An accidental start-up can cause injury.

Using the Forward/Reverse Lever/ Toggle
Please check the direction of rotation before use.



Starting, Stopping and Controlling Speed

These tools may be operated at any speed from 0 to full speed.

- To **start** the tool, pull the trigger.
NOTE: An LED is turned on when the trigger is pulled.
NOTE: Ratchet will automatically shut off when maximum torque is reached.
- To **vary** the driving speed, increase or decrease pressure on the trigger. The further the trigger is pulled, the greater the speed.
- To **stop** the tool, release the trigger.

BATTERY SPECIFICATION & SAFETY

EB14020-A1	
Rated Voltage	14.4V
Rated Capacity	2Ah
Cell type	Li-ion
Dimension	L x W x H 89x59x105(mm)

- Do not throw the battery into fire, nor heat the battery.
- Do not disassemble nor modify the battery Pack.
- Do not leave the battery in a place of high temperature.(60°C or more)
- To prevent the battery from water or moisture.
- Do not add strong shock, nor drop the battery.
- Do not solder lead directly to the battery body.
- Do not heat nor solder the terminals of the battery.
- Do not short “+”and “-”terminal of the battery with a kind of metal.
- Do not charge beyond the condition which described on the delivery specification.
- Do not reverse-charge or reverse-connect the battery.
- When recharging, please use a special charger (EC1412-A1).
- Please regularly check the battery capacity. When the voltage of the battery is lower than the terminal voltage, its capacity may drop and cannot be recovered.
- If the battery is stored over 3 months, it should be checked again about the remaining capacity and charge the battery.
Remarks: Please refer to the technical data sheet for the battery specifications.

CHARGER SPECIFICATION & SAFETY

Battery charger specification :


Battery Charger Specification	
Charger	EC1412-A1
Battery mode	EB14020-A1
Output voltage	12.45V for 10.8V Battery pack
	16.6V for EB14020-A1
	20.75V for 18V Battery pack
Protection class	Electrical protection class II
AC supply voltage	100VAC~240VAC
Mains frequency	50Hz~60Hz
Operating Temperature	0°C to 45°C
Storage Temperature	-20°C to 70°C

State of Charge indicator			
	State	Red LED	Green LED
1	Idle-Input Power Available	OFF	flashes (0.5sec ON,0.5sec OFF)
2	Battery Pack Install And Charging	ON	OFF
3	CV Constant voltage charging mode	OFF	flashes (0.1sec ON,0.1sec OFF)
4	CC Constant current charging mode	ON	OFF
5	Charging complete	OFF	ON
6	Temperature protection	Red LED flashes	
7	Abnormal Protection	Red & Green LED all on	

Battery charger safety

- **Keep work area clean and well lit.**
Cluttered and dark areas invite accidents.
- **Do not operate the appliance in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
Chargers can cause sparks which may ignite dust or fumes.
- **Keep children and other persons away from the area while the charger is in use.**
- **The supply cord plug must match the outlet. Modification of the plug in any way is not permissible.** Unmodified plugs and corresponding power outlets reduce the risk of electric shock.
- **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.
- **Do not abuse the supply cord. Never use the supply cord to carry, pull or unplug the appliance. Keep the cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **Only use the battery charger in areas which are dry.** Water entering an electric appliance increases the risk of electric shock.
- **Use the charger only to charge the batteries approved for use with this charger.**
- **Do not use a charger if its casing or electric supply cord is defective.**
- **Store chargers out of reach of children when not in use. Do not allow persons unfamiliar with the appliance or these instructions to operate it.** Chargers are dangerous in the hands of untrained users.
- **Maintain the appliance carefully. Check to ensure that no parts are broken or damaged in such a way that the appliance can no longer function correctly. If damaged, have the appliance repaired before use.**

- **Use chargers and the corresponding batteries in accordance with these instructions and as is specified for this particular model.** Use of chargers for applications different from those intended could result in hazardous situations.
- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **When not in use, keep the battery and the charger away from paper clips, coins, keys, nails, screws or other small metal objects that could cause a short circuit at the battery terminals or the charging contacts.** A short circuit at the battery terminals or charging contacts could result in personal injury (burns) or fire.
- **Under abusive conditions, liquid may be ejected from the battery, avoid contact with the liquid. If contact accidentally occurs, flush with water. If the liquid comes into contact with the eyes also consult a doctor.** Liquids ejected from the battery may cause irritation or burns.
- **Take care to ensure that the charger is standing in a steady, secure position.**
A falling battery or charger may present a risk of injury to yourself or others.
- **Avoid touching the contacts.**
- **Batteries that have reached the end of their life must be disposed of safely and correctly to avoid environmental pollution.**
- **This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given super-vision or instruction concerning use of the appliance by a person responsible for their safety.**
- **Children must be instructed not to play with the appliance.**
- **Take care to ensure that the batteries suffer no mechanical damage**
- **Do not charge or continue to use damaged batteries (e.g. batteries with cracks, broken parts, bent or pushed-in and/or pulled-out contacts).**

-  **Do not touch the supply cord or extension cord if they are damaged while working. Disconnect the supply cord plug from the power outlet.** Damaged supply cords or extension cords present a risk of electric shock.
- **Never operate the appliance when it is dirty or wet. Under unfavorable conditions, dampness or dust adhering to the surface of the appliance, especially dust from conductive materials, may present a risk of electric shock. Dirty or dusty appliances should thus be checked at a service center at regular intervals, especially if used frequently for working on conductive materials.**

Maintenance

▲ WARNING: To reduce the risk of injury, always unplug the charger and remove the battery pack from the charger or tool before performing any maintenance. Never disassemble the tool, battery pack or charger. Contact a Service facility for ALL repairs.

Maintaining Tool

- **Keep your tool, battery pack and charger in good repair by adopting a regular maintenance program.** Inspect your tool for issues such as undue noise, misalignment or binding of moving parts, breakage of parts, or any other condition that may affect the tool operation. Return the tool, battery pack, and charger to a Service for dealers.
- **If the tool does not start or operate at full power with a fully charged battery pack, clean the contacts on the battery pack. If the tool still does not work properly return the tool, charger and battery pack, to a Service for dealers.**

▲ WARNING: To reduce the risk of personal injury and damage, never immerse your tool, battery pack or charger in liquid or allow a liquid to flow inside them.

Cleaning

- **Clean dust and debris from vents. Keep handles clean, dry and free of oil or grease.**
- **Use only mild soap and a damp cloth to clean, since certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia.**
- **Never use flammable or combustible solvents around tools.**

Repairs

For repairs, return the tool, battery pack and charger to the nearest service center.

Troubleshooting

When protection occurs, Indicator Light of the tool will flash to prompt, and the details are shown in the table below

【 Note 】 Flashing at intervals of 1.5 seconds and at a flashing frequency of 0.25 seconds

Symptom	Occurred abnormal	Trouble shooting
Continuously blinks once.	<ul style="list-style-type: none">■ Battery voltage protection.	<ul style="list-style-type: none">■ Leave workpiece, reinsert the battery, and press the trigger.■ Replace a fully charged battery, and press the trigger.■ Contact Service if the problem persists.
Continuously blinks 2 times.	<ul style="list-style-type: none">■ Tool battery temperature protection.■ Tool motor temperature protection.■ Tool control board temperature protection.	<ul style="list-style-type: none">■ Leave workpiece, replace a fully charged battery, and press the trigger.■ Remove battery, wait temperature recover and reinsert battery.■ Contact Service if the problem persists.
Continuously blinks 3 times.	<ul style="list-style-type: none">■ Tool over current.	<ul style="list-style-type: none">■ Leave workpiece, reinsert the battery, and press the trigger.■ Contact Service if the problem persists.
The tool doesn't work and the battery status not displayed blinks.	<ul style="list-style-type: none">■ Tool motor abnormal.	<ul style="list-style-type: none">■ Leave workpiece, reinsert the battery, and press the trigger.■ Contact Service if the problem persists.
For failure other than above situation, please stop using the tool and contact your local dealer for service.		

Please send the tool back to the tool manufacturer/distributor (address: No. 24, 36th Rd., Taichung Ind. Park, Taichung, 407 Taiwan, R.O.C.) if failure other than those as tabulated above occurs.

Tel:+886-4-2359-8877

Address:No. 24, 36th Road, Taichung Industrial Park
Taichung, Taiwan, R.O.C.