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RB66
Battery Blind Rivet Tool
Installation Manual



BRUSHLESS TECHNOLOGY




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SAFETY INSTRUCTIONS/WARNINGS

To reduce the risk of personal injury to yourself and/or others, or property damage, please be sure to follow the safety instructions below.

Description of the warnings:

-  **Danger** - A cause of potential danger of serious injury/death.
-  **Warning** - A cause of potential danger of serious injury/death.
-  **Caution** - A cause of risk of minor injury or loss of property.


Description of actions to be followed:

-  This is to alert the user to prohibited actions.
-  This is to advise the operating steps that must be followed to correctly use the appliance.

This tool is restricted to setting blind rivets and must not be used for any other purpose, especially any impact use. Only use the tool within the specified setting ranges in the function settings. Oversetting can cause severe damage. (See page 11).

Do not block or insert objects into the motor ventilation on the tool body.

It is recommended that you wear safety glasses, any personal protective equipment and adhere to all relevant safe practice measures when using this tool.

 Please handle with care all of the accessories within the plastic case. The tool and accessories should be kept in the plastic case, stored in a dry place and out of reach of children.

Battery Use

- Please ensure that the battery is charged to 100% on first use. Approximate charging time is about an hour.
- Do not charge damaged, leaking, or wet batteries.
- Batteries must not be put in fire or water at any point.
- Used batteries must be disposed of safely and in compliance with respective governing country regulations.
- Do not charge when the ambient temperature is below 0°C or above 45°C.

Charger Use

- Only the original manufacturer's charger must be used for charging the battery.
- The battery must be charged with a clean, dry, and undamaged charger.
- Ensure there are no metal objects in the charging area to create a possible short circuit.
- This charger must not be used by any person without prior training unless a safety officer is on-site to supervise or instruct them.

Danger

- Do not use near flammable liquids/gases that can cause a risk of explosion.
- Do not use the tool in a damp environment that can cause the risk of electric shock.
- Do not operate the tool aimed at yourself/others.

Warning

- Tools should be placed down safely to prevent any falls that can cause unnecessary damage.
- When installing the battery and after hearing a "click" sound, ensure that the battery is firmly locked in place.
- Before charging, check that the charger and its power supply equipment are in good condition.
- Use a power supply unit that matches the charger.
- Plugs, power leads and chargers should be checked regularly to comply with all safe practice procedures.
- Maintenance personnel must be qualified professionals to carry out any repairs. If in doubt, please return the tool to the authorised distributor for repair.
- When servicing the tool, always ensure the battery is removed.
- Only original spare parts must be used during maintenance.

TOOL MAINTENANCE AND ENVIRONMENTAL COMPLIANCE

! Maintenance

- Regular maintenance prolongs the life of tools with a lithium battery and should be carried out by qualified maintenance personnel or an authorised repair agent.
- To keep the tool in a good working condition, please check common wearing parts (nosepieces etc) on a regular basis.
- In case of damage or possible warranty claim, please contact your authorised distributor.

! Repair

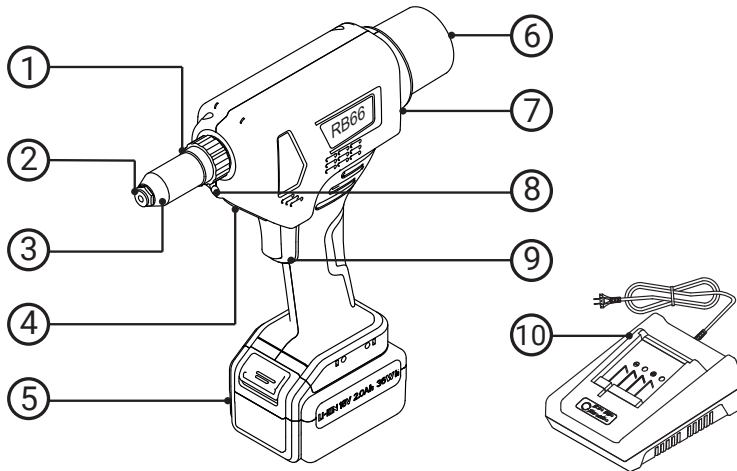
- The 12-month return to base warranty for this tool is from the date of purchase. All wearing parts e.g., nosepieces, jaws, etc. are excluded with the exception of a manufacturing fault/faults.
- All repairs should only be carried out by qualified maintenance personnel or an authorised repair agent. If in doubt, please return the tool to your authorised distributor for repair.

! Environmental Compliance

When replacing the lithium batteries used in this product, be sure to observe that all used batteries must be disposed of safely and in compliance with respective governing country regulations.

- ! Failure to comply with all/any of the warnings and instructions will invalidate the manufacturer's warranty.

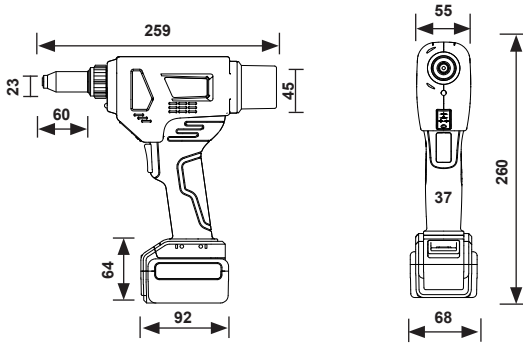
TOOL OVERVIEW



Key Parts

- | | |
|--------------------------|-----------------------|
| 1. Screw Cap | 6. Rear Cover |
| 2. Nosepiece | 7. Body |
| 3. Front Sleeve Assembly | 8. Illuminating Light |
| 4. Control Panel | 9. Trigger |
| 5. Battery | 10. Charger |

Technical Dimensions and Capacity

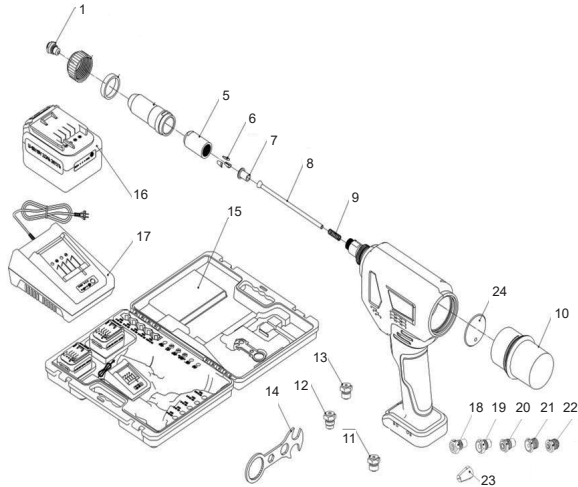


Technical Data	
Capacity	3.2-6.4mm
Material Capabilities	Blind rivet including structural in all materials.
Motor Type	18V Brushless Technology
Vibration Magnitude	1.5m/s ²
Noise Level	< 90dB
Riveting Style	Conventional Pull
Traction Force	18000N
Stroke Length	26.0mm Max
Weight (Net incl. battery)	1.60kg

Capacity Guide					
Diameter Size	Rivet Material				
	Alum	Steel	A2 St/St	A4 St/St	Copper
2.4		X	X	N/A	N/A
3.0					
3.2					
4.0					
4.8					
5.0					N/A
6.0					N/A
6.4					N/A

Tool comes complete with 3.0/3.2, 4.0, 4.8/5.0, 6.0 and 6.4mm nosepieces.

Wearing Parts and Accessories



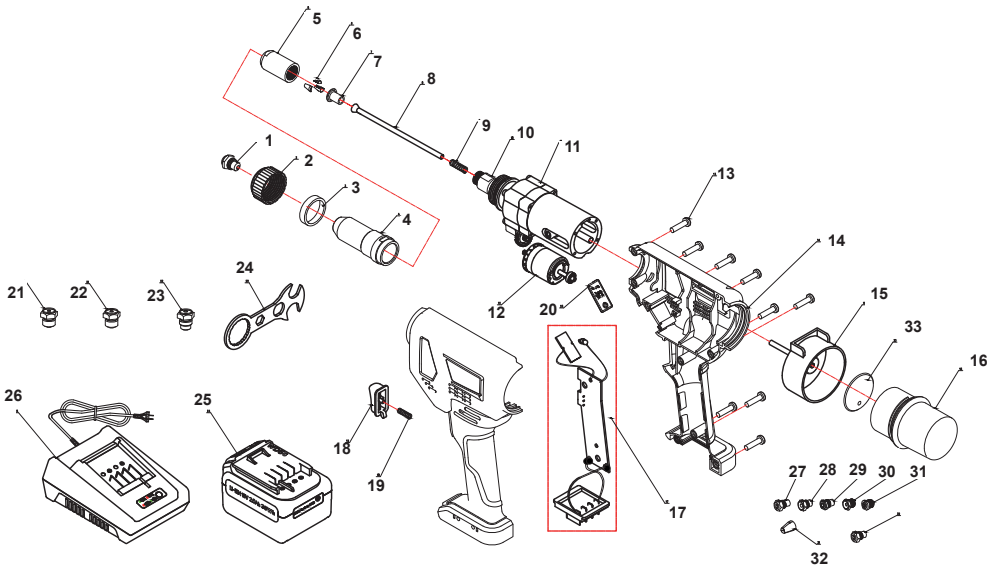
Wearing Parts List

No	Article Number	Description	Qty/Tool
1	TSBL21605H00	6.4mm Nosepiece (F)	1
5	TSBL42102H00	Clamping Sleeve	1
6	TSBZ20320H00	3 Piece Jaw Set (6.4)	1
7	TSBL43000H00	Push Pin	1
8	TSBL43007H00	Mandrel Release Tube	1
9	TSBL42104H00	Push Pin Spring	1
10	TSBL42118H00	Mandrel Collector	1
11	TSBL40105H00	3.2mm Nosepiece (B)	1
12	TSBL40104H00	4.0mm Nosepiece (C)	1
13	TSBL40103H00	4.8/5.0mm Nosepiece (D)	1
14	TSBL42157H00	Spanner	1
15	TSBB01642H00	Storage Case (**)	1
16	TSBZ41718H00	Battery 18 V-2.0A 36W	2
17	TSBZ41734H00	Charger UK ECP-BR-5A	1
18	TSBL21606H00	6.0mm Nosepiece (E)	1
19	TSBL21601H00	6.4mm Nosepiece (K) Structural (*)	1
20	TSBL21637H00	6.4mm Nosepiece (J) M/Bolt (*)	1
21	TSBL21603H00	4.8/5.0mm Nosepiece (H) Structural (*)	1
22	TSBL21638H00	4.8/5.0mm Nosepiece (G) M/Bolt (*)	1
23	TSBZ40102H00	3 Piece Jaw Set (5.0)	1
24	TSBL43006H00	Protector	1

Please Note:-

(*) Spare order parts only. (**) Factory order part on request.

Full Parts List and Exploded Drawing



Turnover for full list

Full Parts List

No	Article Number	Spec.	Qty/Tool	Description
1	TSBL21605H00	6.4	1	6.4mm Nosepiece (F)
2	TSBL23002H00		1	Screw Cover
3	TSBL23003H00		1	Rubber Ring
4	TSBL41901H00		1	Front Sleeve Assembly
5	TSBL42102H00		1	Clamping Sleeve
6	TSBZ20320H00	6.4	1	3 Piece Jaw Set (6.4)
7	TSBL43000H00		1	Push Pin
8	TSBL43007H00		1	Mandrel Release Tube
9	TSBL42104H00		1	Push Pin Spring
10	TSBZ41720H00		1	Spring Sleeve
11	TSBZ41904H00		1	Gear Box
12	TSBZ41922H00		1	Brushless Motor
13	TSBF60577H00		9	Self-Drill Screw
14	TSBZ41709H00		1	Body (Blue)
15	TSBZ41905H00		1	Mandrel Release Tube Assembly
16	TSBL42118H00		1	Mandrel Collector
17	TSBZ41924H00		1	PCB
18	TSBL42133H00		1	Trigger
19	TSBL42162H00		1	Spring For Trigger
20	TSBL42132H00		1	Control Panel
21	TSBL40105H00	3.2	1	3.2mm Nosepiece (B)
22	TSBL40104H00	4.0	1	4.0mm Nosepiece (C)
23	TSBL40103H00	4.8-5.0	1	Nosepiece D (4.8/5.0)
24	TSBL42157H00		1	Spanner
25	TSBZ41718H00	18V-2.0A-36W	2	Battery
26	TSBZ41734H00	18V-2.0A	1	Charger UK ECP-BR-5A
27	TSBL21606H00	6	1	6.0mm Nosepiece (E)
28	TSBL21601H00	6.4	1	6.4mm Nosepiece (K) Structural (*)
29	TSBL21637H00	6.4	1	6.4mm Nosepiece (J) M/Bolt (*)
30	TSBL21603H00	4.8/5.0	1	4.8/5.0mm Nosepiece (H) Structural (*)
31	TSBL21638H00	4.8/5.0	1	4.8/5.0mm Nosepiece (G) M/Bolt (*)
32	TSBZ40102H00	5	1	3 Piece Jaw Set (5.0)
33	TSBL43006H00		1	Protector

Primary Spares

Secondary Spares

Warranty Parts

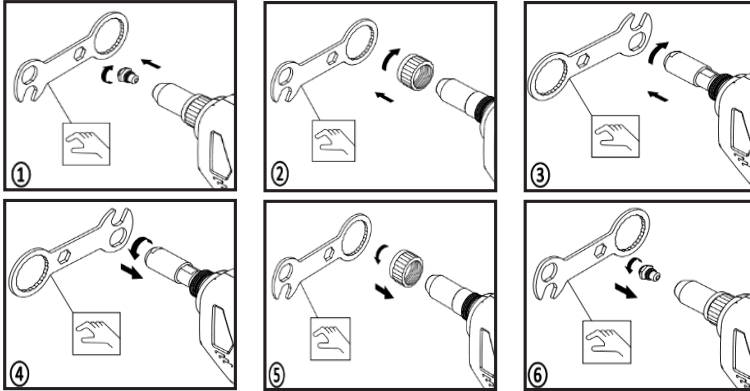
(*) Spare order parts only.


PREPARATION BEFORE USE

⚠ Danger - Please read the instructions carefully before use.

Changing the Nosepiece and Jaws


Ensure the battery is removed from the riveting tool before carrying out any work to prevent any risk of injury. Select the appropriate nosepiece for the diameter of the blind rivet you require. The procedures for removing the nosepiece and jaws are as follows:-



Nosepiece \longleftrightarrow 

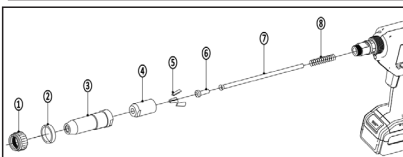
⚠ Warning Please note: nosepieces are under spring-loaded pressure, so be careful when removing them from the front sleeve.

1. Make sure that the battery has been removed from the tool.
2. Loosen the nosepiece with the spanner and remove it from the front sleeve (*Drg.1*)
3. Select the correct nosepiece and tighten with the spanner into the front sleeve (*Drg.6*)

Jaws \longleftrightarrow 

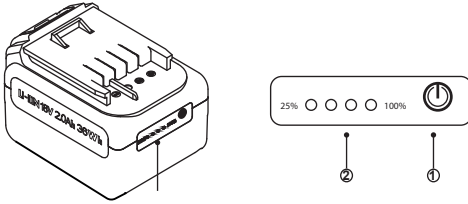
1. Make sure that the battery has been removed from the tool.
2. Loosen the screw cap and then remove the front sleeve (*Drg.2*)
3. Loosen and remove the clamping sleeve from the tool with the jaws inside (*Drg.3*)
4. Replace the 3-piece jaws and tighten the clamping sleeve back onto the tool (*Drg.4*)
5. Replace the front sleeve and tighten the screw cap back on the tool (*Drg.5*)

Visual Inspection of Other Wearing Parts (Other than the Nosepiece and Jaws)



1 - Screw Cap	2 - O Ring	3 - Front Sleeve	4 - Clamping Sleeve
5 - Jaws	6 - Push Pin	7 - Mandrel Release Tube	8 - Push Pin Spring

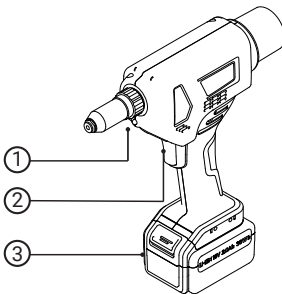
Checking The Battery



- Press button (1) once to check the battery.
- The battery status indicator light (2).
- Four lights (red, amber and two green) - 100% energy. Fully charged.
- Three lights (red, amber and one green) - 75% energy.
- Two lights (red and amber) - 50% energy. *Recharge if you are setting high strength rivets.
- One light (red) - 25% energy. Recharge the battery to full power.

Checking The Tool

- ① White LED light
- ② Trigger
- ③ Battery



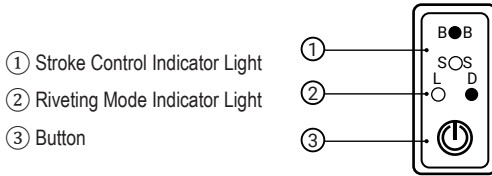
Insert battery ③ in the direction of the arrow and click to lock it into place.

Pull the trigger ② and the white LED light ① will light up indicating the tool has power and is ready for use.

Important Note:- The tool has an energy-saving automatic sleep mode. If the tool has not been operated for over one minute, the white LED light goes off automatically to signal the tool has gone into automatic sleep mode. Pull the trigger again to restore power.

FUNCTION SETTINGS

⚠ Warning Read the following important notes carefully when you are ready to prepare the function settings and especially before you use the tool. The RB66 has two riveting modes and two-stroke settings as standard.



- ① Stroke Control Indicator Light
- ② Riveting Mode Indicator Light
- ③ Button

Riveting Mode Displays

The riveting mode function ② is factory pre-set to D (conventional).
The riveting mode (D) is for the conventional setting.
The riveting mode (L) is for the self-locking setting.

Conventional Riveting Mode (D)

This riveting mode is suitable for nearly all application settings. This riveting mode is when the rivet mandrel is inserted into the tools nosepiece and the rivet is then placed into the workpiece or, the rivet has already been placed into the workpiece and the rivet mandrel inserted into the tools nosepiece, for the operator to pull the trigger to complete the riveting process.

Self-locking Riveting Mode (L)

This riveting mode is for difficult applications where the tool can hold the rivet in place and free from falling from the nosepiece. This is achieved by inserting the rivet mandrel into the nosepiece of the tool and then short pressing the trigger to activate the jaws to lock onto the mandrel. The rivet can then be placed into the workpiece at any angle without fear of the rivet falling out, for the operator to then pull the trigger and complete the riveting process.

Stroke Setting Displays

The stroke setting ① is factory pre-set to B (26.0mm).
The setting B is 26.0mm stroke length.
The setting S is 20.0mm stroke length.

Please set the stroke according to the specifications and the strength of the blind rivet. Before setting the stroke, check the technical characteristics of the blind rivet and its application range.

Setting the Stroke

The stroke setting is factory set to indicator B. To change to setting S, simply short press button ③ and the indicator light lights up in green. To revert to setting B simply repeat the process.

⚠ Warning To avoid excessive stress/damage to the tool, it is strongly recommended to set the stroke setting to S when riveting small diameter blind rivets.

Setting the Riveting Mode

Important Note:- Before switching from the factory set riveting mode of D, please check the specifications, strength and technical characteristics of the blind rivet and its designed application of use.

To switch from the factory setting of conventional riveting mode (D) press and hold button ③ for 1.5 seconds. The indicator light will switch to self-locking riveting mode (L) and light up in green. To revert to conventional riveting mode (D) just repeat the process.

TOOL OPERATION

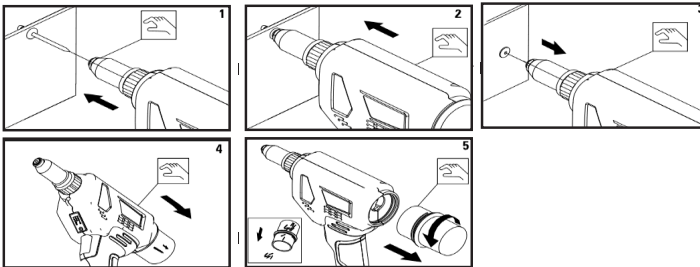
Checks and Pre-Installation

Please ensure the battery is 100% charged before use.

Check the correct stroke and riveting mode settings are selected. Due to both batch variation and different types of specification of blind rivets, installation performance can vary greatly. Therefore, we highly recommend that a pre-installation (sample setting) is performed before any continual use. The use of JRP branded rivets is recommended for optimum performance. Check there is no damage to the nosepiece and it is clean of any foreign bodies before use.

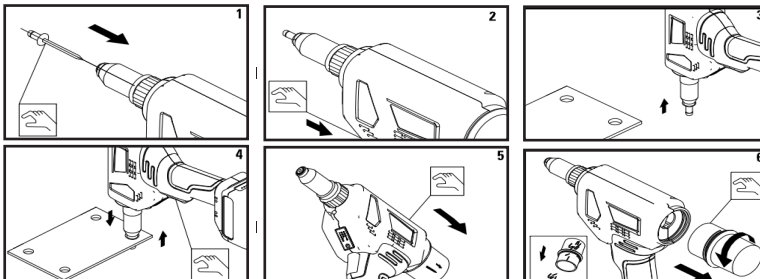
Riveting in Conventional Mode (D)

1. Insert the rivet mandrel into the tools nosepiece or the rivet body into the workpiece. (*Drgs.1 and 2*)
2. Ensure the rivet head is flush to the workpiece and you are not bending the mandrel in any way. Press the trigger to complete the riveting process. (*Drg.3*)
3. After riveting, tilt the tool backwards to ensure the spent mandrel is caught and retained in the mandrel collector and avoid jamming the tool internally. (*Drg.4*)
4. Remember to periodically remove the mandrel collector and ensure the spent mandrels are disposed of safely and in compliance with respective governing country regulations. (*Drg.5*)



Riveting in Self-Locking Mode (L)

1. Insert the rivet mandrel into the nosepiece of the tool. (*Drg.1*)
2. Ensure the rivet head is flush to the nosepiece and you are not bending the mandrel in any way. Short press the trigger to lock the jaws. (*Drg.2*)
3. Angle the tool, insert the rivet into the workpiece and press the trigger to complete the riveting process. (*Drgs.3 and 4*)
4. After riveting, tilt the tool backwards to ensure the spent mandrel is caught and retained in the mandrel collector and avoid jamming the tool internally. (*Drg.5*)
5. Remember to periodically remove the mandrel collector and ensure the spent mandrels are disposed of safely and in compliance with respective governing country regulations. (*Drg.6*)

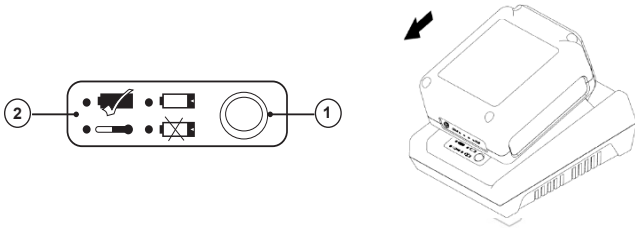


CHARGER AND BATTERIES

Charger Technical Capabilities

Output	18V-2.0A
Input	100-240V – 50-60HZ/1A
Net Weight	0.27Kg
Gross Weight	0.31Kg

When the charger is connected to the power supply and working normally, the indicator light ① is always green. The battery is loaded in the direction of the arrow.



② Symbols ① Charging indicator light

Operation	Charging indicator light ①	Signs ② Meaning	Measures
When the battery is loaded into the charger	Red light on	The battery is in good condition. Charge time is about 30 minutes.	In good condition.
	Green light on	If the light stays green there is either a battery malfunction or it is already fully charged.	Stop charging immediately, remove the battery. Check the charge level and replace it with a new one if required.
When the battery is being charged	Green light on	The battery is fully charged. Please remove the battery.	In good condition.
	Red light on	If the red light has stayed on for a significant period of time, check the heat of the charger and battery charge indicator. The charger has either stopped working or there is a fault with the battery.	Stop charging immediately, remove the battery. Check the charge level and replace it with a new one if required.

Battery Technical Capabilities

- Before use, ensure the battery is charged and refer to section **Checking the Battery** for guidance.
- The battery has excessive discharge protection (ECP) and can be re-charged up to one thousand times.
- Always allow the battery to cool after use before placing it into the charger.
- When the batteries working time is significantly reduced during normal use, it indicates that the battery life has reached its maximum and should be replaced.

FREQUENTLY ASKED QUESTIONS

Q: Is the battery okay if it is not used for a long time?


A: As with all batteries they will deteriorate without use, so please re-charge every six months.

Q: Does charging after each use affect the battery life?

A: To extend the lifespan of the battery it is recommended to use up to full charge, or to at least below 25% (one red light), before fully re-charging.

Q: If the tool is used continuously in the conventional or fully automatic riveting mode for an extended period, will the heat in the tool housing affect normal use?

A: Although heat is generated by the high-speed motor and transferred to the housing, normal use is unaffected. The user is advised to wear suitable protective gloves in line with current health and safety guidelines.

 Warning Oversetting of the rivet can cause both damage to the rivet setting and the tool itself. Consistent oversetting will also lead to possible damage to the motor and gear assembly and will invalidate the warranty.

TROUBLESHOOTING

	Malfunctions	Probable Causes	Corrective Action
When charging	Battery loaded into charger, the green light is on, but it is not fully charged.	Battery malfunction or damage, error, unable to charge.	Stop charging immediately, remove the battery, and replace it with a new one.
	Red light is on for a significant period.	The charger has either stopped working or there is a fault with the battery.	Cut off the power immediately, remove the battery, and check the charger.
Operation	All indicators on the function display panel are flashing.	Low power alarm.	Cut off the power immediately, remove the battery, and check the charger. Stop using the tool immediately and remove the battery. Please send to qualified professional maintenance personnel for inspection and repair. If in doubt please return the tool to the authorised dealer for repair.
	The indicator light flashes once and shuts down after 15 seconds.	Motor short circuit alarm.	
	The indicator light flashes 3 times and shuts down after 15 seconds.	Control panel overheating abnormal alarm.	
	The indicator light flashes 4 times and shuts down after 15 seconds.	Motor blocking alarm.	
	The indicator light flashes 5 times and shuts down after 15 seconds.	Power on failure or abnormal high current flow.	
	Rivet failed riveting.	Battery damaged.	Battery needs to be replaced.
		Loose jaw piece assembly.	Fastening jaw assembly.
		Battery power depletion, check power display panel.	Charge (see P10 Battery Check) or replace new battery as required.
	Cannot pull rivet, rivet cannot break, no mandrel goes to the collector.	The jaw piece is worn, nosepiece has blockage, the push pin spring or the nosepiece hole is deformed.	Replace the jaws, tighten the nosepiece, remove blockages, and replace the push pin spring or nosepiece.
		Incorrect working tension selection.	Set working tension correctly (see P11).
		The broken rivet is stuck in the jaws or is blocked in the push pin or mandrel release tube.	Remove the broken rivet from the jaws, the push pin or mandrel release tube. Replace parts if they cannot be cleared without damage.
		Mandrel collector full.	Empty the mandrels from the collector.
		Incorrect nosepiece or it is worn.	Select the right nosepiece, or replace a new one.
	Loose rivets after rivet installation.	Incorrect stroke set.	Set the operating stroke correctly (see P11).
		Rivet selection does not match panel thickness or hole size.	Check and select the correct rivets and grip range.

⚠ Warning When any of the above methods have failed to troubleshoot, the tool must be repaired by qualified maintenance personnel or alternatively send the tool back to the authorised distributor for repair. Failure to maintain or follow maintenance advice can invalidate the tools warranty.

WARRANTY

The 12-month return to base warranty for this tool is from the date of purchase.
Proof of purchase will be required for any warranty claims.

All wearing parts are not covered by the warranty.

Damage caused by normal wear and tear, overloading, improper use or by unqualified personnel is not covered by the warranty.

In the case of improper use, the manufacturers are not liable for storage, accident, misuse, loss, and failure due to non-conformity of the equipment. The maximum liability for damages is limited to the value of the product itself and does not cover the relevant parts.

If you have any queries, questions, or warranty claims, please contact your local distributor in the first instance.

CE/UKCA DECLARATION OF CONFORMITY

We hereby declare that this battery tool is compliant with the following standards, directives and guidance when used in accordance with the operating instructions.

Harmonised Standards:

EN55014-1:2006 + A1:2009 + A2:2011
EN55014-2:2015
EN60335-1:2012 + A13:2017
EN61000-3-2:2014
EN61000-3-3:2013 + A1:2019
EN62841-1:2015 + AC:2015

European Directives:

2014/30/EU
2014/35/EU
2006/42/EC
2011/65/EU

UK Statutory Guidance and Regulations:

- The Supply of Machinery (Safety) Regulations 2008 ^(SG)
- The Electromagnetic Compatibility Regulations 2016 ^(R)
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 ^(R)

View the Declaration of Performance here



Hexstone Ltd.
14/02/2023