

# TOPTUL<sup>®</sup>

THE MARK OF PROFESSIONAL TOOLS



**Professional Grade Power Tools**

**Brushless Cordless Rivet Nut Tool**

▶ Part No. KPNA0510

## Operational Manual



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THE MARK OF PROFESSIONAL TOOLS

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KP-0510



**WARNING:** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and / or serious injury. Save all warning and instructions for future reference.

## Safety Instructions

### ➤ Safe Work Area

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

### ➤ Electric Safety

1. 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.
2. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranged and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
4. 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.
5. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor could reduces the risk electric shock.

### ➤ Personal Safety

1. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use to 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.
2. 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.
3. Prevent unintentional starting. Ensure the switch is in the off position before connectin to power source and / or battery pack, 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.

4. Remove any adjusting key or wrench before turning the power tools on. A wrench or key left attached part of the power tool may result in personal injury.
5. Always when using the tool, adopt a firm footing and / or position and grip the tool sufficiently only to overcome any reaction forces that may result from the tool doing work. Do not over grip.
6. Be aware of entanglement of the moving parts of the tool with clothing, neckties, long hair, jewelry, watches and etc. This could cause the body or parts of the body to be drawn towards and in contact with the moving parts of the tool and may be very dangerous.
7. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Used of these devices can reduce dust-related hazards.

### ➤ Power Tool Use and Care

1. 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.
2. 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.
3. Disconnect the plug from the power source before marking and adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tools accidentally.
4. 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 tool are dangerous in the hands of untrained users.
5. Maintain power tools. Check for misalignment 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 caused by poorly maintained power tools.
6. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
7. Use the power tool, accessories and tool bits etc., 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.



## Service

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.

## Specific Warnings

Hold 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 make exposed metal parts of the power tool "live" and could give the operator an electric shock.

## Important Safety Instructions for Charger & Battery

1. Before using the battery charger, read all instructions and cautionary markings on (1) Battery charger (2) Battery (3) Product using battery
2. 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.
3. Use power tool only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
4. When battery pack is not in use, keep it away from other metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
5. 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.
6. Do not disassemble battery charger; take it to a qualified service or required. Incorrect reassembly may result in a risk of electric shock or fire.
7. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
8. To reduce risk of electric shock, unplug charger from receptacle before attempting any maintenance or cleaning. Removing the battery will not reduce this risk.
9. A small leakage of liquid from the battery pack may occur under extreme usage or temperature. This does not necessarily indicate a failure of the battery pack.

**However, if the outer seal is broken and this leakage comes into contact with your skin:**

- Wash the affected area quickly with soap and water.
- Neutralize the liquid with a mild acid such as lemon juice or vinegar.

## If the leakage gets in your eyes:

- Flush your eyes with clean water for a minimum of 10 minutes and seek immediate medical attention. Inform the medical staff that the liquid is a 25 - 35% solution of potassium hydroxide.
10. Do not store or carry a spare battery pack in a pocket or toolbox or any other place where it may come into contact with metal objects. The battery pack may be short circuited causing damage to the battery pack, burns or a fire. If storing or disposing the battery pack, cover the terminals with a heavy insulation tape to ensure short circuit cannot occur. Batteries, when stored for a long period of time, will discharge.
  11. Only charge your battery pack indoors as the charge is designed for indoor use only.
  12. **DANGER:** If the battery pack is cracked or damaged in any other way, do not insert it in the charging base. There is a danger of electric shock or electrocution.
  13. **WARNING:** Do not allow any liquid to come into contact with the charger. There is a danger of electric shock.
  14. Do not place any object on the top of the charger as it could cause overheating. Do not place the charger near any heat source.
  15. Pull on the charger to disconnection it from the power source. Do not pull on the lead.
  16. Never recharge a fully charged battery. Overcharging shortens the battery service life.
  17. Make sure that the charger lead is positioned where it will not be stepped on, tripped over or otherwise subjected to damage or stress.
  18. Do not use an extension cord unless it is absolutely necessary. The use of an improper extension cord could cause the risk of fire, electric shock or electrocution.
  19. Do not use the charger if it has been subjected to a heavy knock, dropped or otherwise damaged in any way. Take the charger to an authorized service centre for a check or repair.
  20. Do not charge at voltage higher than indicated as charger specification; otherwise, the charger will burn up.
  21. Do not disassembly the charger. Take it to an authorized service centre when service or repair is required. Incorrect reassembly may result in the result in the risk of fire, electrocution.
  22. To reduce the risk of an electric shock, unplug the charger from the power supply before attempting to clean it. Removing the battery pack alone does not reduce the risk.



## 23. Suitable charging environment:

- Charging temperature: 0°C ~ 40°C (32°F ~ 104°F)
- Discharging temperature: 0°C ~ 40°C (32°F ~ 104°F)
- Storage temperature: -20°C ~ 60°C (-4°F ~ 140°F)

Please wait one hour first before charging, if the battery pack is stored under 0°C (32°F).

## 24. Storage instructions of battery:

- If battery pack is at a low temperature (under -20°C / -4°F) its chemical elements will be in solid state and resistance in charging will become too high for the battery to be charged.
- If battery pack is at a high temperature (above 60°C / 140°F), its chemical elements will be in a vapor state that can make the battery ineffective in a short time.

## 25. The lithium battery safe protection function:

- The "low-voltage protect function" will start when the lithium battery is consumption. Please charge the lithium battery to prevent battery from damage.
- After using, the temperature of the lithium battery will keep rising. When the temperature of the lithium battery exceeds can allow the scope of application, battery "temperature protects function" will start. The lithium battery will be prevent overheated dangerous, please wait till the lithium battery cool down.
- When the battery is working over load or block working, the machine will have greatly current. The lithium battery pack will start "electric current overload protection function" to protect the lithium battery and battery P.C board. In this situation, the machine will stop few seconds till protecting function relieve automatically. If the machine could not use after few minutes, the lithium battery might be in "low-voltage protecting function" or "temperature protecting function". Please follow above mentioned ways to relieve.

### Additional Safety Warnings of Tool & Charger

1. 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 supervision or instruction concerning use of the appliance by a person responsible for their safety.
2. Children should be supervised to ensure that they do not play with the appliance.
3. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

## Charger Indicator & Battery Installation

### ▶ The Indicators of the Charger

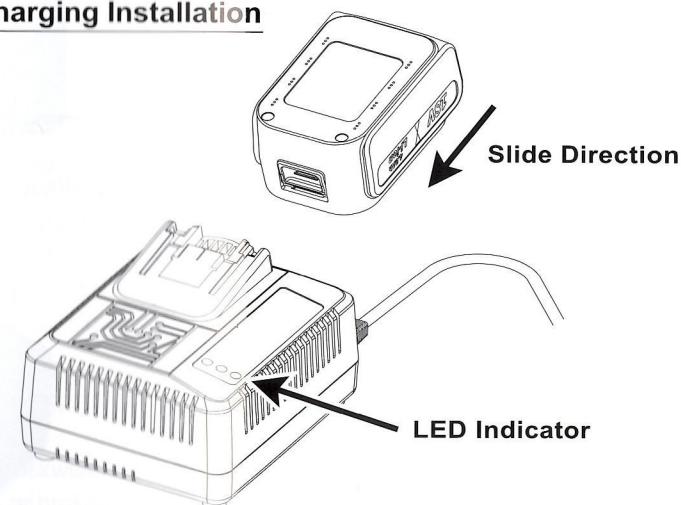
RED		Power On	The charger is power on
YELLOW		Battery at High Temperature	The battery pack is overheated. Please wait until the battery pack cools down, or take it out from the charger temporarily to be cooled off
		Battery at Low Temperature	The battery packs temperature is too low. Please wait until the packs temperature rises to 0°C (32°F)
		Incorrect Battery Type or Battery NG	The battery pack is unspecified or is failed. Please replace the battery pack with a new one
GREEN		Fast Charging	The battery is under quick charging
		Fully Charging	The charging is completed. Please take the battery pack out from the charger, and then unplug the charger from the power supply outlet

#### WARNING:

If any of the following occurs, unplug the charger from the power supply outlet and replace the battery pack

- None of the indicators lights on illuminate at all.
- The yellow indicator light glitters constantly.
- Only the red indicator light is on even if the battery pack.

### Battery Pack Charging Installation





## Content



No.	Description	Q'ty
A	Brushless Cordless Rivet Nut Tool	1
B	Li-ion Battery	2
C	Charger	1
D	Parts Kit: Nozzles - M5, M6, M8, M10 Screw Mandrels - M5, M6, M8, M10 Screw Mandrel Adapter - M5, M6, M8, M10 Screw Mandrel Fixed Seat - M5, M6, M8, M10	1
E	Rivet Nut Head / Nozzle Wrench	1

### CAUTION:

Always use authorized replacement parts and accessories. Never use replacement parts or accessories which are not intended for use with tool. The use of any other attachment or accessory can be dangerous and could cause injury or mechanical damage.

## Explanation of General View



## Specification

### 18V Brushless Cordless Rivet Nut Tool

<b>Rivet Nut</b>	M5, M6, M8, M10
<b>Free Speed</b>	0 - 240 / 370 / 720 / 1120 RPM
<b>Overall Length</b>	9-21/32" / 245 mm
<b>Net Weight</b>	3.96 lbs / 1.8 kgs (with battery)

### Charger & Battery Pack

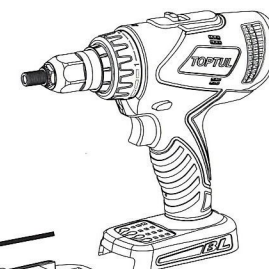
	US-EU-UK-AU/NZ	JP
<b>Charger Power Supply</b>	AC 100-240V 50/60 Hz	
<b>Charger Power Consumption</b>	DC 21V 3.0A	DC 21V 2.3A
<b>Charging Time</b>	1 Hour	1.5 Hour
<b>Battery Voltage</b>	18V	
<b>Capacity Cell Type</b>	4.0 Ah Li-ion	3.0 Ah Li-ion

## Operating Instructions

### Step 1: Battery Pack Installation

- Slide in battery pack.
- Double check battery pack was well installed, heard "click" sound and there no gap (see the arrow area) between the tool and pack housing.

Remove



Install

### Step 2: Pre-check the Nozzle before Operation

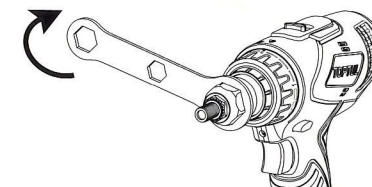
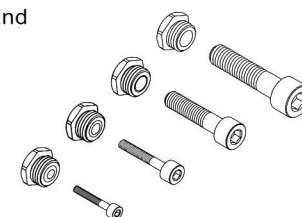
Make sure the nozzle and screw mandrel fit the nut rivet size. If no, please change the right nozzle and screw mandrel.

Nozzle Size	Screw Mandrel	Material
M5	M5 x L30	Metal
M6	M6 x L35	Metal
M8	M8 x L35	Metal
M10	M10 x L45	Metal

- To use hex wrench to loose the nut rivet head in a clockwise direction.

### IMPORTANT:

If open in an anticlockwise, the rivet nut head might be damage or broken.





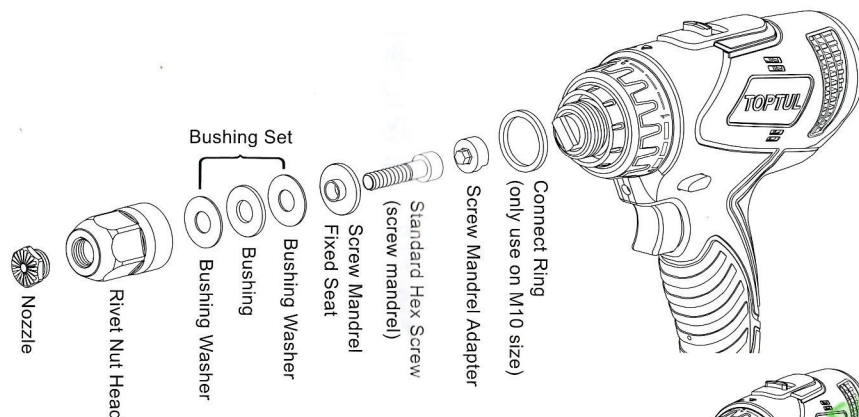
2. Exchange the correct screw mandrel, please put the following parts in order.

(1) **M5 / M6 / M8 (Option) Screw Mandrel:**

Screw Mandrel Adapter → mandrel passed through the fixer  
 → Bushing Set (Bushing Washer + Bushing + Bushing Washer)

(2) **M10 Screw Mandrel:**

Connect Ring → Screw Mandrel Adapter → mandrel passed through the fixer  
 → Bushing Set (Bushing Washer + Bushing + Bushing Washer)  
 • Connect Ring: Only use it when assemble the M10 screw mandrel.



3. Tight the nozzle in a clockwise direction.

4. Tight the rivet nut head on the tool in an anticlockwise direction.

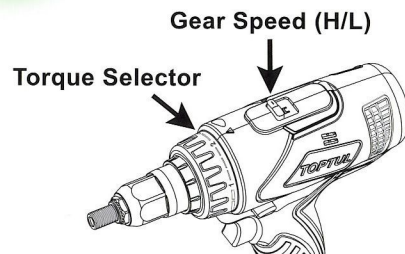
5. Press and hold the trigger to check if the screw mandrel was operate correctly.

**IMPORTANT:**

- Please use the nozzle wrench to change or tight the nozzle before operation.
- Make sure to tight nozzle and rivet nut head.

**Step 3: Operation Procedure**

1. Make sure all of parts are assembly well (battery pack, screw mandrel, nozzle).
2. Press and hold the trigger to check if the screw mandrel was operate correctly (screw mandrel is rotating).
3. Please select the torque (torque selector) and gear speed (High / Low) of tool per rivet nut material and size (refer to before table).



**Torque Selector Contrast Table**

	M5 (3/16")	M6 (1/4")	M8 (5/16")	M10 (3/8")
<b>Gear Speed (L)</b>	1	2	4	5
<b>Gear Speed (H)</b>	1	2	—	—

**IMPORTANT:**

- Above table is the recommended value of metal materials as only for reference. Please test the try run before use.
- The higher the number the greater torque.
- Please turn back to torque 2 after finished operating to extend the internal spring life.
- Gear Speed (high speed) cannot use for M8, M10 nut.

4. Please select auto mode (auto reversing mandrel).

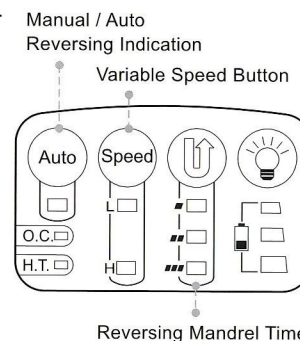
**IMPORTANT:**

Select LED light if need.

5. Please select speed (High / Low) of control board.

6. Please select the reversing mandrel time.

7. Power will shut off after eight minutes of unused tool.



**Maintenance**

**CAUTION:**

Always be sure that the tool is triggered off and the battery is removed before attempting to perform inspection or maintenance.

**1. Jammed Nut Elimination**

Use the pliers to hold the nut, and please press the forward / reverse lever to "L", and press the trigger to the end.

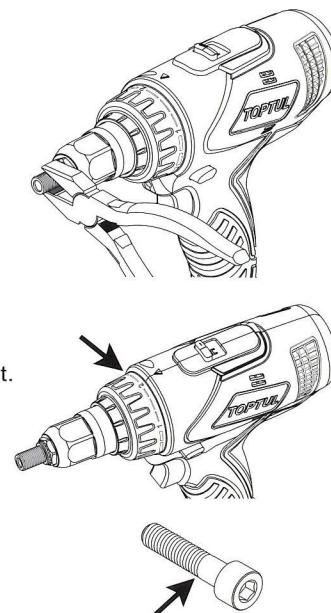
Press and hold the trigger to release the jammed nut.

**2. Maintenance of Rivet Nut Gun**

Turn back to torque 2 after finished operating to extend the internal spring life.

**3. Replacement of Jaw and Nozzle**

Check the screw mandrel regularly, and please replace the worn screw mandrel.





## General Troubleshooting Guide

Do not operate the tool without the rivet, will cause tool failure. Please test with the washer. Stop to operate when jammed rivet happen.

1. There is no working when press the trigger.

Check the battery pack if well installed or out of power.

2. The nut cannot extrusion and deformed.

Step 1: Check the battery if well installed or out of power.

Step 2: Select the gear speed to "L" (low speed). (Fig.A)

Step 3: Check the torque if correctly. If torque is not enough, select bigger torque. (Fig.A)  
Or, the nut is exceeding the tool capacity.

3. Jammed nut happen.

Step 1: Use the pliers to hold the nut, and please press the forward / reverse lever to "L", and press the trigger to the end. (Fig.B)

Step 2: Press and hold the trigger to release the jammed nut.

Step 3: Check the screw mandrel, and please replace the screw mandrel if was worn.

4. The screw mandrel cannot rotate or sway.

Step 1: Check the screw mandrel size if correctly.

Step 2: Check the nozzle if tight in a clockwise direction.

5. Press the trigger, cannot tight the nut to the end or not smooth.

Press the forward / reverse lever to "L" to move backward few threads, and press the forward / reverse lever to "R" and press the trigger to the end. Or, screw mandrel was worn. Replace to a new screw mandrel.

6. The nut is stripped.

Clean up the nozzle if there has iron chippings.

7. To make sure all of threads are fasten with correct way and tight after change the nozzle or disassembly the rivet head or change the jaws.

8. Please clean up the nozzle and oil the screw mandrel and bushing when you use the tool first time daily.

9. Please contact with the store if cannot solve the problems.

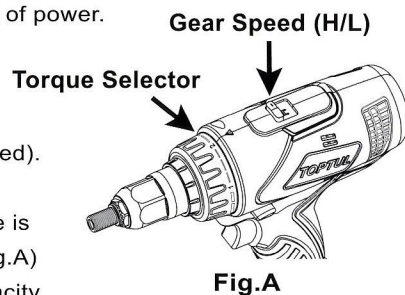


Fig.A

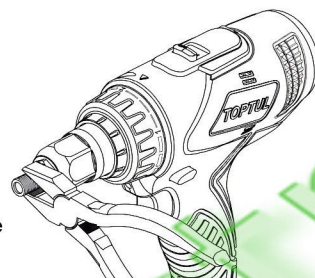
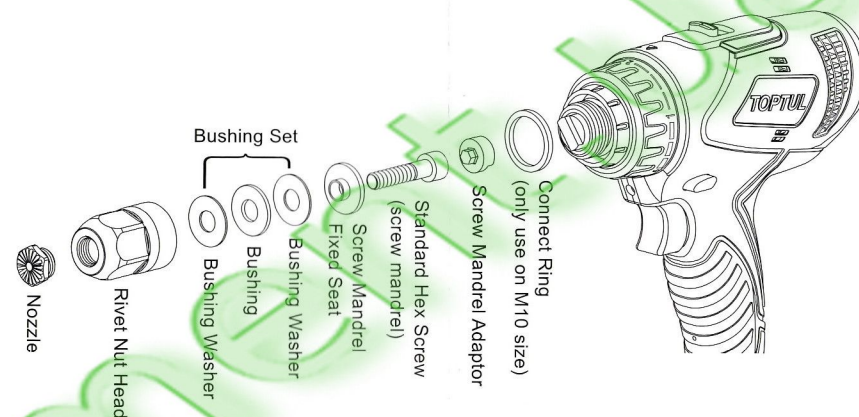


Fig.B

## Standard Hex Screw Replace Steps



### 1. M5 / M6 / M8 Standard Hex Screw Replace Steps:

Screw Mandrel Adapter → Standard Hex Screw → Screw Mandrel Fixed Seat  
→ Bushing Set (Bushing Washer + Bushing + Bushing Washer) → fasten the Nozzle  
→ fasten the Rivet Nut Head to the tool

### 2. M10 Standard Hex Screw Replace Steps:

Connect Ring → Screw Mandrel Adapter → Standard Hex Screw → Screw Mandrel Fixed Seat → Bushing Set (Bushing Washer + Bushing + Bushing Washer)  
→ fasten the Nozzle → fasten the Rivet Nut Head to the tool

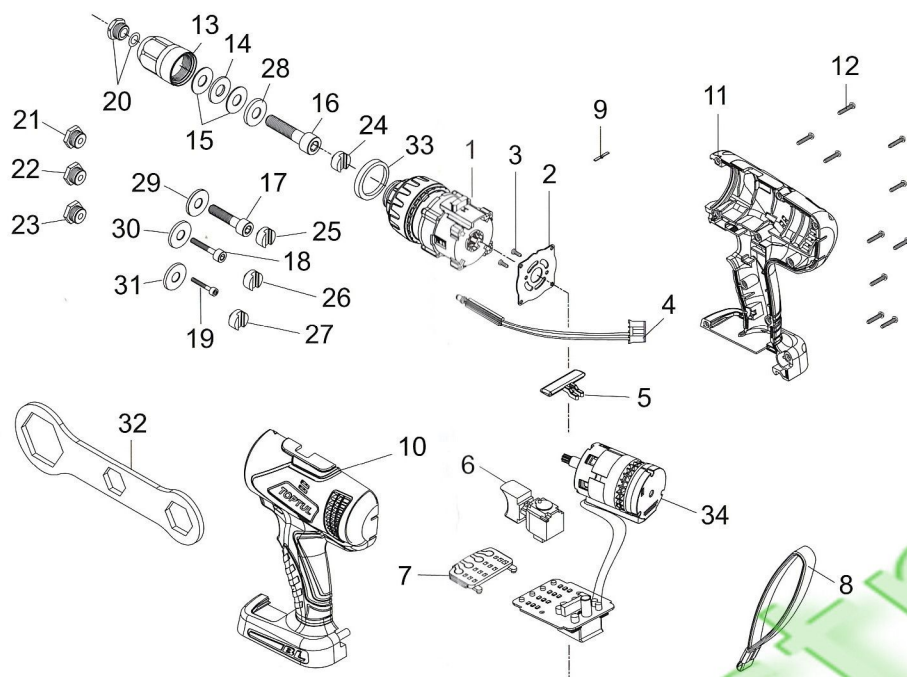
### IMPORTANT:

- Please note the Screw Mandrel Adapter and Screw Mandrel Fixed Seat need to purchase by the store. Standard Hex Screw could purchase by hardware store.
- The following is recommending screw mandrel length.

Nozzle Size	Screw Mandrel	Mandrel Adapter	Mandrel Fixed Seat
M5	M5 x L30	M5	M5
M6	M6 x L35	M6	M6
M8	M8 x L35	M8	M8
M10	M10 x L45	M10	M10



## Brushless Cordless Rivet Nut Tool


 ITEM NO. **KPNA0510**

Index No.	Parts No.	Description	Q'TY	Index No.	Parts No.	Description	Q'TY
1	KAPD0010	Gear Box Set	1	18	KAPD0180	M6 Screw Mandrel	1
2	KAPD0020	Washer	1	19	KAPD0190	M5 Screw Mandrel	1
3	KAPD0030	Cross Screw	2	20	KAPD0200	M10 Nozzle	1
4	KAPA0090	LED	1	21	KAPD0210	M8 Nozzle	1
5	KAPD0050	Forward / Reverse Lever	1	22	KAPD0220	M6 Nozzle	1
6	KAPA0110	Trigger	1	23	KAPD0230	M5 Nozzle	1
7	KAPA0120	Control Board Button	1	24	KAPD0240	M10 Screw Mandrel Adapter	1
8	KAPA0130	Strap	1	25	KAPD0250	M8 Screw Mandrel Adapter	1
9	KAPD0090	Bouncing Chip	1	26	KAPD0260	M6 Screw Mandrel Adapter	1
10	KAPD0100	Housing (Bottom)	1	27	KAPD0270	M5 Screw Mandrel Adapter	1
11	KAPD0110	Housing (Top)	1	28	KAPD0280	M10 Screw Mandrel Fixed Seat	1
12	KAPD0120	Cross Screw	10	29	KAPD0290	M8 Screw Mandrel Fixed Seat	1
13	KAPD0130	Rivet Head Cover	1	30	KAPD0300	M6 Screw Mandrel Fixed Seat	1
14	KAPD0140	Bushing	1	31	KAPD0310	M5 Screw Mandrel Fixed Seat	1
15	KAPD0150	Washer	2	32	KAPD0320	Wrench	1
16	KAPD0160	M10 Screw Mandrel	1	33	KAPD0330	Connecting Ring	1
17	KAPD0170	M8 Screw Mandrel	1	34	KAPD0340	Motor & Control Board Set	1

● Recommended not be replaced and reinstalled individually due to assembly difficulty

2015.12

## EC DECLARATION OF CONFORMITY

WE HEREBY CERTIFY THAT:  
 Brushless Cordless Rivet Nut Tool  
 KPNA0510



AND KEEPS ALL REQUIREMENTS ACCORDING THE FOLLOWING REGULATIONS

Test Standards:

Electromagnetic Compatibility (EMC) Directive 2004/108/EC

Low Voltage Directive 2014/35/EU

Machinery Directive 2006/42/EC

IS IN COMPLIANCE TO THE EUROPEAN COUNCIL DIRECTIVE 2004/108/EC  
 WITHIN CE MARKING REQUIREMENT.

 ITEM NO. **KPNA0510**


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