



Product Pulsa™ 800 Gas Technology Tool

Model Number TRAKFAST800 CABLEMASTER800

Serial Number

Purchased from

Invoice Number _____ Date / /

In addition to other rights and remedies that may be available under law, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for the compensation for any other reasonable foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Ramset™ will repair or replace this product free of charge if it shall be found to be defective under normal use within a period of 12 months for the Pulsa™ 800 Gas Technology tool and 6 months for the battery, charger and power supply from the date of purchase due to faulty materials or workmanship.

Defects which are due to normal wear and tear, overload or misuse are not covered by this warranty.

The above warranty is additional to and not in substitution for any rights of the purchaser arising under the Trade Practices Act 1974 or any relevant legislation for any States and Territories of the Commonwealth of Australia providing that where so permitted by such legislation liability thereunder shall be limited to the replacement or repair of the goods or the cost of replacing or repairing the goods as the case may require. Subject thereto all conditions and warranties which might be implied by law are hereby expressly negated and excluded so far as same may be legally done.

Your Pulsa™ 800 Gas Technology Tool has a warranty against materials or workmanship for a period of 12 months for the Pulsa™ 800 tool and 6 months for the battery, charger and power supply from date of purchase, providing the tool has been operated by a qualified operator strictly in accordance with these instructions and Local or Government regulations, using fuel cells or other consumables designed specifically for use with the Pulsa™ 800 Gas Technology Tool.

For genuine authorised service and repair, telephone 1300 780 063 Australia wide.



Ramset™

Ramset
1 Ramset Drive Chirnside Park,
Victoria 3116 AUSTRALIA
Postal: P.O. Box 192, Croydon, 3136
Tel: + 61 3 9726 6222
Fax: + 61 3 9726 8215
Web: www.ramset.com.au

Ramset (N.Z.) Limited
23-29 Poland Rd
Glenfield, Auckland
NEW ZEALAND
Tel: + 64 9 444 3510
Fax: + 64 9 444 2864
Web: www.ramset.co.nz

IMPORTANT

Before operating any Ramset™ tool, Ramset™ strongly recommends that in addition to reading and understanding this instruction manual all users obtain personal instructions and training from a Ramset™ representative.

Pulsa™ 800 Gas Technology Tool

- ① Fan filter housing
- ② Battery
- ③ L.E.D. Indicator
- ④ Operating trigger
- ⑤ Fuel Cell
- ⑥ Fastener guide
- ⑦ Fuel Cell eject button
- ⑧ Battery and fuel gauge



Pulsa™ 800 Tool Service Log Records cont.

Date	Type of Service	Hours Used	Details of service Show components replaced	Status	Signature

Pulsa™ 800 Tool Service Log Records

Product: **Pulsa™ Technology Tool**

Model Number: **Pulsa™ 800 Tool**

Purchased from:

Serial Number:

ABN:

Invoice Number:

Date:

Purchaser's Name:

Address:

Signature:

ABN:

Comments:

IMPORTANT: READ THIS INSTRUCTION BOOK COMPLETELY BEFORE ATTEMPTING TO USE THIS TOOL

The Pulsa™ 800 Gas Technology Fastening System

Pulsa™ 800 Gas Technology tools have been designed with productivity in mind. The TrakFast™ 800 tool is primarily designed for efficient fixing of light gauge material, such as metal track in the construction of commercial building partitions. The CableMaster™ 800 tool is primarily designed for fast efficient fixing of a variety of clips used for fixing electrical, data and security cabling and conduit; and also used for fixing PEX and other small diameter pipes.

These systems provide a very fast consistent fixing in a variety of material types and strengths.

The Pulsa™ 800 Gas Technology system consists of a tool, fasteners and a fuel cell. The fasteners are generally supplied pre-collated into 10-fastener strips, packed in boxes of 500 fixings with a fuel cell.

This patented technology ensures you can carry out maximum installation in a given period with minimum fatigue to the operator. Pulsa™ Gas Powered Tools are manufactured to the highest standard utilising world best practices.

Important

No one should attempt to operate a Pulsa™ 800 Gas Technology tool before reading this manual.

Do not undertake to use this Gas Technology tool without adequate, competent personal instruction and careful study of this instruction book and any local Government Regulations.

The manufacturer disclaims all responsibility for any incidents which may result from the disregard of these operation procedures and maintenance instructions, or the disregard of any local or statutory authority regulations pertaining to the use of Gas Technology tools.

To promote safe working conditions, the following safety precautions should be observed in the use of Gas Technology Fastening Tools.

Safety Precautions

1. **BEFORE** attempting to use your Ramset™ Pulsa™ 800 Technology tool **be sure you have obtained competent personal instruction** and read and understood all safety rules and instructions in this manual for safe operation.
2. When not in use, the Pulsa™ 800 Gas Technology tool should be placed in its box or case.
3. **ALWAYS** follow the directions for care of the tool contained in this book.
4. **ONLY** use the device for its intended use.
5. **ONLY** use the device on material to be fastened.
6. **NEVER** use the tool **UNLESS** you and any other people in the area are wearing approved eye and hearing protection.
7. **NEVER** let bystanders gather around when you are using a Pulsa™ 800 Gas Technology tool.
8. **NEVER** use a Pulsa™ 800 Gas Technology tool in the presence of any explosive or inflammable gas, dust or vapour, in an atmosphere which is compressed, or in any place where the fuel cell may be unintentionally exploded or be rendered dangerous by the presence of heat.
9. **DO NOT** use the Pulsa™ 800 Gas Technology tool in rainy or excessively humid conditions.
10. **ONLY** use the tool in well-ventilated areas. Store the gas cartridges in a well-ventilated place.
11. **NEVER** load the tool until ready to fasten. The tool should not be loaded until immediately prior to its use. If it has been loaded but not put into immediate operation, it should not be carried around in the loaded condition. Never load the tool at other than the place at which it is to be used, thus minimising risk of unintentional firing.
12. **NEVER** transport the tool with your finger on the trigger.
13. **NEVER** point a loaded or unloaded tool towards any person. **ALWAYS** point the tool downwards and as far as practical away from the operators body.
14. **ALWAYS** assume that the tool is loaded.
15. **NEVER** place your hand over the pin guide of the tool.
16. **NEVER** force the pin guide with your hand.
17. **WARNING: The contents of the fuel cell are flammable.**
18. The fuel cell is under pressure. Protect it from temperatures above 50°C (sunlight).
19. **DO NOT** open, puncture or burn the fuel cell.
20. Keep the fuel cell away from flames, sparks and heat. **DO NOT** spray near flames or incandescent objects.
21. The fuel cell cannot be recharged. **DO NOT** attempt to fill or recycle it.
22. Keep tool, fuel cells and battery away from children.
23. **Fasteners should not be driven into** brick, concrete, or similar substances if;
 - (i) **nearer than 75 mm** to an edge, or
 - (ii) the thickness of which is **less than 20 mm**, or less than three times the shank penetration into the basic material, whichever is the lesser, or
 - (iii) **nearer than 50 mm** to where a former fastener has failed.
24. **NEVER** attempt to fasten into a spalled area in masonry where a previous fastener has failed.
25. Fasteners should not be driven into steel if;
 - (i) The shank diameter of the fastener is less than the thickness of the steel, as holding power maybe reduced
 - (ii) **nearer than 13 mm** to an edge or hole.
26. **NEVER** fasten into plaster or other soft materials **unless** backed up by a material that will prevent the fastener from passing completely through. (Masonry, brick or steel.)
27. **NEVER** fire fasteners into brittle or hard materials such as glazed brick or tile, terracotta, marble, granite, slate, glass or into hard steel. Do not attempt to fasten into high tensile steel, cast iron, heat treated steel or pressurised vessels such as gas bottles, compressed air cylinders etc.

Operating Instructions cont.

6. Firing

Pulsa™ Gas Technology tool can be used in all positions:

Walls



Floor



Ceiling



The Pulsa™ 800 Technology tool can be used on the following base materials:



- Concrete/precaster concrete.



- Rendered hollow block; hollow floor block.



- Solid/rendered brick.



- Steel

- (a) Place the fastener against the base material you want to fasten and apply pressure on the tool towards the surface.
 - the fan is on
 - The green indicator light is flashing
 - The gas is injected into the combustion chamber then mixed with air by the fan
- (b) Pull the trigger
 - the gas / air mixture burns
 - The fan keeps operating for approx 10 seconds
- (c) When the cycle is over, the tool is ready for another sequence. When finished, remove the battery or place it in the standby position



SAFETY WARNING

To avoid overheating, do not place hand over filters during use. This obstructs the filters.



7. Using pre-assembled drive pins and clips (Optional and only where available)

In markets where pre-assembled drive pins and clips are available for use with the Pulsa 800 Gas Technology tool, it will be necessary to bypass the magazine function.

This can be achieved by retracting the magazine slider until it locks into place while also ensuring no **fasteners are in the magazine.**

Operating Instructions

Important

Before using your Pulsa™ 800 Technology tool be sure you have obtained competent personal instruction and read all safety rules and understand all the instructions in this manual for safe operation of the tool. Before handling the tool check that the tool has the battery removed or in the standby position until ready for use.

The Ramset™ Pulsa™ 800 tool is designed for fastening insulation to masonry materials, wood and mild steel.

They should not be used for any other purpose and the user should read and fully understand the Safety Precautions on pages 4 and 5.

1. Preparation

- Put on approved eye and hearing protection.
- Clear people from local area.
- Check the local environment is safe for the use of Pulsa™ 800 Technology tools, ie. free from inflammable gases, explosive materials etc. Refer Safety Precautions on 4 of this manual.
- Check that the material to be fixed into is suitable for use with a Pulsa™ 800 Technology tool. Refer Safety Precautions on page 4 of this manual or contact your Ramset™ representative.

2. Installing the fuel cell

- Remove the protective cap from the top of the fuel cell.
- Insert the fuel cell into the tool until an audible 'click' is heard.



3. Installing the Drive Pins

- Hold the tool so that the magazine is pointed upwards.
- Pull the magazine slider all the way back until it locks into place.
- Insert the Ramset collated drive pins into the magazine.
- Release the magazine slider by pushing the orange button on the magazine slider.



4. Insert the battery all the way into the tool

- The battery and fuel cell LED's should illuminate

5. When fastening clips (Optional)

- Insert the clip over the fastener guide without depressing the fastener guide.

SAFETY WARNING



When loading the fastener guide with clips or assemblies, NEVER depress the fastener guide as this may allow the tool to fire and could cause a severe hand injury.



Safety Precautions cont.

- ALWAYS** position your body comfortably in line with and behind the tool. (see illustrations Fig. 1 ,2 & 3).
- ALWAYS** make certain the tool is at right angles (90°) in both directions to the work surface before firing (Fig. 1 ,2 & 3).
- NEVER** fire tool at an angle to the work surface.
- NEVER** use the tool at or near the extremities of your reach (see illustrations Fig. 4, 5 & 6) as you may overbalance causing injury.
- ALWAYS** wear approved eye and hearing protection when using a Pulsa™ 800 GasTechnology tool (Fig. 7 & 8).
- When servicing, remove the fuel cell, battery, and fasteners from the fastener guide.
- The Ramset Pulsa™ 800 battery charger 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 battery charger by a person responsible for their safety.

- Children should be supervised to ensure that they don't play with the battery charger.
- The Ramset Pulsa™ 800 battery charger is only designed for charging Ramset Pulsa™ 800 3.7V 8Wh lithium-ion batteries. Do not attempt to charge any incompatible batteries or any non-rechargeable batteries.
- If the supply cord is damaged, it must be replaced by Ramset, or similarly qualified persons in order to avoid a hazard.
- The Ramset Pulsa™ 800 charger may be powered using an optional car charger accessory. When powered in this manner the input must only be supplied at SELV (10-16Vdc).

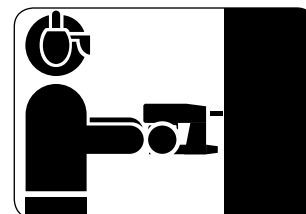


Fig. 1



Fig. 2

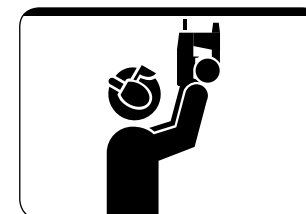


Fig. 3

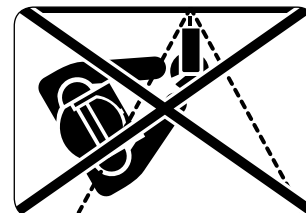


Fig. 4

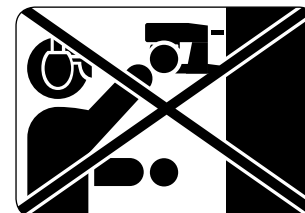


Fig. 5



Fig. 6

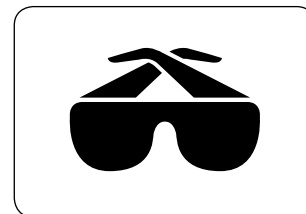


Fig. 7

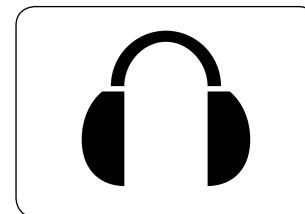


Fig. 8

Ramset™ Operator Training

Ramset™ regards training and education of operators a basic essential for the safe use, operation and application of Ramset™ Fastening Tools. Accordingly, thorough training and instruction is available for all Ramset™ Gas Technology Tool operators. Experience has shown that mishaps and unsatisfactory fixings can be prevented by proper use.

Disclaimer

“This information is given in good faith but without affecting any warranty or condition which is mandatorily implied by legislation applicable hereto. No liability in contract, tort (including negligence) or otherwise shall attach to Ramset™ or its servants or as agents as a result of the giving of such information or the correctness thereof.”

WARNING

If any tool parts do not fit correctly, or if wear or damage is visible, do not use them. Do not, under any circumstances, attempt to grind or file parts. Worn or damaged parts must be replaced. Modification of parts may adversely affect safety features and will void Warranty.

Pulsa™ 800 Tool Kit

Order No.: TRAKFAST800, CABLEMASTER800

As illustrated below the tool kit consists of Pulsa™ 800 Gas Technology tool, complete with instruction manual, 2 battery packs, battery charger, safety glasses and sturdy carrying case. The kit contents may vary to meet local requirements.



Pic. 1

Safety Features

Accidental Firing

The tool is designed to prevent accidental firing. The tool prevents accidental firing in a number of ways. The tool can only be fired when the tool is compressed against the work surface. The tool also utilises a trigger lock which is released once the tool is compressed.

Outer Housing

The outer housing is made using a tough, impact resistant material with low thermal transfer properties. This minimises the risk of damage if the tool is accidentally dropped, and also lowers the tool housing temperature during operation.

Fuel Cell

The Pulsa™ 800 Gas Technology fuel cell is fully contained within the body of the tool. This greatly reduces the risk of possible damage to the fuel cell.

Power Supply

Power supply for the tool can be easily isolated by either placing the battery into the standby position or removing completely.

Servicing



SAFETY WARNING

For operations not included in this manual, consult any authorised Ramset™ Tool Service Centre.

Before performing any servicing ensure that the battery and fuel cell are removed from the tool.

Servicing that can be performed by the user.

- Cleaning of filters.
- Inspection of fuel cell.
- Inspection of battery charger contacts.



Cleaning of filters

Remove the cover, remove the filters and clean with compressed air.

After cleaning, replace the filter and close the cover.

Cleaning of battery contacts

Periodically clean these contacts with a dry cloth.

Quick Change Fastener Guide / Magazine

The Pulsa 800 tool is equipped with a quick change fastener guide / magazine.

This feature allows the operator to quickly change the fastener guide or magazine and allows access to clear the faster guide if required.

The fastener guide and/or magazine can be changed or removed without the use of tools by following the following steps:

Removal

1. **Remove the battery from the tool !**
2. **Remove any fasteners from the magazine and ensure the magazine slide is retracted.**
3. Rotate the magazine retaining switch clockwise and remove the magazine.
4. Pull the fastener guide out of the tool. (If the fastener guide is being changed)

Assembly

1. **Remove the battery from the tool !**
2. Orientate the fastener guide with the cut-out lining up with the magazine direction and the fixing end pointing away from the tool and simply slide the fastener guide into the tool.
3. Ensure the magazine slide is retracted and the magazine does not contain any fasteners.
4. Insert the magazine into the fastener guide and rotate the magazine back towards the magazine retaining switch until it clicks into place.

(This procedure is required when changing between 20 pin and 50 pin magazines and changing between different fastener guides such as the magnetic washer adaptor and standard track or electrical fastener guide.)



Troubleshooting



SAFETY WARNING

If the recommendations do not solve the problem, contact the nearest authorised Ramset™ Tool Service Centre.



Indicator LED

Symptom	LED Indicator Status	Fuel Cell LED's	Battery LED's	Possible Diagnosis / Suggested Actions
The fan starts when the tool is compressed. But the tool does not fire.	Flashing Green	Last LED flashes red	Some green when button is pressed	Insufficient fuel or no fuel cell in the tool. Insert a new fuel cell.
The fan starts when the tool is compressed. But the tool does not fire.	Flashing Green	Some green when button is pressed	Last LED flashes red	Insufficient Battery power. Charge / change the battery.
The fan starts when the tool is compressed. But the tool does not fire.	Flashing Green	Some green when button is pressed	Some green when button is pressed	Insufficient drive pins in magazine. (The tool needs more than 2 pins in the magazine to operate with the slider engaged.) The fuel in the fuel cell has been consumed by another tool. (A tool will only show the correct fuel level if the fuel cell has only been used in that tool.) Insert a new fuel cell.
The tool does not work	Not illuminated	Not illuminated when button is pressed	Not illuminated when button is pressed	Insufficient Battery power. Charge / change the battery. Contact Ramset or your authorised Ramset Tool Service Centre
The tool works slowly and heats up	Flashing Green	Some green when button is pressed	Some green when button is pressed	Check and clean the filter
The fan stops when the trigger is actuated.	-	-	-	Contact Ramset or your authorised Ramset Tool Service Centre
The drive pins are under-driven	-	-	-	Select Maximum Depth of Drive Setting
The drive pins are over-driven	-	-	-	Select Minimum Depth of Drive Setting

Tool Features

Fuel Cell and Battery Gauge

When the battery is inserted into the tool, the battery and fuel cell gauge will indicate the remaining power levels of both the battery and the fuel cell.

These power levels can be checked at any time simply by pressing the Energy button.

Depth of Drive Adjustment

The Depth of Drive switch allows the operator to quickly and easily change the depth of penetration.

On full over-drive setting, the head of the drive pin is set flush with the fixing. On minimum overdrive setting, the head of the drive pin is set approximately 2mm proud of the fixture.



When fixing metal clips and track, this adjustment generally allows for the plastic strip to remain under the head of the drive pin on minimum overdrive setting, and for the plastic strip to be removed from under the head of the drive pin on maximum overdrive setting.

It is recommended that when fixing plastic clips that the minimum overdrive setting is used to avoid damaging the clip.

Power Management

When the tool is stationary for more than a minute, the battery is automatically electrically isolated to prolong battery life.

Power is restored as soon as the tool is moved.

Lithium Battery Technology

The Pulsa™ 800 tools use the latest lithium battery technology to ensure long consistent battery life while allowing fast recharges.

This technology ensures compact low weight batteries with no memory issues.

Quick Change Fastener Guide

The Pulsa™ 800 tools are designed to allow for the fast simple removal and replacement of the fastener guide without the need for any tools.

Tool Maintenance

To maintain the tool in good working condition it is necessary to clean and inspect the tool regularly.

It is recommended that every 25 000 fixings the tool be returned to the manufacturer or an authorised agency for a complete™ overhaul. This is a service which is available at all Ramset™ offices.

Technical Data

Dimensions	CableMaster™	Trakfast™ 800
Height	309 mm	520 mm
Length	396 mm	396 mm
Weight	3.8 kg	3.9 kg
Power	82 J	100 J
Fuel cell capacity (20°C)	750 pins (approx)	600 pins (approx)
Battery capacity (20°C)	3,000 pins (approx)	3,000 pins (approx)
Fastener range	15mm to 40mm	15mm to 40mm
Battery		
Voltage during use	3.7V, 8Wh	3.7V, 8Wh
Order No.	018545	018545
Battery charger		
Order No.	018546	018546

Ramset™ tools and other components of the Ramset™ Fastening System are designed and manufactured as a complete system. They provide the greatest ease, convenience, all year round performance and safety when used together. It is important that you insist on genuine Ramset™ products for utmost satisfaction and to ensure validity of your warranty.

Battery and Fuel Cell Gauge

The combined battery and fuel cell gauge allows the condition of both the fuel cell and the battery to be checked at the same time.

This innovative system greatly reduces the possibility of un-expectedly running out of gas or battery power.

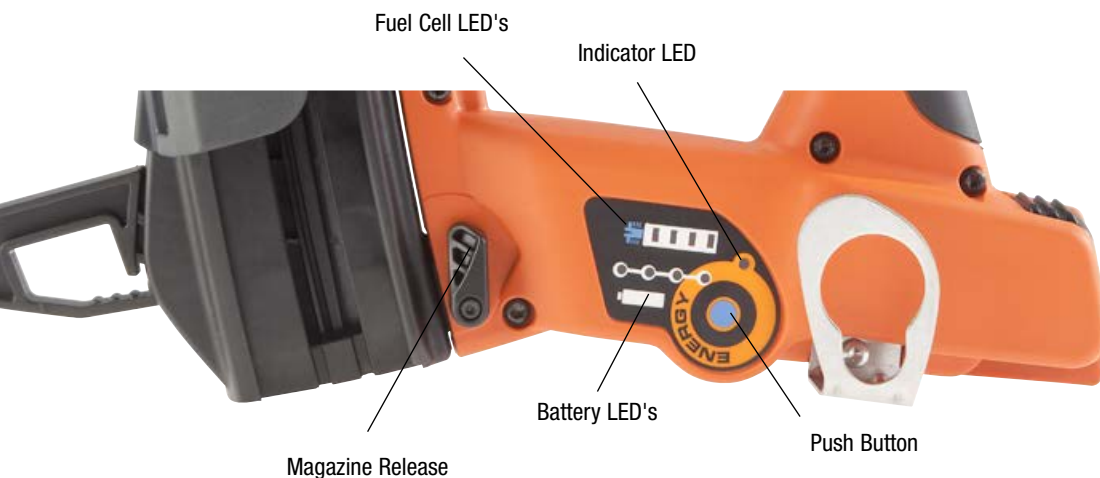
When the battery is first inserted into the tool the gauge will automatically display the battery level and the fuel cell level for a few seconds. If a fuel cell is not present the fuel gauge LED will flash red.

If the battery is in place and a fuel cell is inserted, the battery and fuel gauge will automatically display the levels of both for a few seconds.

If the battery is fully inserted and the tool has automatically cut the power due to inactivity, the battery and fuel cell gauge will automatically operate for a few seconds when the tool is moved or picked up for use.

The battery and fuel cell levels can also be checked at anytime by pressing the “ENERGY” button. (The battery must be fully inserted for this to function).

Note: The fuel cell gauge works by allowing the tool to read a unique RFID (Radio Frequency Identification) tag located in each fuel cell. The tool then records how many fixings are performed with the fuel cell to allow it to indicate an approximate remaining fuel level. This information is recorded in the tool and not on the fuel cell. It is therefore important, where possible, to use a fuel cell in only one tool. Using the same fuel cell in multiple tools will cause an error in the fuel cell gauge reading. The fuel cell gauge can only be used to check fuel cell levels if the fuel cell has only been used in a single tool.



Gas Fuel Cell



SAFETY WARNING

The fuel cell must be used at a temperature between -5°C and 49°C.

At the beginning of each cycle, a dose of gas is injected into the combustion chamber.

For the safe operation of your Ramset™ Pulsa™ 800 gas Technology tool only use Ramset™ fuel cells.

- The fuel cell is supplied with a protective cap which needs to be removed before it is inserted into the tool.
- Where possible, fuel cells should be stored at between 5°C and 25°C.
- The fuel cell contains liquefied hydrocarbon gases, (butane, propane, propylene), and a lubricant to maximise tool durability.
- The fuel cell contents are extremely flammable. • The fuel cell has an internal reservoir and an external housing.
- In the internal reservoir, the fuel is kept under pressure by a propellant.
- When the fuel cell is empty, a small amount of propellant remains in the external chamber.
- Press the “FUEL EJECT” button to remove the fuel cell from the tool. Excessive removal and insertion of the fuel cell will reduce the number of fixings per cell.



Battery



SAFETY WARNING

Remove the battery or place the battery in the standby position when not in use.

Remove the battery completely when servicing or removing the magazine.

Completely removing the battery is the best way to ensure the tool cannot fire

- Batteries are supplied with less than a full charge.
- When charging the battery the indicator lights on the charger indicate the level of charge in the battery.
- When a battery is inserted into the charger, the red LED will illuminate to signify the battery is being charged.
- When a battery is completely discharged it will take approximately 25 minutes for the first green LED to illuminate, at this level of charge the battery will be able to power the Pulsa 800 tool for approximately 500 fixings.
- The second green LED will illuminate when the battery reaches 80% of its capacity (Approximately 45 minutes for a completely discharged battery).
- The third green LED will illuminate when the battery is fully charged. (Approximately 90 minutes for a completely discharged battery).

Batteries can be partially inserted into the tool, “the standby position”

Placing the battery in this position allows for the battery to be electrically isolated from the tool while still being retained with the tool.



SAFETY WARNING

The battery charger is designed for charging Ramset Pulsa™ 800 3.7V 8Wh lithium-ion batteries.

Do not attempt to charge any incompatible or any non-rechargeable batteries.

