



Ramset™

InsulFast™ GT3 Instruction Manual

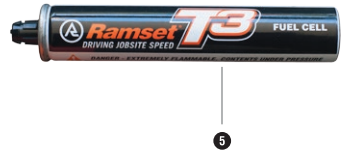


IMPORTANT

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.

InsulFast™ GT3 Pulsar™ 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





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

The Pulsa™ Gas Technology Fastening System

Pulsa™ Gas Powered Tools have been designed with productivity in mind. The InsulFast™ GT3 tool has been designed for fast efficient fixing of a wide variety of insulation to concrete and steel. This system provides very fast consistent fixing in a variety of material types and strengths.

The InsulFast™ GT3 Gas Powered System consists of a tool, fasteners and a fuel cell. The fasteners are supplied boxed along 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™ 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

- BEFORE** attempting to use your Ramset™ Pulsa™ 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.
- When not in use, the Pulsa™ Technology tool should be placed in its box or case.
- ALWAYS** follow the directions for care of the tool contained in this book.
- ONLY** use the device for its intended use.
- ONLY** use the device on material to be fastened.
- NEVER** use the tool **UNLESS** you and any other people in the area are wearing approved eye and hearing protection.
- NEVER** let bystanders gather around when you are using a Pulsa™ Technology tool.
- NEVER** use a Pulsa™ 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.
- DO NOT** use the Pulsa™ Technology tool in rainy or excessively humid conditions.
- ONLY** use the tool in well-ventilated areas. Store the gas cartridges in a well-ventilated place.
- 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.
- NEVER** transport the tool with your finger on the trigger.
- 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.
- ALWAYS** assume that the tool is loaded.
- NEVER** place your hand over the pin guide of the tool.
- NEVER** force the pin guide with your hand.
- WARNING: The contents of the fuel cell are flammable.**
- The fuel cell is under pressure. Protect it from temperatures above 50°C (sunlight).
- DO NOT** open, puncture or burn the fuel cell.
- Keep the fuel cell away from flames, sparks and heat. **DO NOT** spray near flames or incandescent objects.
- The fuel cell cannot be recharged. **DO NOT** attempt to fill or recycle it.
- Keep tool, fuel cells and battery away from children.
- Fasteners should not be driven into** brick, concrete, or similar substances if;
 - nearer than 75 mm** to an edge, or
 - 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
 - nearer than 50 mm** to where a former fastener has failed.
- NEVER** attempt to fasten into a spalled area in masonry where a previous fastener has failed.
- Fasteners should not be driven into steel if;
 - The shank diameter of the fastener is less than the thickness of the steel, as holding power maybe reduced
 - nearer than 13 mm** to an edge or hole.
- 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.)
- 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.



Safety Precautions cont.

- 28. **ALWAYS** position your body comfortably in line with and behind the tool. (see illustrations Fig. 1 ,2 & 3).
- 29. **ALWAYS** make certain the tool is at right angles (90°) in both directions to the work surface before firing (Fig. 1 ,2 & 3).
- 30. **NEVER** fire tool at an angle to the work surface.

- 31. **NEVER** use the tool at or near the extremities of your reach (see illustrations Fig. 4, 5 & 6) as you may overbalance causing injury.
- 32. **ALWAYS** wear approved eye and hearing protection when using a Pulsa™ Technology tool (Fig. 7 & 8).
- 33. When servicing, remove the fuel cell, battery, and fasteners from the fastener guide.



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.

InsulFast™ GT3 Tool Kit

Order No.: T3IF

As illustrated below the tool kit consists of an InsulFast™ GT3 Pulsa™ 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.

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™ Technology tool 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.



Pic. 1



Tool Features

Operating Principle

The push down (cocking) pressure of the Pulsa™ Technology tool is very low (5 kg). Fixing is possible in all kinds of base materials including concrete/precast concrete, rendered hollow block, hollow floor block, solid rendered brick, wood and steel.

Operator Comfort

The Pulsa™ Technology tool has many operator comfort advantages including its very compact patented design, very low recoil, low noise and low cocking force.

Uniqueness

The Pulsa™ Technology tool has a patented telescopic nose for better fixing quality - during the shot the tool remains in contact with the base material.

Reliability

A tough outer body ensures reliability and a long in-field life. Maintenance is also only required at every 25 000 shots.

Thermally Insulated

The tools utilise heat resistant materials to ensure cooler operation when in continuous use.

Simple To Use

The tools are simple to use, reliable and have excellent balance for more efficient fixing. Also the front part of the tool is totally free for optimum access.

Power Level Adjustment

The Pulsa™ Technology tool, due to its unique design, automatically compensates for different material strengths ensuring that the finished height of the fastener remains constant.

Technical Data

InsulFast™ GT3

Dimensions

Height 363 mm

Length 466 mm

Weight 3.5 kg

Power 100 J

Fuel cell capacity (20°C) 1,000 pins (approx)

Battery capacity (20°C) 3,000 pins (approx)

Fastener capacity 25mm to 100mm insulation fasteners

Battery

Voltage during use 6 V - 600mA

Order No. B0092

Battery charger

Order No. B0020

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.

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.

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™ Technology tool only use Ramset™ fuel cells.

- 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 for cell.

Battery



SAFETY WARNING

The battery will discharge itself even if the tool is not being used. Remove the battery when not in use or put in the standby position. Recharge the battery if it has not been used for a long period of time.

Batteries are supplied uncharged. Fully charge them before using for the first time. Only use Ramset™ batteries and battery chargers.

Wait until the battery has completely drained before recharging it.

When the battery has been charged (approx. 1 hour) insert it into the tool (contacts towards front).

After use, remove the battery or place it in the standby position.



Insulation Fasteners



SAFETY WARNING

Only use insulation fasteners designed for use in the Ramset™ InsulFast™ GT3 tool.



Insulation fasteners for concrete, masonry and steel

| Part No. InsulFastGT InsulFastGT2 | Part No. InsulFastGT3 | Rigid Insulation Thickness | Soft Insulation Thickness | Fastener Colour * | Order Qty |
|---|--------------------------|-------------------------------|------------------------------|----------------------|--------------|
| IG625 | T3IG625 | 25mm | 25mm – 30mm | Natural (White) | 400 |
| IG625B | T3IG625B | 25mm | 25mm – 30mm | Black | 400 |
| IG638 | T3IG638 | 38mm | 38mm – 45mm | Natural (White) | 350 |
| IG650 | T3IG650 | 50mm | 50 mm – 55mm | Natural (White) | 300 |
| IG650B | T3IG650B | 50mm | 50 mm – 55mm | Black | 300 |
| IG663# | T3IG663# | 60mm | 60mm – 65mm | Natural (White) | 500 |
| IG675 | T3IG675 | 75mm | 75mm – 85mm | Natural (White) | 250 |
| IG675B | T3IG675B | 75mm | 75mm – 85mm | Black | 250 |
| IG6100 | T3IG6100 | 100mm | 100mm – 110mm | Natural (White) | 200 |

* Other sizes and colours such as silver, to a maximum of 100mm in length are available on request. Minimum order quantities and lead times apply.

Available on request



Troubleshooting

An LED control light is located on the right-hand side of the handle. If, after installing the battery, the indicator:

- **flashes green slowly** - the tool is powered by the battery
- the tool is able to operate every second time the tool is compressed. (i.e. Mode 1 - alternate compressions of the tool, optimised for use with rigid insulation).
- **flashes green quickly** - the tool is powered by the battery
- the tool is able to operate every time the tool is compressed. (i.e. Mode 2 - optimised for use with soft/compressible insulation).
- **flashes red** - recharge the battery.
- **is green** - the pin guide is pushed in, the fan is turning, the device is ready to fire.
- **is red** - the pin guide is pushed in, the fan is not turning, recharge the battery.



SAFETY WARNING

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

Battery in standby position



Pic. 2

| Symptom | LED Indicator Status | Possible Diagnosis / Suggested Actions |
|--|------------------------|---|
| The device does not work. | The light is off. | Battery not in nailer. Dirty battery contacts. Clean. |
| | The light flashes red. | Battery completely discharged. Recharge battery. |
| The fan is on but the tool does not fire. | The light is red. | Battery power too low. Recharge the battery. |
| | The light is green. | Change the fuel cell. |
| The fan stops after pulling the trigger. | The light is green. | Contact your authorised Ramset™ Tool Service Centre. |
| The tool fires with interruptions. | The light is green. | Change the fuel cell. |
| The nails are under driven. | The light is green. | Change the fuel cell. Clean filters. |
| The device makes a low sound. The piston remains in low position; no nails come out. | The light is green. | Contact Ramset™ or your authorised Ramset™ Tool Service Centre. |
| The tool works slowly and heats up. | The light is green. | Check and clean the filter. |
| Use in cold weather below -5°C. | — | Place the tool, gas cartridge and battery in a warm place. |

Servicing



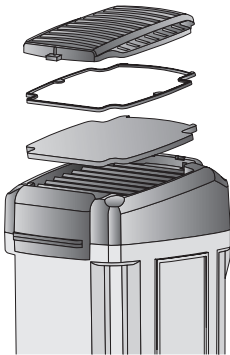
SAFETY WARNING

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 lightly tap them to remove any dust.

After cleaning, replace them and close the cover.

Cleaning of battery contacts

Periodically clean these contacts with a dry cloth.

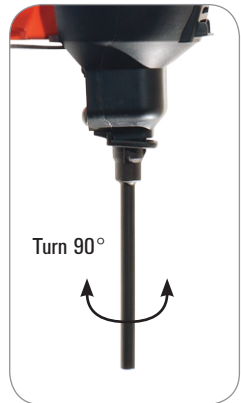
Quick Change Fastener Guide

The InsulFastGT3 tool is equipped with a quick change fastener guide. This feature allows the user to quickly replace the fastener guide and allows access to clear the fastener guide if required.

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

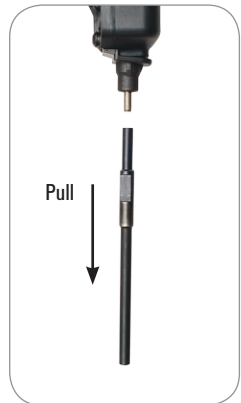
Removal

1. **Remove battery from the tool !**
2. Firmly grasp the end of the fastener guide and turn it 90 degrees,
3. Pull the fastener guide away from the tool.



Assembly

1. **Remove battery from the tool !**
2. Orient the fastener guide so that the notched or flat portion is toward the back of the tool and aligned with one of the sides of the tool.
3. Firmly push the fastener guide into the tool.
4. Twist the fastener guide until it locks into place.
5. Insert the battery and operate the tool.





Operating Instructions

Important

Before using your Pulsa™ 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™ InsulFast™ GT3 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.

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



• Concrete/precaster concrete.



• Rendered hollow block; hollow floor block.



• Solid/rendered brick.



• Steel

1. Preparation

- (a) Put on approved eye and hearing protection.
- (b) Clear people from local area.
- (c) Check the local environment is safe for the use of Pulsa™ Technology tools, ie. free from inflammable gases, explosive materials etc. Refer Safety Precautions page 3 and 4 of this manual.
- (d) Check that the material to be fixed into is suitable for use with a Pulsa™ Technology tool. Refer Safety Precautions page 3 and 4 of this manual or contact your Ramset™ representative.

2. Installing the fuel cell

- (a) Insert the fuel cell all the way until an audible "click" can be heard.



SAFETY WARNING

For the safe operation of your Ramset™ Pulsa™ Technology tool only use fuel cells. Specifically designed for use with the InsulFast™ GT3 tool.



Pic. 2

3. Inserting the battery

- (a) Ensure that the battery is fully inserted in the tool and not in the standby position.
- (b) Check that the green LED light is flashing to indicate that the battery is charged.

4. Inserting the Insulation Fastener

- (a) Place the fastener assembly over the front end of the tool without compressing the fastener guide.

5. Tool Operation Sequence

- (a) Force the fastener assembly through the insulation and compress the tool completely.



Operating Instructions cont.

6. Firing

- (a) Immediately pull the trigger once the tool is fully compressed. (The gas / air mixture burns.)
- (b) The tool can be removed as soon as the fastener has set.
- (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 (see page 9).



SAFETY WARNING

Do not press on the fastener guide while loading the insulation fastener, or else a serious hand injury may occur if the tool is accidentally fired.



SAFETY WARNING

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



Insulation Fastening Recommendations



The number of fasteners required will vary depending upon the type of insulation being fastened and other factors that will change according to the requirements of the project. Other factors which may influence the number of fasteners that are required include the weight of the insulation, the size of the insulation panels, the appearance and flatness of the insulated area.

Ramset recommends a minimum of 4 fasteners per fastened unit/panel of insulation.

These fasteners should be fastened through the insulation as described in the operating section of this manual.

(Larger panels and insulation that has a tendency to sag are likely to require more fasteners.)



The suggested fixing configurations for 4, 5 and 6 fasteners per board are shown above. (Its is NOT recommended that fasteners be placed on the very edge of the boards.)



InsulFast™ GT3 Tool Service Log Records

Product: **Pulsa™ Technology Tool**

Model Number: **Insulfast™ GT3**

Purchased from:

Serial Number:

ABN:

Invoice Number:

Date:

Purchaser's Name:

Address:

Signature:

ABN:

Comments:



InsulFast™ GT3 Tool Service Log Records cont.

| Date | Type of Service | Hours Used | Details of service <small>Show components replaced</small> | Status | Signature |
|------|-----------------|------------|---|--------|-----------|
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Ramset™

InsulFast™ GT3

Instruction Manual



InsulFast™ GT3 Warranty



Ramset™

Product Pulsa™ Gas Technology Tool

Model Number InsulFast™ GT3

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™ 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™ Gas Technology Tool has a warranty against materials or workmanship for a period of 12 months for the InsulFast™GT3 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 InsulFast™GT3 tool.

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



Ramset™

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