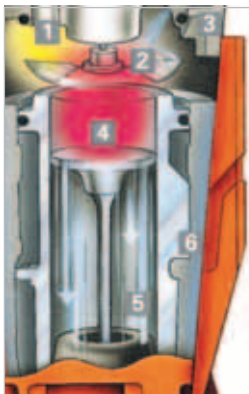


FIXING TECHNOLOGY





Gas Technology - How it works



1. Spark Plug
2. Fan Motor
3. Fuel Port
4. Combustion Chamber
5. Piston Assembly
6. Cylinder

With its own internal combustion engine, Ramset™ Gas Technology fastens cable management, wiring accessories and partitioning track much faster than any other system!

At the heart of Ramset™ Gas Technology is the patented linear combustion engine. With its steel piston rings and precision-machined combustion chamber, Ramset™ Gas Technology drives fasteners all day long, week after week, year after year.

How to select a Ramset™ Gas Technology Fixing to directly fasten an object for permanent installation

Fixing to concrete

As the fixing enters the concrete, extreme pressure and heat are created. This creates a bond that provides high loading strength in concrete.

Edge distance

Do not fix closer than 75mm from the edge of concrete. If the concrete cracks, the fixing may not hold.

Recommended minimum fixing spacing

Setting fixings too close together can cause the concrete to crack. The recommended minimum distance between fixings is 50mm. Never attempt a fixing application too close to another fixing as this could affect the previously inserted fixing's embedment.

Concrete thickness

It is important that the concrete be at least three times as thick as the fixing penetration. If the concrete is too thin, the compressive forces forming at the fixing's point can cause the free face of the concrete to break away. This creates a dangerous condition from flying concrete and / or the fixing and also results in a reduction of fastener holding power.

Fixing to steel

The resilience of steel provides a clamping effect to the fixing. This combined with the tremendous heat that is created, provides a welding and clamping effect to give maximum holding power.

Edge distance

The recommended edge distance for a fixing to the edge of steel is 13mm. Never fire the tool within 13mm of the edge of a steel base material because the steel may bend or break off, allowing the fixing to ricochet.

Recommended minimum fastener spacing

The recommended minimum distance between fixings is 25mm. Never attempt a fixing application too close to another fixing as this could affect the previously installed fixing's embedment.

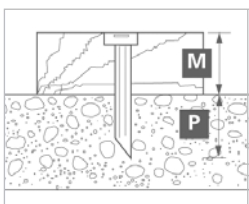
Steel thickness.

Do not fasten into steel base material thinner than the fastener shank diameter. Holding power may be reduced and the fastener may be overdriven.

As a guide when:

- Fixing into steel - min. steel thickness = 3mm

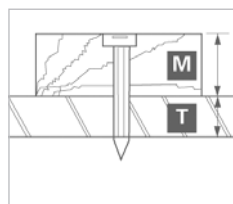
Minimum Shank Length



Minimum Shank Length

Thickness of material (M) + Required penetration (P)

Minimum Shank Length



Minimum Shank Length

Thickness of material (M) + Thickness of steel (T) + 5mm point allowance

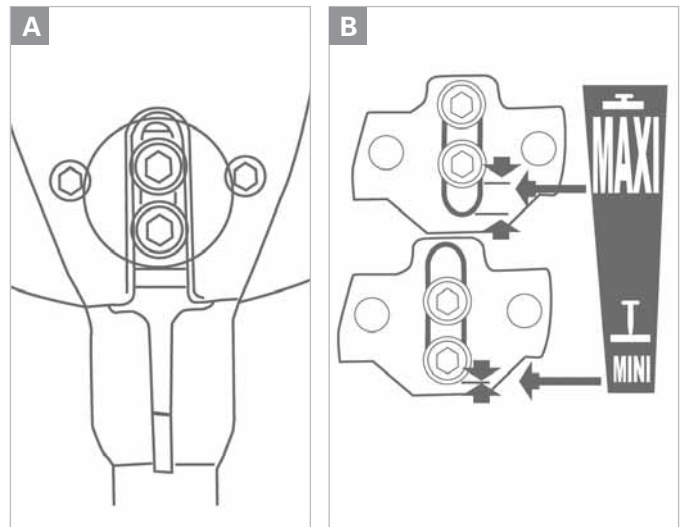
Adjusting Fastener Penetration - TrakMaster™ Only

All Ramset™ Gas Technology tools automatically adjust their power to suit the supporting material. These gas technology tools can adjust their power up to a maximum impact energy that is determined by the capability of each tool model. (This is one of the main differences between Ramset™ Gas Technology tools and Powder Actuated tools).

Even though Ramset™ Gas Technology tools automatically adjust their power, certain applications may require the fastener to penetrate deeper into the base material or penetrate less.

Ramset™ TrakMaster™ tools are designed with a feature that allows adjustment of the fastener penetration to be performed. This adjustment is dependent both on the type and hardness of the base material and on the object being fixed. The adjustment does not affect the impact energy that is supplied to the fastener.

Adjusting Penetration

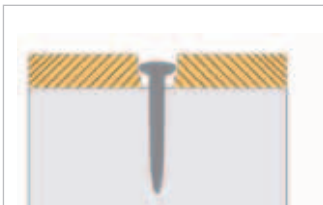


Penetration is adjusted by slackening the two screws (A) on the upper part of the barrel using the allen key provided and moving them backwards or forwards (4mm) in the recess on plate (B).

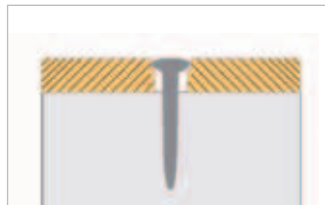
The adjustment range is 4mm. Intermediate adjustments between maximum and minimum are possible.

For best fixing results, check the adjustment position before and during work.

Maximum Penetration



Minimum Penetration



Pulsa™ Technology - TrakMaster™ Only

As gases are affected by temperature, to generate exactly the same power in a gas technology tool the fuel injector must vary the amount of gas delivered to the combustion chamber. With traditional mechanical fuel delivery systems as found in the TrakFast™ tool this variation is not possible and differences in power are evident at very low (i.e. -5°C) or high temperatures.

However, the TrakMaster™ tools use PULSA™ Technology which employs temperature dependent Electronic Fuel Injection (E.F.I.) to accurately inject the exact amount of gas that the tool requires no matter what the ambient temperature is. The tool actually detects what the ambient temperature is and calculates the amount of gas to release from the fuel cell. This 'smart' technology ensures that the tool delivers the right amount of power... every time!

TrakMaster™ for Ceiling, Partioning and General Contractors



The fastest method of installing partioning track

Cordless and quick to set up, users can move quickly and effectively without restriction.

Product Advantages

- Cordless - self powered, no setting up time required
- Sequential actuation - safe operation
- Depth-of-drive (Indicated on top of the tool)
- Lock-out feature (safety)
- Belt hook
- Flared fastener guide designed for partioning track work
- 5kg actuation force
- Soft cushioned grip
- Voltage indicator light
- Compact carrying case
- Well balanced
- Heat sensor controls amount of gas injected, relative to the ambient temperature
- Electronically controlled fuel injection
- Low maintenance
- In-car charger adaptor (accessory)

Substrates

- Concrete
- Composite steel decking
- Solid brick
- Precast
- Steel
- Pre-stressed concrete
- Hollow block wall
- Reinforced concrete
- Reinforced prefabricated concrete

Cycle Rates

Intermittent operation	2 pins per second
Fuel cell life	650 pins (approx)
Battery charge capacity	1,000 pins (approx)

Tool Specifications

Weight	3.7kg
Height	383mm
Length	295mm
Magazine capacity	20(+3) pin magazine, [40(+3) pin magazine accessory]
Impact force	82J
Actuation pressure	5kg
Overdrive	4mm (adjustable)

Battery Specification

Voltage	6V
Amperage	600mA
Charging Time	1 hour

Applications



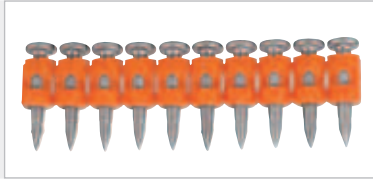
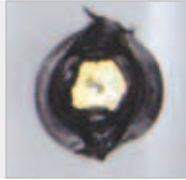
- Fixing partioning track systems to concrete, masonry, block and structural steel
- Fixing particle board flooring to steel joists
- Fixing termite protective mesh to concrete, brick, block and structural steel
- Fixing timber to concrete, brick, block and structural steel
- Fixing foils, membranes and mesh to concrete, brick, block and structural steel (using 25mm steel washers and magnetic fastener guide)

Product Range - TrakMaster™

Part No.	Description	Order Qty
9A-TRAK-MSTR	TrakMaster™ Pulsa Tool + 2 x batteries	1

Kit includes: TrakMaster™ Pulsa™ Tool, high impact carry case, batteries, battery charger, safety glasses, allen key, dust cover and instruction manual.

Product Range - All-purpose Pin Range for Steel and Concrete Fixing



Part No.	Description	Pin Length (mm)	Order Qty
Standard Duty Pin Range - C6 Pins (Fixing timber to concrete/light guage steel)			
9A-PULS-C620	Ramset C6-20 Pins	20	500
9A-PULS-C625	Ramset C6-25 Pins	25	500
9A-PULS-C630	Ramset C6-30 Pins	30	500
9A-PULS-C635	Ramset C6-35 Pins	35	500
9A-PULS-C640	Ramset C6-40FH Pins	40	500

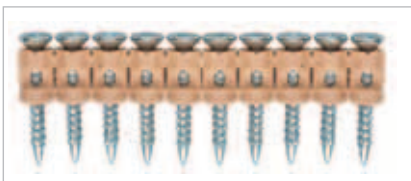
10 pins strip collation (suitable for use in 20 and 40 pin magazines); box of 500 pins + 1 x Fuel Cell

Heavy Duty Pin Range - HC6 Pins (Premium Hard Concrete/Steel)

9A-PULS-HC15	Ramset HC6-15 Pins	15	500
9A-PULS-HC17	Ramset HC6-17 Pins	17	500
9A-PULS-HC22	Ramset HC6-22 Pins	22	500
9A-PULS-HC27	Ramset HC6-27 Pins	27	500
9A-PULS-HC32	Ramset HC6-32 Pins	32	500

10 pins strip collation (suitable for use in 20 and 40 pin magazines); box of 500 pins + 1 x Fuel Cell

Product Range - Special Applications Pin Range



Part No.	Description	Pin Length (mm)	Order Qty
Wood Pin Range - CW6 Pin (Fixing into wood)			
9A-PULS-CW25	CW6-25 Pin	25	500

10 pins strip collation (suitable for use in 20 and 40 pin magazines); box of 500 pins + 1 x Fuel Cell

Threaded Duty Pin Range - THC6 Pins (Premium Hard Concrete/Steel)

9A-PULS-TH21	THC6 M621 (Thread Size M6)	21	500
9A-PULS-TH26	THC6 M623 (Thread Size M6)	23	500

10 pins strip collation (suitable for use in 20 and 40 pin magazines); box of 500 pins + 1 x Fuel Cell

FIXING TECHNOLOGY

Product Range - Washer



Part No.	Description	Order Qty
9A-PULS-WASH	Ø 25 mm Washer	1,000

Product Range - Accessories



Part No.	Description	Order Qty
9A-PULS-MAGH	Magnetic Fastener Guide	1
9A-PULS-40MG	40 Pin Magazine	1
9A-PULS-BATT	Battery	1
9A-PULS-CHAR	Battery Charger	1
9A-PULS-ADAP	Charger Adapter	1
9A-PULS-LOCK	Belt Lock	1
9A-PULS-LIFT	SPIT lift Pole Tool	1
9A-PULS-CKIT	Tool Cleaning Kit	1