

Instruction Manual



Ramset Fasteners (Aust) Pty Limited

Head Office
292-298 Maroondah Highway
Mooroolbark Victoria Australia 3138
Web: www.ramset.com.au

© Copyright 2002
™ Trademark of ITW Inc.

Sales, orders and enquiries
Tel: 1300 780 063
Fax: 1300 780 064
Email: enquiry@ramset.com.au

Head Office
Tel: (03) 9726 6222
Fax: (03) 9762 8215

Made in U.S.A.
by ITW Ramset/Red Head
An Illinois Tool Works Company



MODEL TF1100



Concrete Results™

www.ramset.com.au
™ Trademarks of ITW Inc



Concrete Results™

www.ramset.com.au
™ Trademarks of ITW Inc

TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEMS	SERVICE
Preparing Tool for Operation – Battery/Charger Problems		
1. Battery Cell does not appear to accept charge. Green charger light does not come on.	1a. Inoperative indicator lights on charger. 1b. Battery Cell damaged or cycle life exhausted. 1c. Damaged charger.	1. Try Battery Cell in tool after 3 hours on charge cycle. If tool LED is green, charger lights are not working properly. Replace charger, or monitor charging time to ensure Battery Cell has adequate time for recharging. It's normal for Battery to feel warm after properly charging. 1b. Replace Battery Cell. 1c. Discontinue use immediately and unplug from power source. Replace charger and tag or dispose of charger to prevent accidental reuse or connection to power source.
Normal Stage of Operation		
1. Fan does no run – tool LED is off.	1a. Battery Cell is not charged. 1b. Magazine is loose, preventing current flow from Magazine to Handle and Cylinder Head. 1c. Magazine contacts at top of Magazine, or contact posts in base of Handle, are oily, dirty, or corroded. 1d. Battery Terminals or Magazine battery contacts are oily, dirty, or corroded.	1a. Charge Battery Cell according to Operating Manual. 1b. Make sure Magazine is tight to nose of tool, and secure with Magazine locking Knob. 1c. Clean contacts as required. 1d. Clean Battery Cell terminals. Clean Magazine Battery Cell contacts as required.
2. Fan does not run. Tool LED is off, however the Magazine red LED is blinking.	2. There is electrical short somewhere.	2. The tool must be looked into by an Authorised Service Centre.
3. Fan does not run, or runs slower than normal – tool LED is red.	3. Battery Cell is discharged.	3. Charge Battery Cell.
4. Fan runs intermittently.	4. Magazine is loose or contacts are bent.	4. Tighten Magazine, or bend contacts up.
Pre-Combustion/Combustion Stage of Operation		
1. Fastener Guide does not depress fully – tool does not operate.	1a. Lockout Bracket is stuck in lockout position. 1b. Fastener Guide is damaged or build-up of debris in track restricts operation. 1c. Follower is not behind strip. 1d. Fan motor O-Ring pinched.	1a. Check Lockout Bracket screw for excessive tightness. Remove cover if necessary and clean out build-up of debris from track. 1b. Remove and inspect Lower Probe. Clean track with cloth. Repair or replace Lower Probe as required. 1c. Put follower behind strip. 1d. Contact your local Ramset Sales Representative or Authorised Service Centre.
2. Tool will not cycle – fan runs, LED is green.	2a. Fuel Cell is empty. 2b. Spark Wire out of spark plug. 2c. Spark does not occur.	2a. Replace Fuel Cell. 2b. Contact your local Ramset Sales Representative or Authorised Service Centre. 2c. Contact your local Ramset Sales Representative or Authorised Service Centre.

CONTENTS

SUBJECT	PAGE
Introduction and Warranty	2
An Overview of the Trakfast Tool	3
Safety Instructions	4 - 5
Battery Cell and Charger	6
Fuel Cell and Metering Valve	7 - 8
Preparing the Trakfast Tool for use	9
Trakfast Tool Operation	9
Servicing	10 - 11
Troubleshooting	12 - 13

Ramset Fasteners
Maroondah Highway, Mooroolbark
Victoria, Australia

INTRODUCTION AND WARRANTY

TRAKFAST TOOL OPERATING MANUAL

This manual is intended to acquaint you with the Ramset Trakfast tool. Unlike other power fastening tools, the Trakfast tool is powered by an internal combustion linear motor. In simpler terms, your Trakfast tool is powered by a motor similar to the one that powers an automobile. The tool ignites a fuel and air mixture to produce the energy to drive the motor, which in turn drives the fastener. As you will see, the Trakfast tool is totally self-contained. It carries its own fuel supply and battery, along with a supply of fasteners.

For ease of use, this manual is divided into sections (see contents). Each section of the manual is written with you, the tool operator, in mind. We have left out all of the technical terms so that you can readily understand how to get the maximum performance from your Trakfast tool, and how to avoid damaging the tool or injuring yourself. But, to accomplish this, we need you to do two things:

1. READ THE MANUAL FROM COVER TO COVER BEFORE USING THE TOOL.
2. FOLLOW ALL INSTRUCTIONS IN THE MANUAL.

The Trakfast tool should be handled like other power fastening tools that you use. When used properly, it will meet your fastening needs. And, like most of your tools, when used improperly it can cause injury. If you are going to allow others to use the Trakfast tool, it is your responsibility to make sure that they also read and comply with the instructions in this manual before attempting to operate the tool.

Should you have questions about the Trakfast system, or wish to obtain additional copies of this manual, please feel free to contact your local Ramset Sales Representative or Ramset Gas Technology Distributor.

Ramset TRAKFAST™ TOOL WARRANTY and LIMITATIONS

Ramset warranty that new Trakfast power fastening tools, parts and accessories will be free from defects in material and workmanship for the period shown below, after the date of delivery to the original user.

TWO-YEAR LIMITED WARRANTY

A two-year warranty will apply to all parts, except those listed below as normal wearing parts, or parts which are specifically covered by an extended warranty.

SIX-MONTH LIMITED WARRANTY

A six-month warranty applies to the following parts, which are considered normal wearing parts:

- Bumper
- Battery
- Piston Assembly
- Battery Charger
- O-Rings
- Piston Rings

WARRANTY STATEMENT

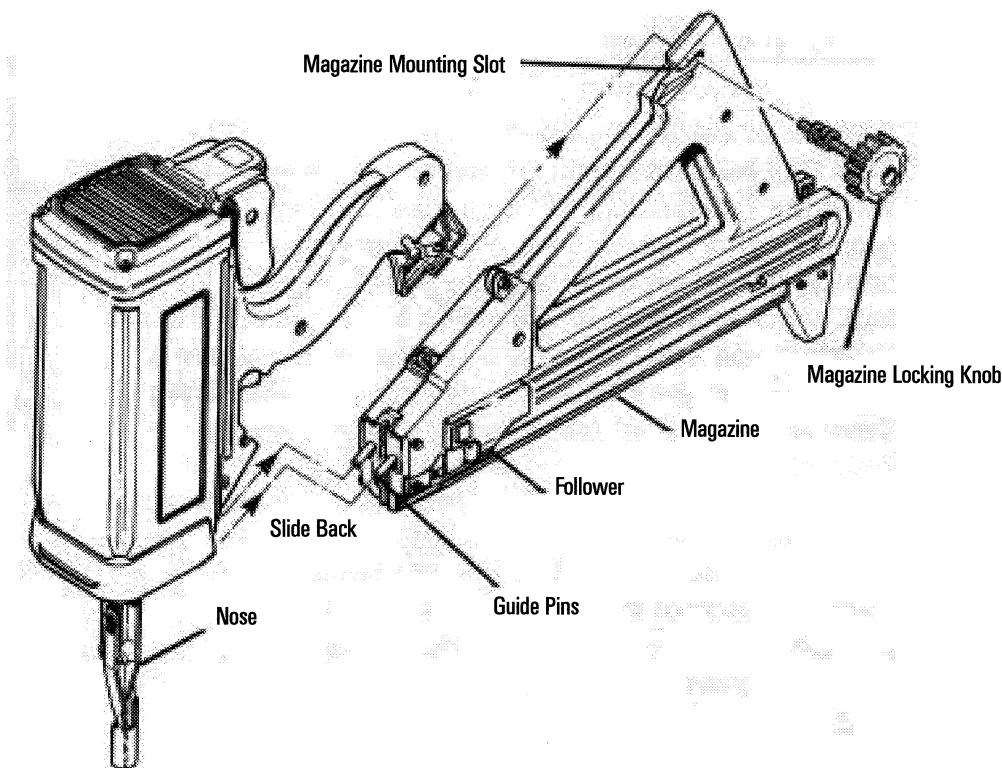
Ramset sole liability hereunder will be to replace any part or accessory which proves to be defective within the specific time period. Any replacement part or accessory provided in accordance with this warranty will carry a warranty for the balance of the period of warranty applicable to the part it replaces. This warranty does not apply to part replacement required due to normal wear.

This warranty is void as to any tool which has been subjected to misuse, abuse, accidental or intentional damage, use with fasteners, fuel, battery, or battery chargers not meeting Ramset specification, size, or quality, improperly maintained, repaired with other than genuine Trakfast replacement parts, damaged in transit or handling, or which, in Ramset opinion, has been altered or repaired in a way that affects or detracts from the performance of the tool.

RAMSET MAKES NO WARRANTY, EXPRESSED OR IMPLIED, RELATING TO MERCHANTABILITY, FITNESS, OR OTHERWISE, EXCEPT AS STATED ABOVE and the liability AS STATED ABOVE AND AS ASSUMED ABOVE is in lieu of all other warranties arising out of, or in connection with, the use and performance of the tool, except to the extent otherwise provided by applicable law. RAMSET SHALL IN NO EVENT BE LIABLE FOR ANY DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO DAMAGES WHICH MAY ARISE FROM LOSS OF ANTICIPATED PROFITS OR PRODUCTION, SPOILAGE OF MATERIALS, INCREASED COST OF OPERATION OR OTHERWISE.

Ramset reserves the right to change specifications, equipment, or designs at any time without notice and without incurring obligation.

SERVICING



CLEARING A JAM (continued)

At this point, the jammed fastener should fall out. If the jammed fastener does not fall out, carefully remove the fastener taking care not to damage the **Shear Block**.

After you have removed the jammed fastener take the following steps to reattach the **Magazine** to the tool:

1. Use the two guide pins to align the **Magazine** at the nose of the tool.
2. Position the **Magazine** mounting slot over the locking knob screw.
3. Slide the **Magazine** firmly against the nose.
4. Tighten the **Magazine Locking Knob** and reload the tool.

DANGER

Make sure Magazine is all the way forward against the nose and Magazine Locking Knob is tightened securely before operating tool. Attempting to use tool with a loose Magazine may result in loss of fastener control, damage to tool, or pin discharge toward tool operator.

If you find that the Trakfast tool's Fan does not operate after clearing the jam:

Check the condition of your **Battery Cell**.

If the **Handle LED** indicator emits a constant red glow when depressing the tool, recharge the **Battery**.

SERVICING

Field service should be restricted to the following:

- CHECKING THE ENERGY LEVEL OF THE BATTERY
- RECHARGING THE BATTERY
- CHECKING THE FUEL CELL AND METERING VALVE
- REPLACING THE FUEL CELL
- CLEANING THE AIR FILTERS
- CLEARING A JAM

Attempts to go beyond these procedures could result in serious personal injury or damage to the Trakfast tool and voiding of the warranty.

There are certain problems that you may encounter when you are using the Trakfast tool that you will be able to correct on the work site. The following field service procedures are the only service procedures you should attempt. Anything else that may appear wrong with the Trakfast tool should only be diagnosed and repaired by a fully trained service technician. If you have any reason to believe that your problem is beyond the service procedures in this manual, contact your Ramset Sales Representative or Authorised Service Centre immediately.

DANGER

Never attempt any maintenance of the Trakfast tool without first removing the Fuel Cell. Maintenance should only be started after the tool is completely inoperative.

BATTERY CELL CHECK

Periodically check on the LED Battery Voltage Indicator Light—the LED in the Handle of the Trakfast tool. When encountering a problem, the first step should always be to make sure the Battery has enough energy to operate the tool.

If the light is red, recharge the Battery. If the light is glowing green, indicating that the Battery is charged, check the ignition system.

FUEL CELL CHECK

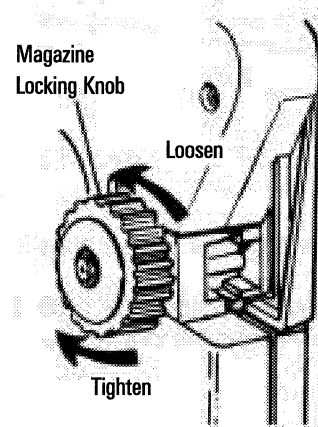
Another typical service condition will occur when the Fuel Cell becomes empty. A typical symptom will be when the Trakfast tool's Fan operates and the LED is green, but the tool does not drive fasteners completely. In this case, take the Fuel Cell out of the tool, check to see if the Cell still contains fuel and that the

Metering Valve is working. To determine if there is any fuel left in the Fuel Cell simply place the Metering Stem against a solid object, and gently push about three or four times. A small amount of fuel should be released each time. Never perform this test near an open flame or sparks, while smoking, or where the fuel may get into your eyes. If fuel is not released with each operation of the Metering Valve, this indicates that there is no more fuel left in the cylinder and it must be replaced. Dispose of the empty Fuel Cell properly.

CLEARING A JAM

A typical problem you may encounter is having a jammed fastener. Because of the unique design of the Trakfast tool, clearing a jammed fastener is easy.

1. Pull the Carrier Assembly back until it locks.
2. Loosen the Magazine Locking Knob three full turns.
3. Remove the Magazine by sliding it away from the nose of the tool.



AN OVERVIEW OF THE TRAKFAST TOOL DESCRIPTION

The Trakfast tool is a self-contained, fully portable tool that uses liquid hydrocarbon fuel to power a unique linear drive internal combustion motor. In order for you to fully understand the information contained in this manual, you need a basic understanding of the tool. As you can see in the illustration below, the Trakfast tool is made up of three assemblies: the Handle, the Motor, and the Magazine.

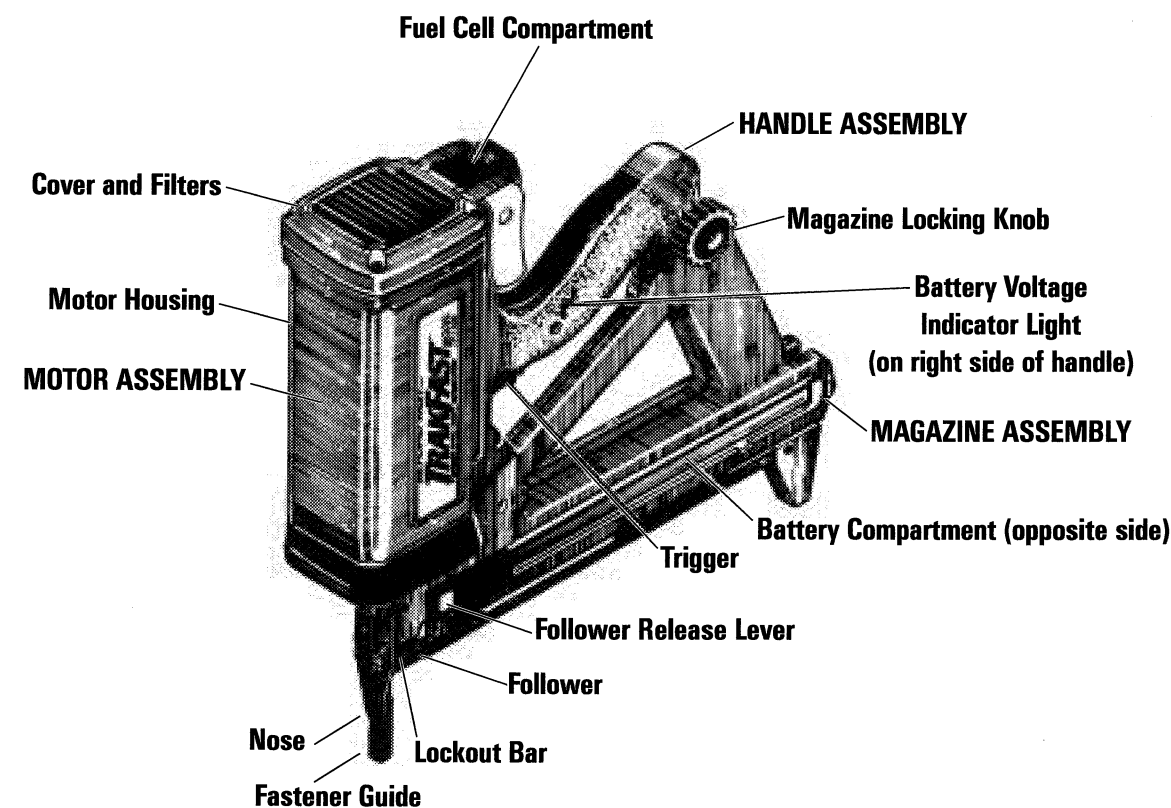
As you examine the Trakfast tool, become familiar with the three major assemblies and the various components located in each of them. The Handle Assembly contains the Fuel Cell, the Battery Voltage Indicator Light, and the Trigger.

The Motor Assembly contains the Cover and Filter, the Motor Housing, the Nose, and the Fastener Guide.

The Magazine Assembly contains the Magazine Locking Knob, the Battery Compartment, the Follower Release Lever, the Follower, and the Lockout Bar.

SPECIFICATIONS

Dimension:	Weight 4.3kg Height 394mm Length 438mm
Cycle Rate:	Intermittent Operation 2 to 3 pins per second Continuous Operation 1000 pins per hour
NOTE:	Exceeding these rates could cause the tool to overheat, resulting in loss of performance or damage to tool components. By using the Trakfast tool at its recommended operation rate you will be able to drive several thousand fasteners in a typical workday.
Maximum Fastener Length:	38mm x 2.6mm diameter shank
Magazine Capacity:	42 fasteners
Battery Cell:	6 volts D.C. - Provides enough energy to drive approximately 3000 fasteners on a full charge.
Fuel Cell:	Liquid hydrocarbon – Provides enough fuel to drive up to 1000 fasteners.



SAFETY INSTRUCTIONS

The following safety instructions have been included in this manual to provide you with basic information necessary for safe operation of the Trakfast Tool. **DO NOT ATTEMPT TO OPERATE THIS TOOL UNTIL YOU READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND MANUAL INSTRUCTIONS.**

Failure to follow all safety precautions and manual instructions can result in blindness, severe personal injury, damage to personal property, and damage to the tool.

In addition to these instructions, additional training may be necessary, depending upon the type of fastening you wish to do. Contact your local Ramset Sales Representative or Ramset Gas Technology Distributor for additional information.

DANGER

The Trakfast tool is an internal combustion device. It produces hot exhaust gases that may ignite flammable materials. **This tool must not be used in a combustible environment or in the presence of combustible materials**, such as flammable chemicals, adhesives, gasoline, or solvents. Care must be taken to prevent a tool containing a Fuel Cell from being exposed to temperatures in excess of 50° Celsius, since the Fuel Cell could burst releasing flammable gas.

This tool must be operated **only in a well ventilated environment**, because the tool exhausts excessive carbon monoxide similar to a chain saw or lawnmower. Exposure to carbon monoxide may cause dizziness, nausea, or unconsciousness.

The Trakfast tool, the Fuel Cells, and the Battery Cell and its Charger, should always be kept out of the reach of children.

- 1. READ THIS MANUAL FROM COVER TO COVER.** Always turn to this manual for information about the safe operation and servicing of the Trakfast tool. If any portion seems unclear, or you have any questions, contact your local Ramset Sales Representative or Ramset Gas Technology Distributor immediately.

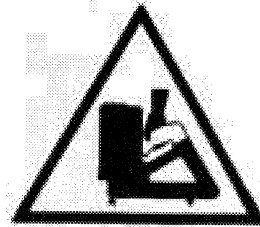
- 2. WEAR EYE AND HEARING PROTECTION.** Always wear approved hearing and eye protection devices when you are operating the Trakfast tool or working in the vicinity of this tool. Also, your eye protection must meet the requirement of Australian or recognised International Standard, and should have side shields for increased protection.



- 3. NEVER ASSUME THE TOOL IS EMPTY.** Every time you pick up the Trakfast tool, check the **Magazine** for fasteners. Never point the tool at anyone or yourself, even if you are **absolutely sure** there are no fasteners in the tool. The fasteners you did not see is the fasteners that can injure you or someone else.
- 4. NEVER ENGAGE IN 'HORSEPLAY' WITH THE TOOL.** The Trakfast tool is not a toy...it is a power fastening tool. It is designed to drive a fastener through steel sheets into concrete. To accomplish this task, it generates a tremendous amount of energy. Fooling around, even when you are **absolutely sure** there are no fasteners in the tool, is asking for an accident.
- 5. NEVER CARRY THE TOOL WITH YOUR FINGER ON, OR DEPRESSING, THE TRIGGER.** You must remember that the Trakfast tool operates in a specific sequence. The **Nose Piece** acts as an operating feature that blocks the **Trigger** from completing the ignition circuit. Should you unintentionally depress the **Nose Piece** while pulling the **Trigger** as you are carrying the tool, it could discharge a fastener.
- 6. NEVER OPERATE A TOOL THAT IS MALFUNCTIONING.** If you determine that the Trakfast tool is not working properly, and the problem is more than a simple fastener jam, stop using it immediately and refer to the Servicing Section of this manual. If the problem cannot be corrected with one of the steps covered in the Servicing Section, report the problem to your Supervisor, your local Ramset Sales Representative or Approved Service Centre.

Do not attempt to make any additional repairs to the Trakfast tool.

- 7. OPERATE THE TOOL ONLY ON THE WORK SURFACE.** The Trakfast tool should be operated only when it is in contact with the work surface. Always hold the tool firm and perpendicular against the surface to be fastened. Stay at least 50mm away from the edge of the concrete.



- 8. NEVER DISABLE OR REMOVE THE NOSE PIECE.** The Trakfast tool is equipped with a device connected to the **Nose Piece**. This device helps reduce the possibility of accidental operation by preventing the tool from operating until it is fully depressed on the work surface. Although the **Nose Piece** has adjustment, it must never be disabled or removed. Do not use the Trakfast tool if the **Nose Piece** is not working properly.

PREPARING THE TRAKFAST TOOL FOR USE

FASTENERS

The Trakfast tool can drive only Ramset fasteners which have been collated into strips. Any other fastener will cause tool damage and void your warranty.

LOADING FASTENERS

The illustration below shows how to properly load fasteners into the Trakfast tool.

1. Pull the carrier assembly back until it locks.
2. Load four fastener strips into the rear slot of the magazine.
3. Pull the carrier assembly slightly back, push the follower button in, and gently release the assembly to engage the fasteners.

The **Trigger** on the Trakfast tool is automatically locked and will not operate when there is less than 2 fasteners in the feed magazine and unless the nose of the tool is fully depressed. The purpose of this feature is to prevent needless blank cycling, which could damage tool components.

DANGER

Two (2) fasteners will be left in the Magazine after strips have been used. At this point you can reload. It does not indicate that the tool is empty. Because of a lockout feature in the Trakfast tool, it will not operate when the fastener supply in the tool is less than two (2) fasteners.

OUTDOOR WEATHER AND THE TRAKFAST TOOL

Use the Trakfast tool outdoors, in clear weather, when the **Tool**, **Fuel Cell**, and **Battery** are between -7°C and 50°C. Colder temperature may damage the Trakfast **Tool** and **Battery Cell**. Hotter temperatures may damage the **Tool** and **Fuel Cell**.

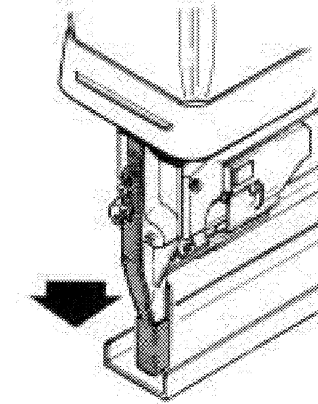
Fuel should be stored out of direct sunlight in surroundings less than 50°C. After extended periods of continuous use, cool the **Tool** by running the **Fan Motor**.

Operation when the **Tool** is less than -7°C may damage the tool. **Fuel Cells** at cold temperatures lose the required propellant force. Bring the **Tool**, **Battery Cell** and **Fuel Cell** above minimum operating temperature without direct exposure to flame, and check the **Battery**.

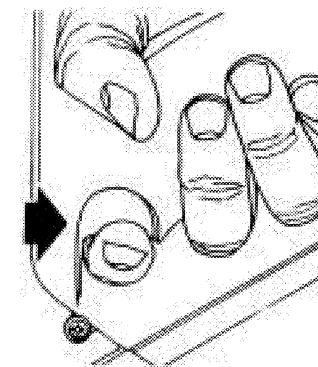
CAUTION

The Trakfast tool should not be used in the rain or where excessive moisture is present. These conditions may result in damage to the tool components and cause tool to malfunction.

TRAKFAST TOOL OPERATION



PRESS TOOL DOWN AGAINST WORK SURFACE. **Fan Motor** will turn on, LED will be steady green. Fuel is injected into **Combustion Chamber** and mixed with air by the **Fan**.



SQUEEZE THE TRIGGER

The **Spark Plug** sparks and fuel/air mixture ignites. Combustion powers the **Piston Assembly** driving fastener.

RELEASE TRIGGER – LIFT THE TOOL

The **Combustion Chamber** opens. **Fan** exhausts hot gases and cools internal components.

NOTE: if no additional cycles are made, **fan** will run for 7 seconds and the shut off.

WARNING

The Fastener Guide and nose may become hot after prolonged or rapid use.

THE TRAKFAST TOOL

BATTERY CELL AND CHARGER

The first step in preparing a new tool for operation is to fully charge the new **Battery**. New **Batteries** are shipped discharged and must be charged for 24 hours before first use. All subsequent charges will require at most a 3 hour charge.

IMPORTANT CHARGING NOTES

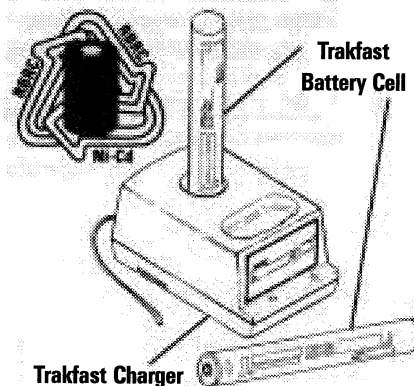
NOTE: **Battery** contains Nickel Cadmium and must be recycled or disposed of properly.

When the **Battery** is charged for the first time or after long storage, the cell will accept less than a full charge. However, after several charge and full discharge cycles, the **Battery** will come up to full charge capacity and deliver maximum performance.

Do not repeatedly charge the **Battery** after only a few minutes of operation. To do so can reduce **Battery** efficiency. Discharge the **Battery** until the **Battery Voltage Indicator Light** becomes red.

If, **Battery** does not take a full charge or appears to produce less operating time, the cell may need to be restored to its original power and life. Fully charge and then completely use up the charge several times to recondition the **Battery**. The charge can be used up by the **Fan Motor**. To turn the **Fan Motor** on, rest the Trakfast tool so the Nose Piece is pressed in. With the Nose Piece in, lean the Trakfast tool against a wall until the **Battery** is discharged.

The Trakfast tool comes with a long cylindrical **Battery** and its own charger. This **Battery Cell** and **Charger** combination is the only one that will work with the Trakfast tool. The basic charging instructions are as follows:



WARNING

CHEMICAL/EXPLOSION HAZARD

Read all instructions before charging or using **Battery**. Failure to follow all instructions may result in fire, severe burns, or release of toxic fumes.

CHARGING INSTRUCTIONS

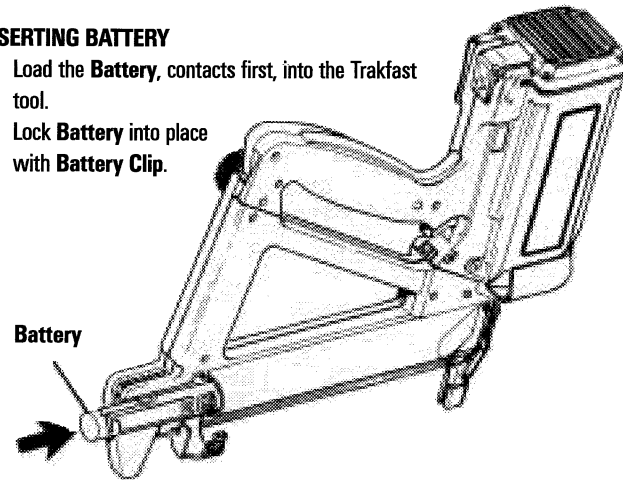
1. Connect the round plug of the transformer to the back of the charge base and plug the transformer into any 240 Volt wall outlet.
2. Place the battery (contacts first) firmly in the round hole of the charger base. The red LED will appear.
3. The battery is fully charged when the green LED appears.

NOTE: When charging a new battery for the first time, leave the battery in the charger for a full 24 hours.

- * Charger must be on a level surface.
- * Do not charge battery when temperature is below 5°C.
- * Do not drop battery or charger.
- * Do not allow metal objects to come in contact with battery terminals.
- * Do not puncture or attempt to open battery case or cells.
- * Do not store battery where it will be subjected to temperatures above 50°C.
- * Do not incinerate battery.
- * Do not use a defective battery charger, one that overheats and/or smokes when plugged in.

INSERTING BATTERY

1. Load the **Battery**, contacts first, into the Trakfast tool.
2. Lock **Battery** into place with **Battery Clip**.



BATTERY INDICATOR LIGHT

The illustration is a close-up of the side of the Trakfast tool.

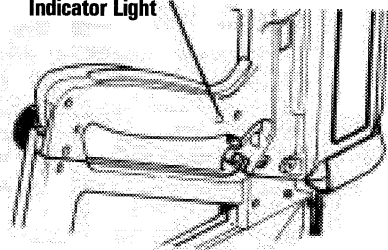
On the side of the Handle is a small plastic lens. This is the **Battery Voltage Indicator Light**

To check the battery voltage, the LED on the right should be flashing or blinking green.

Pushing down on the

Fastener Guide will turn on **Fan Motor** and LED will be a solid green. If the LED blinks or glows red, recharge the **Battery**.

Battery Voltage Indicator Light



FUEL CELL AND METERING VALVE

FUEL CONTAINER

DANGER

EXPLOSION/FIRE HAZARD

Read all safety instructions before using or handling Fuel Cell. Failure to follow all handling instructions may result in explosion or fire, causing severe personal injuries or property damage.

Keep away from heat, sparks, and open flame.

Do not puncture or attempt to open. Container is non-refillable.

Do not incinerate or attempt to reclaim or recycle container.

Exposure to temperatures above 50°C may cause container to burst, releasing flammable gas.

Do not smoke while installing or operating Metering Valve.

Never spray toward face or eyes.

Do not inhale spray.

Keep out of reach of children.

WARNING

Sunlight can raise the inside temperature of a motor vehicle above 50°C. Fuel cells should not be exposed to such temperatures as this could cause the cell to burst and release flammable gas.

There is a container within the **Fuel Cell**. This **Inner Container** actually holds the **Fuel**. The space between the **Inner Container** and the **Outer Cylinder** is filled with a different gas called the propellant, which is under pressure.

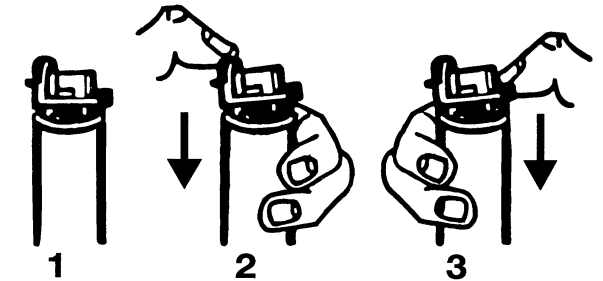
As the **Fuel** is used, propellant pressure actually "squeezes" the **Inner Fuel Container**, much as you would squeeze a tube of toothpaste. This squeezing action ensures that all of the **Fuel** will be used, and that the Trakfast tool can operate in any position.

Because of this container-within-a container design, you might hear the sound of fluid when shaking the **Fuel Cell** after all the **Fuel** has been used. This is the propellant which remains between the containers.

If you expose the empty **Fuel Cell** to extreme temperatures, the propellant gas will expand and could cause the container to burst, releasing flammable gases.

METERING VALVE

The **Metering Valve** contains the **Fuel Metering System** that ensures that the correct amount of fuel is injected into the combustion chamber. The **RED Metering Valve** is the only valve that will operate properly with the Trakfast tool.



STOP!

Before inserting the fuel cell into a tool, see instructions below. If the metering valve is on top of the fuel cell, proceed to **STEP 2**.

STEP 1

Metering valve has two grooves. Place the valve on the cell so that only the lowest groove is under the rim of the cell.

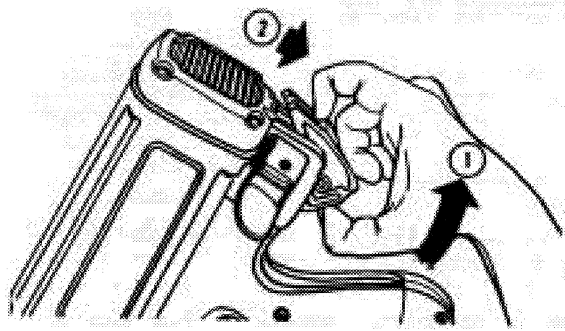
STEP 2

With the valve in position, press down on front side first until it clicks.

STEP 3

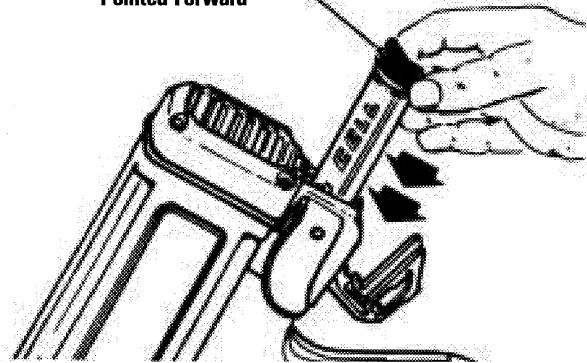
Press down on back side next until it clicks.

1. Push in and up
2. Pull out

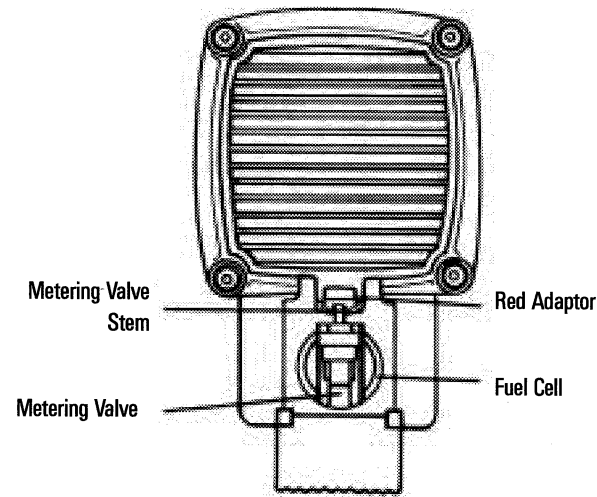


Next, with the **Metering Valve Stem** pointed toward the front of the tool, insert the **Metering Valve/fuel Cell Assembly**.

Metering Valve Stem
Pointed Forward

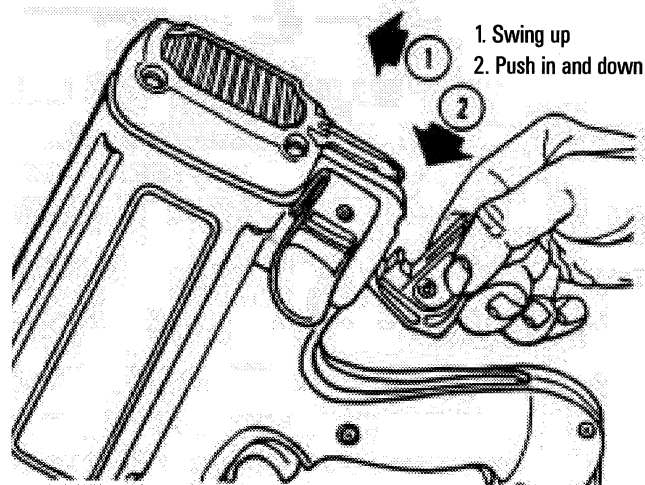


Top View of Trakfast tool



As you slide the **Metering Valve/Fuel Cell Assembly** into the Trakfast tool, you will notice that there is a **Red Adaptor** at the top of the **Cylinder Pocket**. As is shown in the illustration, this **Adaptor** is designed to ensure that the **Metering Valve Stem** is properly aligned with the small hole, or orifice that leads to the **Combustion Chamber**. Insert the **Metering Valve Stem** into the orifice of the red coloured **Adaptor**.

You complete the loading of **Fuel** in the Trakfast tool by closing the **Actuator Cover**. You do this by swinging it up and over the **Fuel Valve/Cylinder Assembly** and pushing down until the **Actuator Cover** snaps into position.



1. Swing up
2. Push in and down

9. DO NOT LOAD FASTENERS WITH THE TRIGGER OR WORK CONTACTING ELEMENT DEPRESSED. When loading fasteners into the Trakfast tool, you must avoid pulling the **Trigger** or while having the **Nose Piece** depressed. When the tool is placed on a bench or other surface, the **Nose Piece** might be depressed. When you are loading fasteners, you could accidentally pull the **Trigger** by grasping the **Handle** to steady the tool. These two actions will cause the Trakfast tool to operate, discharging a fastener.

10. FASTENER REMOVAL OR CLEARING JAMS. With the Trakfast tool pointed away from you and others, pull the **Follower** back slightly and push the **Release Lever**. Tip the tool **Nose** up slightly, and the fasteners will slide out the rear of the **Magazine**. If you have a jammed fastener, or other problem with the operation of your Trakfast tool you should stop attempting to use the tool and refer immediately to the **Servicing Section** of the manual.

11. NEVER ATTEMPT TO OPERATE THE TRAKFAST TOOL IF PARTS ARE LOOSE, DAMAGED, OR MISSING. Make sure all screws and nuts are properly tightened and all parts are properly installed and in good working order. If parts are missing, don't attempt to make temporary repairs....contact your local Ramset Sales Representative or Approved Service Centre immediately.

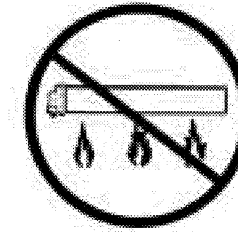
12. NEVER DRIVE FASTENERS ON TOP OF OTHER FASTENERS OR TOO CLOSE TO OTHER FASTENERS. Fastening on top of or too close to other fasteners can cause the fastener to ricochet and cause serious injury. Fasten only in areas where the entire shank can penetrate. Fastener spacing should be a minimum of 75mm.

13. NEVER FIRE INTO VERY HARD OR BRITTLE MATERIALS SUCH AS CAST IRON, TILE, GLASS, OR ROCK. These materials can shatter, causing sharp fragments and/or the fastener to fly freely.

14. NEVER CARRY FASTENERS OR OTHER HARD OBJECTS IN THE SAME POCKET OR CONTAINER WITH FUEL CELL. The **Fuel Cell** could be punctured, causing serious injury.

15. NEVER ALLOW ANYONE TO USE THE TRAKFAST TOOL UNLESS THEY READ AND UNDERSTAND THE TOOL MANUAL AND ALL SAFETY INSTRUCTIONS. It is the tool owner's responsibility to make sure that all Trakfast tool users read and fully understand all tool operation, safety and maintenance instructions.

16. FUEL CELL STORAGE. Fuel Cells contain flammable gases which are



under pressure and must be stored in a area where they will not be exposed to an open flame, sparks, or temperatures above 50° Celsius. Exposure to temperatures above 50°C may cause the Fuel Cells to leak or burst, releasing the flammable gases and creating a risk of fire or explosion.

17. FUEL CELL DISPOSAL. Never attempt to puncture, crush, burn or refill a **Fuel Cell**. Always dispose of empty **Cells** with trash that will not be burned. Also, never place the **Fuel Cell** with other materials for reclamation or recycling.

18. TOOL STORAGE. At the end of every workday, remove the **Battery Cell** and store it in the carrying case. Recharge the **Cell** only if required as indicated by a red charge light in the handle.

19. KEEP THE TOOL CLEAN. At the end of each work day, take a minute to wipe the Trakfast tool with a clean rag. A dirty tool is more likely to jam or malfunction.

20. NEVER PLACE YOUR HANDS OR FINGERS OVER THE NOSE OF THE TOOL. The fastener or piston can seriously injure your hand in the event of an accidental discharge.

TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEMS	SERVICE
Power/Exhaust Stage of Operation		
1. Tool operates properly, but fasteners do not drive fully.	1a. Battery cell is discharged.	1a. Charge Battery Cell.
	1b. Fuel Cell is low.	1b. Check Fuel Cell according to Operating Manual and replace as required.
	1c. There may be loss of seal in combustion chamber.	1c. Press Fastener Guide against workpiece for one minute. Pull trigger. If fastener does not drive, there is a leak that requires service.
2. Tool operates, but no fastener is driven.	2a. Fastener strip may be binding.	2a. Use only fasteners meeting Ramset specifications.
	2b. Follower not properly engaged behind fastener.	2b. Locate follower behind fastener strip and engage strip according to instructions in Operating Manual.
	2c. Jammed fastener.	2c. Clear jam according to Operating Manual.
3. Tool operates erratically or appears to be losing power-tool LED is green.	3a. Fuel Cell is low.	3a. Check Fuel Cell according to Operating Manual.
	3b. Spark Plug wire is loose.	3b. Contact your local Ramset Sales Representative or Authorised Service Centre.
	3c. Filter element is dirty, causing tool to overheat.	3c. Remove Filter element and clean according to Operating Manual. Use safe cleaning solution to remove stubborn debris.
	3d. Tool Sleeve or O-Rings are dirty	3d. Clean tool per Cleaning Procedure.
Returning/Purging Stage of Operation		
1. Tool operated and drove fastener, but piston did not return to up position.	1a. Built-up dirt and debris on Piston or in Nose bore.	1a. Clean piston and Nose bore with safety solvent. See Cleaning Procedure.
	1b. Mushrooming of Piston Tip.	1b. Contact your local Ramset Sales Representative or Authorised Service Centre.
	1c. Exhaust ports on the Sleeve are dirty or clogged.	1c. Return tool to your local Ramset Sales Representative or Authorised Service Centre.
	1d. Tool (Sleeve) or O-Rings are dirty.	1d. Clean tool per Cleaning Procedure.
2. Combustion Chamber does not drop after tool cycles.	2. Fastener Guide is damaged, or tool is dirty.	2. Clean tool or replace Fastener Guide as required.

If the Trakfast tool will not operate after following the above service directions, return the tool to your local Ramset Sales Representative or Authorised Service Centre.