

TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
Fan motor does not run.	<ul style="list-style-type: none"> • Check Battery • Check for solid green light • Red light — check Battery Contact (7505017) • Check Fan Motor and Head Switch connectors • Check Fan Motor (7405164) • Check Head Switch (404601)
Fan runs, but will not fire.	<ul style="list-style-type: none"> • Check Fuel Cell for expiration date on bottom • Change Fuel Cell • Check for oil fouled Spark Plug • Check for spark • Check MSU • Change Trigger Switch • Check position of Piston (should be up)
Fan runs all the time.	<ul style="list-style-type: none"> • Head Switch sticking (404601) or Trigger Switch (404490) • Pinched or shorted wire
Tool will not fire every time.	<ul style="list-style-type: none"> • Trigger switch sticking (404490) • Battery low • Old Fuel Cell (check expiration date on bottom) • Check for Piston Return • Check for oil fouled Spark Plug • Fuel Cell low
Tool fires, but pins do not shoot.	<ul style="list-style-type: none"> • Make sure Carrier (7405168) is not riding on side of fasteners • Constant Force Spring (7405169) is bent • Burr on Work Contact Element (801129) • Check for burr on Upper or Lower Rail • Check for burr in Shear Block
Pins not driving in all the way.	<ul style="list-style-type: none"> • Check application • Battery not charged • Fuel cell expired (check expiration date on bottom) • O-Ring (403992) bad • Seal and Wave Washer (7405056) compressed • Grommet on Upper Probe (801116 or 801132) worn • Piston Rings (7405055) not sealing or are opposite each other • Weak fan motor (7405164)
Tool not sparking.	<ul style="list-style-type: none"> • Oil fouled Spark Plug (clean plug) • Spark Unit bad (7405163) • Head Switch bad (404601) • Trigger Switch bad (404490)
Piston not returning.	<ul style="list-style-type: none"> • O-Ring torn (404482 - 403992) • Seal and Wave Washers (7405056) compressed • Work Contact Element (801129) burred
Won't fire overhead.	<ul style="list-style-type: none"> • Change Wave Washers (7405056) • Piston rings (7405055) not opposite each other or compressed • Air dam (401313) not in correct position
Misfiring.	<ul style="list-style-type: none"> • Check for burrs on Upper and Lower Rails (801112 and 801110) • Check bent Carrier/Follower Assembly (7405168) • Fuel Cell empty • Battery low • Fastener jammed in Shear Block (7405145 or 7405176)

Note: Solutions are listed in no particular order

TROUBLESHOOTING GUIDE

The troubleshooting charts on the following pages have been developed to provide a systematic approach to handling problems. The charts provide troubleshooting information for each phase of tool operation, and list the suggested corrective action for each symptom beginning with the simplest of most likely solution first.

Before attempting any service, always make sure you try operating the tool using a fresh, fully-charged battery first. If this doesn't work, place a new Fuel Cell in the tool also, and try again. **Many "tools won't operate" problems are the result of failure to make sure that the Fuel Cell is delivering fuel and that the Battery is fully charged.**

DANGER

DO NOT ATTEMPT TO OPERATE A TOOL THAT IS MISSING PARTS, OR THAT HAS OR IS THOUGHT TO HAVE SEVERELY DAMAGED COMPONENTS, SINCE ADDITIONAL TOOL DAMAGE OR PERSONAL INJURY COULD RESULT.

Always check the tool for proper operation before placing it back in service, but before operating the tool for the first time after performing service, go through the following checklist:

- Make sure all parts removed during service have been replaced in the tool. Do not attempt to operate the TrakFast tool if there are extra parts left over after assembly.

DANGER

OPERATING A TRAKFAST TOOL WITHOUT ALL PARTS PROPERLY INSTALLED MAY RESULT IN SEVERE PERSONAL INJURY TO TOOL USER AND BYSTANDERS AND CAUSE EXTENSIVE TOOL DAMAGE.

- Make sure that all hardware is securely tightened, and that Loctite #242 (blue) has been used where appropriate. Pay particular attention to Cap and Nose screws, since these screws help contain the forces that provide the power to operate your TrakFast tool.
- Make sure that the Work Contacting Element and Trigger operate freely, and that they do not bind in any position.
- Make sure that Handle halves, Magazine and Motor are properly assembled, and that no wiring is pinched or exposed between mating parts.
- Check the tool for labels, and replace any labels that are missing or that are no longer readable.

If the TrakFast tool will not operate after following the service directions in the Troubleshooting Guide, return the tool to an ITW Ramset Distributor Sales Representative for service.

PREPARING TOOL FOR OPERATION — TOOL PROBLEMS

SYMPTOM	POSSIBLE PROBLEMS	SERVICE
Fasteners do not slide freely into Magazine; strip does not advance into nose of tool.	Pin or pins not properly collated.	Use strip with proper collation.
	Damaged strip.	Discard the damaged strip
	Burr(s) in Shear Block	Replace Shear Block
Follower does not engage the strip properly; Follower snaps forward when released, bypassing strip.	Follower spring broken, missing or improperly installed.	Install new Constant Force Spring.
	Follower defective.	Replace Follower
Follower carrier does not advance.	Damaged Constant Force Spring	Replace Constant Force Spring.
	Improper assembly of Lockout Bracket.	Check for proper assembly.
Battery Clip does not latch securely.	Battery Clip broken or distorted.	Replace Battery Clip.

TROUBLESHOOTING GUIDE
PREPARING TOOL FOR OPERATION — BATTERY/CHARGER PROBLEMS

SYMPTOM	POSSIBLE PROBLEMS	SERVICE
Battery Cell doesn't appear to accept charge – green Charger light does not come on – red Charger light comes on or Charger flashes red/green lights.	Inoperative indicator lights on Charger.	Try Battery Cell in tool after 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. If tool LED is red or is off, check Charger output voltage.
	Battery Cell damaged or cycle life exhausted.	Replace the Battery Cell.
Battery Cell won't accept charge when Battery Cell is installed.	Battery Cell left in completely discharged state for extensive time.	Place Battery Cell in Charger for 3 hours, then try in tool. If tool LED still indicates red, replace Battery Cell.
Battery Cell won't fit in Charger opening freely.	Battery cell case or label is damaged.	Remove raised burrs or replace label. Do not use Battery Cell if plastic case is cracked or severely damaged.
Blue Charger light won't come on when Charger is plugged in; red light won't come on when discharged Battery Cell is inserted and red button is pushed.	Defective indicator light(s) and/or Charger.	Check Charger output voltage. Make sure Charger is plugged into an energized 110V outlet.
Blue Charger light comes on when Charger is plugged in; red light won't come on when discharged Battery Cell is inserted.	Battery Cell not completely inserted into Charger.	Check terminal end of battery for burrs on tube or scuffed label. Service as required. Replace severely damaged Battery Cell.
	Terminals in Charger not making contact with Battery Cell.	Unplug Charger and check if terminals are O.K. If not, replace Charger.
Charger gets hotter than normal, makes excessively loud noise, or smokes during charging cycle. Charger cord or wall plug gets hotter than normal.	Damaged Charger.	Discontinue use immediately and unplug from power source. Replace Charger and tag. Dispose of Charger to prevent accidental use.

TROUBLESHOOTING GUIDE
NORMAL STAGE OF OPERATION

Symptom	Possible Problems	Service
Fan not running – tool LED is off.	Battery Cell not charged.	Charge Battery Cell according to Owner's Manual.
	Magazine is loose, preventing current flow from Magazine to Handle and Cylinder Head.	Make sure Magazine is tight to nose of tool, and secure with Magazine Locking Knob.
	Magazine contacts at top of Magazine or contact posts in base of Handle are oily, dirty or corroded.	Clean or replace contacts.
	No current is passing through Handle Contact Board.	Check for battery voltage at plug of MSU Spark Unit or replace Handle Contact Board.
	Battery terminals or Magazine Battery Cell contacts are oily, dirty or corroded. Magazine battery spring is damaged.	Clean Battery Cell terminals. Replace Battery Contact Assembly.
Fan does not run or runs slower than normal. Tool LED is red.	Battery Cell is discharged.	Charge Battery cell.
Fan operates intermittently. Tool LED is green.	Fan Motor wire is loose at plastic connector or connector not fully engaged.	Replug in Fan Connector. Replace Fan Motor if wiring is bad.
	Battery Cell is marginal or Battery Cell contacts are dirty.	Charge Battery Cell or clean contacts.
Fan motor is noisy.	Fan Motor is improperly installed.	Install Fan Motor correctly.
	Fan Motor shaft is bent.	Replace Fan Motor.
	Fan Blades are bent or damaged.	Replace Fan Blade.
Fan not running – tool handle LED is blinking green.	Head Switch inoperable.	Replace Head Switch.
	Trigger Switch inoperative.	Check Trigger Switch. Replace Trigger Switch.

TROUBLESHOOTING GUIDE
PRE-COMBUSTION/COMBUSTION STAGE OF OPERATION

Symptom	Possible Problems	Service
Work Contact Element (WCE) doesn't go down all the way – tool does not operate.	WCE is bent or build-up of dirt in track restricts operation.	Remove and inspect WCE. Replace WCE as required.
	Cylinder Head O-Ring is dry or not seated in groove properly.	Lubricate Cylinder Head O-Ring with TrakFast Lubricating Oil or replace O-Ring if O-Ring does not seat in groove.
	Upper Sleeve O-Ring is dry or not seated in groove properly.	Lubricate O-Ring with TrakFast Lubricating Oil or replace O-Ring if O-Ring does not seat in groove.
Tool won't operate – Fan runs, LED is constant green. No spark apparent.	Battery Cell charge is marginal or contacts and terminals are dirty.	Recharge Battery Cell and clean contacts.
	Spark Plug wire is not connected properly.	Install spark plug wire.
	Spark Plug is dirty or damaged.	Clean or replace Spark Plug.
	Trigger Switch is improperly installed or inoperative.	Check switch for proper operation. Repair or replace as necessary. Check connection at MSU Spark Unit.
	Spark Unit is inoperative.	Check and replace MSU Spark Unit as required.
Tool won't operate. Fan does not run, LED blinks green.	Spark Unit is inoperative.	Check Spark Unit for spark. Replace if bad.
	Head Switch is inoperative.	Check Head Switch and connections. Replace as necessary.
	Cage is deformed or bent.	Check Cage for bent arms or deformed base. Repair or replace as necessary.
	Grommet in Upper Probe is damaged or missing.	Check and replace Upper Probe as necessary.
Tool won't operate – Fan runs, LED is constant green, audible spark apparent but not visible at Spark Plug.	Spark Plug wire shorting to ground at Cylinder Head Casting.	Make sure Plug wires correctly seated into Spark Plug. Replace Spark Plug wire as necessary.
	Spark Plug is fouled, causing spark to ground out to Cylinder Head.	Clean Spark Plug gap and Cylinder Head.

TROUBLESHOOTING GUIDE
POWER/EXHAUST STAGE OF OPERATION

Symptom	Possible Problems	Service
Tool works properly, but pins won't drive fully.	Check application.	Check application.
	Fuel Cell is low.	Check Fuel Cell according to Owner's Manual.
Tool works properly, but pins are consistently under-driven.	Bumper is not seated properly in base of Sleeve.	Seat Bumper properly.
	Driver Blade broken at tip or worn excessively.	Replace Piston Assembly.
	Driver Blade loose at Piston.	Replace Piston Assembly.
Tool operates, but doesn't drive pins.	Follower not properly engaged behind pin strip.	Locate Follower behind pin strip and engage strip according to instructions in Owner's Manual.
	Jammed fastener.	Clear jam by removing Magazine according to Owner's Manual.
	Burr(s) in Shear Block	Replace Shear Block.
	Burr(s) in Upper or Lower Rail.	Replace Upper and/or Lower Rail.
	Piston not fully returning.	Check O-Rings, check Flat Washer, check Wavy Washers. Replace as necessary.
	Driver Blade loose at Piston.	Replace Piston Assembly.
	Follower Constant Force Spring improperly installed, damaged, dirty or weak.	Replace Constant Force Spring.
	Shear Block is loose, preventing pin feed into nose of tool.	Apply Loctite #242 (blue) to all Shear Block Screws and tighten securely.
Tool works, but pin is driven at an angle into concrete or deflects off work surface.	Driver Blade broken at tip or worn excessively.	Replace Piston Assembly.
Tool works erratically, LED is constant green.	Battery Cell charge is marginal.	Charge Battery Cell according to Operator's Manual.
	Fuel Cell is low.	Check Fuel Cell according to Operator's Manual.
	Spark Plug wire is loose.	Check Spark Plug wire.
	Filter elements are dirty, causing tool to overheat.	Remove Filter elements and clean according to Operator's Manual. Use safe cleaning solution to remove stubborn debris.
	Battery Contact Assembly is damaged or dirty.	Replace Battery Contact Assembly.
Tool won't work as fast as normal; operator must slow pace or tool won't cycle.	Filter elements are dirty, causing tool to overheat.	Remove Filter elements and clean according to Operator's Manual. Use safe cleaning solution if necessary.
	Tool Sleeve is dirty.	Clean Sleeve/Mid-Check Assembly.

TROUBLESHOOTING GUIDE
POWER/EXHAUST STAGE OF OPERATION (cont'd)

Symptom	Possible Problems	Service
Tool cycles with a “poof” sound – no pin is driven.	Piston Rings are damaged or not seated properly in piston ring grooves.	Check Piston Rings and service as required.
	Piston Retaining Ring is damaged, missing, or not seated properly in groove.	Check Piston Retaining Ring and serve as required.
	Sleeve or Cylinder Head O-Ring is broken or damaged.	Check Sleeve or Cylinder Head O-Ring and service as required.

RETURNING/PURGING STAGE OF OPERATION

Symptom	Possible Problems	Service
Tool drove pin, but Piston Assembly won't return to up position.	Build-up of dirt and debris on Driver Blade in Nose bore.	Clean Piston Assembly and Nose bore with safety solvent and lubricate with TrakFast Lubricating Oil.
	Piston Rings are dirty, preventing full contact with sleeve walls, or are damaged.	Check Piston Rings for free-floating engagement in Piston grooves, and clean or replace.
	Combustion Chamber O-Rings are dry, damaged, or swollen, preventing vacuum seal from being held.	Lubricate or replace O-Rings.
	Mid-Check Seal Washer is dirty, bent or damaged.	Check Seal Washer and clean or replace.
	Mid-Check Wave Washers are damaged (flattened).	Replace Wave Washers.
	Debris in Mid-Check area is preventing proper operation of Mid-Check.	Check Mid-Check area for debris or Bumper for fragments and clean.
Combustion Chamber won't drop when Trigger is released after tool cycles.	WCE is burred or damaged.	Replace Work Contact Element (WCE)
	Head O-Ring is dry, damaged or swollen.	Check Head O-Ring and Lubricate or replace.
	Combustion Chamber O-Rings are dry, damaged or swollen.	Check Combustion Chamber O-Rings and lubricate or replace.
	Air Dam is pinched between Housing and casting.	Re-seat Air Dam.