IT IS VERY IMPORTANT THAT THE OPERATOR OF THIS TOOL COMPLETELY READS AND UNDERSTANDS THE FOLLOWING:

NEVER CLOSE TOOL WITH ANY PART OF HAND OVER MUZZLE END.

PROPER TRAINING ACCORDING TO THE CURRENT ANS STANDARD A 10.3, SAFETY REQUIREMENTS FOR SPEED. THIS TOOL USES FOUR LEVELS OF POWER; GRAY THROUGH YELLOW LOADS (LEVELS 1-4) AND .300, 8MM HEAD FASTENERS WITH PIN TYPE TOOL BODIES.

Suitable base materials are based on the following factors:

- Thickness of the steel
- Service load design of the steel
- Shank diameter of the fastener
- Depth of point penetration through the steel

While powder-actuated fasteners can be used successfully in concrete, certain masonry materials, and A36 brittle material for powder-actuated fasteners?

a) Soft masonry
b) Concrete block

The following table lists typical embedment depths expected in the fastener materials. This will vary greatly depending on the density of the materials used. The table should be used as a guide only since the consistency of these materials varies. If in doubt, a job site test performance load should be conducted.

**BASE MATERIAL THICKNESS**

Steel base materials should be a minimum of 1/8" in thickness.

**EDGE DISTANCE**

For installations in A36 steel, 1/2" is the recommended minimum edge distance.

**SHORING**

A recommended minimum distance between fastenings is 1/10 of center to center for installations in ASTM A 36 steel.

**INSTALLATION IN STEEL**

For permanent applications when using pins in steel, first determine the thickness of the face to be fastened. To do this, the thickness of the steel base material plus a minimum of 1/4" to allow for proper penetration. This will be the minimum fastener Shank length required for the particular application. An excessively long Shank can pull through the steel resulting in a reduced load capacity. For removable applications with threaded shanks, the Shank length required is equal to the thickness of the steel base material plus a minimum of 1/4" to allow for proper penetration. This will be the minimum Shank length required. Do not select a Shank length longer than this requirement. An excessively long Shank can pull through the steel resulting in a reduced load capacity. To determine the Shank length required, add the threaded Shank length to the minimum Shank length. Do not exceed the total threaded Shank length, Maximum tightening torque values are listed in the table below. Use of a nut setter is recommended to reduce the possibility of overtightening the fasteners, for critical applications perform a test job.

**SPREAD**

Screwing fasteners too close together in concrete or masonry can cause cracking. The depth of embedment should be as shown in the order below.

**FASTENER LENGTH SELECTION IN CONCRETE**

For permanent applications using pins in concrete, first determine the thickness of the face to be fastened. To do this, add the required embedment or penetration into the Shank length required for the particular application. The Shank length required for applications in the face of masonry block, select a fastener Shank length equal to the thickness of the face. Select a Shank length equal to the face and not exceed the thickness of the face. Shank length is important for securing the block to the fastened masonry block. Select a Shank length equal to the thickness of the face. Shank length is important for securing the block to the fastened masonry block. Shank length is important for securing the block to the fastened masonry block. Shank length is important for securing the block to the fastened masonry block. Shank length is important for securing the block to the fastened masonry block. Shank length is important for securing the block to the fastened masonry block. Shank length is important for securing the block to the fastened masonry block. Shank length is important for securing the block to the fastened masonry block. Shank length is important for securing the block to the fastened masonry block. Shank length is important for securing the block to the fastened masonry block.

**SPREAD**

Screwing fasteners too close together in concrete or masonry can cause cracking. The depth of embedment should be as shown in the order below.

**FASTENER INSTALLATION REQUIREMENTS**

It is important to understand the required minimum base material thickness requirements along with the minimum Shank length requirements. Failure to follow these requirements can result in an unsatisfactory installation and create a safety hazard.

**BASE MATERIAL THICKNESS**

Concrete base material should be at least 7/8" as thick as the steel embedment depth required. To determine the minimum threaded length, add the threaded Shank length to the minimum Shank length. Do not exceed the total threaded Shank length, Maximum tightening torque values are listed in the table below. Use of a nut setter is recommended to reduce the possibility of overtightening the fasteners, for critical applications perform a test job.

**INSTALLATION IN STEEL**

The following guidelines are based on the installation of a fastener in ASTM A 36 structural steel with the pin inserted perpendicular to the steel surface. Fasteners that are inserted perpendicular to the steel surface will provide a minimum of 1/8" to 1/4" of friction. Use in higher strength structural steel applications where the pin does not penetrate more than 1/2" into a steel member or concrete of thickness greater than 0.75", .360 pin performance may be recommended.

**BASE MATERIAL THICKNESS**

Steel base materials should be a minimum of 1/8" in thickness.

**EDGE DISTANCE**

For installations in A36 steel, 1/2" is the recommended minimum edge distance.

**SHORING**

A recommended minimum distance between fastenings is 1/10 of center to center for installations in ASTM A 36 steel.

**INSTALLATION IN STEEL**

For permanent applications when using pins in steel, first determine the thickness of the face to be fastened. To do this, the thickness of the steel base material plus a minimum of 1/4" to allow for proper penetration. This will be the minimum fastener Shank length required for the particular application. An excessively long Shank can pull through the steel resulting in a reduced load capacity. For removable applications with threaded shanks, the Shank length required is equal to the thickness of the steel base material plus a minimum of 1/4" to allow for proper penetration. This will be the minimum Shank length required. Do not select a Shank length longer than this requirement. An excessively long Shank can pull through the steel resulting in a reduced load capacity. To determine the Shank length required, add the threaded Shank length to the minimum Shank length. Do not exceed the total threaded Shank length, Maximum tightening torque values are listed in the table below. Use of a nut setter is recommended to reduce the possibility of overtightening the fasteners, for critical applications perform a test job.

**SPREAD**

Screwing fasteners too close together in concrete or masonry can cause cracking. The depth of embedment should be as shown in the order below.
**WARNING**

Before operating this tool, study the manual carefully and develop a thorough understanding of the contents.

**QUALIFIED TOOL OPERATOR EXAMINATION**

A ‘Qualification Tool Operator’ examination (sold separately) is required. Do not operate the tool unless your Manual has been completed by a qualified tool operator.

**INSTALLATION IN STEEL**

The following guidelines are based on the installation of a fastener in ASTM A 36 structural steel with the following specifications: 0.5” dia. Fastener head, 0.25” stud length, and a maximum 6” of 1/8” to a maximum of 3/8” for use in higher strength structural steel applications where the pin does not penetrate the fastener head; and a thickness of greater than 3/8”, i.e. pin only applications are acceptable.

**BASE MATERIAL THICKNESS**

Steel base materials should be a minimum of 1/8” in thickness.

**EDGE DISTANCE**

For installations in ASTM A 36 steel, 1/2” is the recommended minimum edge distance.

**SPACING**

There is no recommended minimum distance between fastenings. It is 1-1/2” center to center for installations in ASTM A 36 steel.

**Fasterer Installation Requirements**

It is important to understand the required minimum base material thickness requirements along with the minimum required base material edge requirements. Failure to follow these requirements can result in an unsuccessful fastening and create a safety hazard.

**BASE MATERIAL THICKNESS**

Concrete base material should be at least 6” thick (20.3 cm) and 12” wide (30.5 cm) for maximum performance. The following table lists typical embedment depths expected in the concrete base materials. The fastener will vary depending on the density of the concrete materials. This table should be used as a guide only since the consistency of these materials varies. When in doubt, a job site performance test should be conducted.

**SMALL MACHINERY**

When driving fasteners too close to concrete or masonry can cause the masonry to crack. The fastener is considered subject to failure. The following table lists the maximum edge distance that can be achieved using specific fastener lengths. The table should be used as a guide only since the consistency of these materials varies. When in doubt, a job site performance test should be conducted.

**COUNTERSUNK DRIVING**

The most common fastener used in concrete is the countersunk fastener. This fastener is designed to design and can be driven into the concrete at a slight angle to create a flush head. The countersunk fastener is ideal for use in high density concrete as it will not stick out of the surface. The countersunk fastener is also ideal for use in situations where a flush head is required. The countersunk fastener is ideal for use in situations where a flush head is required.

**Fasterer Length Selection in Concrete**

For professional applications using pin in concrete, the first consideration for the thickness of the fixture is to add the required embedment or penetration into the fixture. This is achieved by subtracting the length of the fixture from the thickness of the fixture and the length of the fixture should be used as a guide only since the consistency of these materials varies. When in doubt, a job site performance test should be conducted.

**TOOL OPERATION**

Operation: Be sure to read and understand all the safety precautions and training in this manual before attempting to operate the tool. Check to be sure the tool is not damaged and the pinater moves freely within the base and, no foreign objects are fasteners in the fixture/Patent/Safety data for the tool before using the tool.

1. Always position the tool in a safe direction away from bystanders and the operator. Slide the tool forward. This can be done in any direction, so proceed with caution. Use a pointed pin in the fixture to align the pin. The pin should be firmly held to prevent the fixture from moving out of alignment.

2. Always load the fixture before inserting powder load to prevent injury to the operator or bystanders. Insert the desired number of pins and powder load until the fixture is filled. This can be done in any direction, so proceed with caution.

3. Never use a powder actuated tool to exceed the safety and or numerical limitations of the tool.

4. Only use the full powder load to drive the fixture. Never use any less powder load to drive the fixture. This can be done in any direction, so proceed with caution.
Fasterer Functioning

To begin to use the testing procedures for this tool, it is important to understand how a powder actuated tool works. A Powder actuated tool is considered to be a direct drive or indirect type of tool because it is driven directly into the base material and the action causes a tremendous force to be transferred to the fastener. Powder powered fasteners are specially designed and manufactured using an air-water propellant system to be used in the driving tool. Only fasteners manufactured or supplied by Powershield should be used in this tool.

Functioning in concrete

The performance of a powder actuated fastener when installed into concrete or masonry base materials is based on the following three factors:
- Strength of the base material
- Shank diameter of the fastener
- Depth of embedment into the base material

In addition to these factors, installation tool accessories such as a step drill, which reduces the dimensions of the concrete cup to drill, may be used to provide better performance. When a powder actuated tool is driven into concrete, it drills the volume of concrete around the embedded facet of the fastener. The concrete around the fastener is compressed as it is penetrated and is pressure against the back of the face shell. Additionally, the actuating device generates heat as it moves through the powder particles. This combination of compression and fusion forms a hardened joint between the tool and concrete.

While powder actuated tools provide excellent results when installing fasteners into concrete and masonry, they may not be the most cost-effective method when installing fasteners into non-structural concrete or masonry. When using poweder actuated tools in non-structural concrete or masonry, it is recommended to use a smaller diameter fastener (1/8” - 5/32”) and lower loads (20 – 40 lbs) to reduce damage to the concrete or masonry base material.

Checking the correct fastener

It is necessary to use the Operator’s Manual prior to operating a Powershield fastener. The correct fastener is required to provide the best performance in terms of strength and durability. The fastener chosen should be designed for the specific application and the materials being used. The following guidelines should be followed when selecting the correct fastener:

1. Use the fastener which is designed for the specific application and the materials being used.
2. The fastener should be designed for the specific application and the materials being used.
3. The fastener should be designed for the specific application and the materials being used.

In summary, Powershield fasteners are designed to provide the best performance in terms of strength and durability. The correct fastener should be selected based on the specific application and the materials being used. The following guidelines should be followed when selecting the correct fastener:

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LOW POWER ACTUATED FASTENING TOOL

Faster Tooling: The use of powder actuated fastening tools is an economical alternative to drilling, screwing, and riveting. These tools are designed to provide fast, safe, and efficient installation of fasteners in various materials, making them ideal for construction and renovation projects.

Installation Instructions

1. Select a flat, clean, and smooth surface to install the fastener. This is important to ensure proper alignment and adhesion of the fastener to the surface.

2. Prepare the surface by removing any debris or dust. This is crucial to ensure a secure and lasting bond between the fastener and the surface.

3. Insert the fastener into the tool magazine. Make sure it is securely locked in place.

4. Choose the appropriate safety gear and follow all safety guidelines provided by the manufacturer.

5. Position the tool over the selected area and slowly press the trigger to activate the fastening process. Maintain steady pressure until the fastener is fully embedded.

6. After completion, inspect the fastener and surface for any signs of damage or misalignment.

Safety Guidelines

- Always wear appropriate safety gear, including goggles, gloves, and a hard hat, when operating the tool.
- Keep the tool and its magazine clean and free of debris to ensure smooth operation.
- Follow all manufacturer’s instructions and safety guidelines provided with the tool.
- Do not use the tool near flammable materials or in explosive environments.

Maintenance and Storage

- After use, clean the tool and magazine thoroughly and store in a dry, safe location.
- Regularly check the tool’s components for wear and replace any damaged parts as necessary.

Troubleshooting

- If the tool is not functioning properly, check for obstructions in the magazine or damage to the tool’s components.
- Contact the manufacturer’s customer service for assistance in troubleshooting.

Conclusion

Powder actuated fastening tools are an efficient and versatile method for installing fasteners in various materials. By following the proper installation guidelines and safety precautions, users can ensure a safe and successful completion of their projects.

For more information on specific models and accessories, refer to the manufacturer’s manual or contact the distributor directly.
WHY USE A POWDER ACTUATED TOOL? 

- FASTER: The powder actuated tool can drive a fastener faster than any other method of fastening.
- ECONOMICAL: Powder actuated tools are often the most economical fastening method available.

FUNCTIONING IN STEEL

- Functioning in steel is a critical point to understand in order to ensure correct tool function and injury prevention.
- Steel base materials should be a minimum of 1/8" in thickness.
Low Velocity Powder Actuated Fastening Tool

**WARNING!**

Always read the instruction and safety manual before using your tool. This equipment is guarded for safe operation. Always follow the instructions, warnings, and cautions in the tool's manual. Failure to do so may result in serious injury or death.

**ACHEL!**

DANGER TO AVOID SERIOUS INJURY OR DEATH: Never operate this tool with any part of your foot, hand, or fingers directly below the tool. Always hold the tool firmly while operating it. Failure to do so may result in serious injury or death.

**RISK TO AVOID SERIOUS INJURY OR DEATH:** Never operate this tool with any part of your foot, hand, or fingers directly below the tool. Always hold the tool firmly while operating it. Failure to do so may result in serious injury or death.

**WARNING:**

When using a powder actuated tool, it is important to understand how a powder actuated tool works. The powder actuated tool is designed to be used by a trained professional. It is not recommended for use by anyone else. Failure to follow the instructions and warnings in this manual may result in serious injury or death.

**CAUTION:**

Never use a powder actuated tool on a surface that is too smooth or too rough. This may result in the tool not being able to penetrate the surface properly.

**INSTRUCTION:**

Always read the instruction and safety manual before using your tool. This equipment is guarded for safe operation. Always follow the instructions, warnings, and cautions in the tool's manual. Failure to do so may result in serious injury or death.

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PREPARATION FOR LOADING THE TOOL

1. Use the tool in its intended purpose only.
2. Tool must be checked prior to operating to make sure they are not faulty or partially loaded with a powder cartridge.
3. Ensure safe operation, perform the daily function test described in this manual. Be sure the tool is not loaded prior to performing this test.
4. Do not operate the tool unless all of the以上 are in place and operating properly. Always test to use a real fastener/operating. Call 1-800-543-3444 for assistance.
5. Never abuse the safety of your tool. Be sure that you understand the safety of your tool before using it. Your tool must be in a state of readiness.
6. Do not use a tool without a fastener. The tool will not operate if the fastener is not in place. Be sure that the tool is not loaded prior to performing this test.
7. Fastener must be loaded prior to loading the powder load, to prevent injury to operator or bystander in the event of an accidental discharge.
8. Do not use a tool without a fastener. The tool will not operate if the fastener is not in place. Be sure that the tool is not loaded prior to performing this test.
9. Fastener must be loaded prior to loading the powder load, to prevent injury to operator or bystander in the event of an accidental discharge.
10. Do not load tool without a fastener in place. Be sure that the tool is not loaded prior to performing this test. Fastener must be loaded prior to loading the powder load, to prevent injury to operator or bystander in the event of an accidental discharge.

Fastener Selection Guide

Piston stroke is the forward position. Piston does not extend further when jammed against powder load retainer pin.

Chipped or damaged piston Tool not held or used surface squarely. This discharges the powder to the head of the pin and causes damage to the piston.

Piston load does not eject after firing Tool not depressed completely. See “Tool does not depress completely” below.

Powder load does not eject after firing Stick powder load. Remove barrel assembly from tool and carefully unload residue. Carefully pull the piston out of the barrel. Brush or clean products and gently push load back into chamber. DANGER! The load is not under any extreme pressure when removing to avoid discharge. Load it load does not come out very well, call your Powder Fasteners Authorized representative.

Barel will not open easily Bern piston. Remove and replace piston.

Chopped or damaged piston Tool not held or used surface squarely. This discharges the powder to the head of the pin and causes damage to the piston.

Machine piston as shown in page ?? Powder residue may be performed only by qualified individuals.

Foreign material jammed between the barrel and housing. Clean and remove foreign particles from barrel and housing.

Barel opens too easily Need piston. spring has worn out. Remove and replace with a new spring.
Always hold the tool perpendicular to the work surface. Hold the tool firmly against the work surface for at least 30 (thirty) seconds in case of a delayed load discharge. Then carefully remove the load and/or fastener to pass through the operator’s hand.

NOTE: If excessive force is required, stop and determine why the fastener can not be set. Review the various power levels. Keep them segregated in clearly identified containers.

4. Do not load the tool until you are ready to make a fastening. Check the power load level before inserting it into the chamber. Always hold the tool de-pressed against the work surface until the proper level is found.

PRIOR TO OPERATING THE TOOL
1. Warning signs should always be posted within the area in which a powder actuated tool is to be used. These signs should be at least 10" x 10" in size with boldface type that is not less than 1" in height. The sign should state: “Powder Actuated Tool In Use”.

- Approved safety shoes should always be worn by operator or bystanders when using a powder actuated tool. Other personal safety protection as required should also be used.

- Always confirm the load is correct for the gun. Incorrect loads can cause damage to the piston or jammed against piston reset pin

- If the load does not fail to discharge after the trigger is pulled, the tool must be kept depressed against the tool body until the powder load has been removed. If the powder load does not eject Barrel is not pulled forward Firmly snap the tool open.

- Never discard unfired powder loads into a trash container.

- Do not attempt to unload or disassemble a jammed, stuck or broken tool as improper handling may cause it to discharge and strike operator and/or bystander. A jammed tool must be pointed in a safe direction at all times. Throw the tool and load it up. Call your Powers Fasteners representative for proper assistance.

- If excessive force is required, stop and determine why the fastener can not be set. Review the various power levels. Keep them segregated in clearly identified containers.

- Powders, powder loads and powder tools should be stored under lock and key. Must be unattended when not in use.

- Tool malfunction
1. In the event a load fails to discharge after the trigger is pulled, the tool must be kept depressed against the work surface until the powder load is cleared. Carefully remove the entire load tool, and dispose of it in a can, bucket or other nonflammable material. Never attempt to remove or pry a load out of a chamber.

- Never discard unfired powder loads into a trash container.

- Do not attempt to unload or disassemble a jammed, stuck or broken tool as improper handling may cause it to discharge and strike operator and/or bystander. A jammed tool must be pointed in a safe direction at all times. Throw the tool and load it up. Call your Powers Fasteners representative for proper assistance.

- Tool License Coordinator
- Mailing Address: P.O. Box 978, New York, NY 10101
- Telephone: 1-800-521-8526
- E-mail: license@powersfasteners.com

- Fold along dotted line and tape shut before mailing

- The T1000 Tool is warranted for 90 days from date of purchase.

- Safety Precautions
- Safety is now more important than ever when selecting any powder actuated tool. You must read and understand the contents of this manual. You must be familiar with all functional and safety precautions of the tool. It is your responsibility to obtain proper training and a Powers Fasteners operator card prior to using this tool in compliance with the current American National Standards. Safety Requirements for Powder Actuated Fastening Tools and the National Safety Council’s Yellow Book of Standard Operating Practices. Safety measures and local regulations should also be followed. When using this tool, you must have the qualified operators card in your possession.

- Revocation of card: Failure to comply with any of the rules and regulations for safe operation of powder actuated tools shall be cause for the immediate revocation of your qualified operator card.

The following is a summary of safety precautions to be followed when operating a Powers Fasteners powder actuated tool. Failure to follow these safety instructions can result in death or serious injuries to operators or bystanders.

- Never hold or operate a powder actuated tool without reading and understanding the entire contents of this manual.

- To use only use fasteners and powder loads designed for this tool as supplied by Powers Fasteners. Do not attempt to use altered loads or powder loads designed for another tool.

- Do not load powder load without a fastener. The powder load will not stick. If powder load will not stick, replace it with another powder load.

- When you are not using the tool, always keep it pointed in a safe direction. Never leave it unattended.

- If the load does not fail to discharge after the trigger is pulled, the tool must be kept depressed against the tool body until the powder load has been removed. If the powder load does not eject Barrel is not pulled forward Firmly snap the tool open.

- Do not attempt to unload or disassemble a jammed, stuck or broken tool as improper handling may cause it to discharge and strike operator and/or bystander. A jammed tool must be pointed in a safe direction at all times. Throw the tool and load it up. Call your Powers Fasteners representative for proper assistance.

- Never discard unfired powder loads into a trash container.

- Do not attempt to unload or disassemble a jammed, stuck or broken tool as improper handling may cause it to discharge and strike operator and/or bystander. A jammed tool must be pointed in a safe direction at all times. Throw the tool and load it up. Call your Powers Fasteners representative for proper assistance.

- If excessive force is required, stop and determine why the fastener can not be set. Review the various power levels. Keep them segregated in clearly identified containers.

- Powder load will not stick. If powder load will not stick, replace it with another powder load.

- Powder load will not eject after firing tool

- Powder load will not eject Barrel is not pulled forward completely when the tool is cycled. Firmly snap the tool open. Never use powders that can result in serious injury to the operator or bystanders.

- Powder load will not eject barrel is not pulled out of a chamber

- Powder load will not eject Barrel is not pulled forward completely when the tool is cycled. Firmly snap the tool open. Never use powders that can result in serious injury to the operator or bystanders.

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- Powder load will not eject Barrel is not pulled forward completely when the tool is cycled. Firmly snap the tool open. Never use powders that can result in serious injury to the operator or bystanders.
Face the tool with care. Insert the powder load starting with the lowest power level. If this load does not set the fastener, try the next higher load until the proper level is attained. Failure to follow this procedure may cause the fastener to be overpowered. If this occurs, the fastener may fully penetrate the base material.

Prior to operating the tool:

1. Warning signs should always be posted within the area in which a powder actuated tool is to be used. These signs should contain at least 8" x 10" in size with boldface type that is not less than 1" in height. The sign should carry a "Powder Actuated Tool in Use" label.

2. Approved safety guidelines should always be worn by operator or bystander to protect their eyes from flying particles. Hearing protection should always be worn by the operator and bystanders when using a powder actuated tool. Other personal safety protection as required should also be used.

3. Never modify or fabricate parts for use in your Powers Tool. Use only Powers Fasteners, loads, and tool parts.

4. Pull the barrel all the way back to close the tool. Do not attempt to close the tool by hand. The tool should be manually closed, with hands away from muzzle.

5. Always check the tool for proper operation. Test the parts for damage or bent or damaged parts. A damaged tool must be turned in for service at all times.

6. Wear the tool for its intended purpose only.

Preparation for loading the tool:

1. Tools shall be checked prior to operating to make sure they are not faulty or poorly loaded with a powder load and barrel.

2. To ensure safe operation, perform the daily function test described in this manual. Be sure the tool is not loaded prior to performing this test.

3. Do not operate the tool unless all parts are in place and operating properly. Never attempt to use a malfunctioning tool.

4. Always check the parts for damage or bent or damaged parts. A damaged tool must be turned in for service at all times. Tag the tool and lock it up. Call your Powers Fasteners representative for proper assistance.

Troubleshooting

Always check instruction manual for proper assembly of parts

Tool does not fire

Power level too high / Pin too short

Use a lower powder load number or a longer pin.

Soft base material

Check base material specification or contact Powers Fasteners

Tool does not fire

Tool does not completely set

See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Tool doesn't depress completely

Tool does not completely set. See "Tool does not completely set" section below.

Model T1000

- Tool is not loaded correctly.
- Tool has been overdriven and is stuck in the forward position. Tap the tool against a hard surface.
- Tool has been forced against a hard surface. The tool should be manually closed, with hands away from muzzle.
- Barrel has been pulled back against a hard surface.
- Excessive build-up of dirt in the tool. Disassemble and clean tool.
- Tool has been dropped on a hard surface. Tool does not operate properly. Replace tool.

Material damaged or bent piston Tool not held on work surface Squarely. This allows the piston to slip off the head of the pin and cause damage to the tool.

Machine piston as shown on page 77. Front mating surface may be operated only by qualified individuals.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't depress completely

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Power level too high / Pin too short

Use a lower powder load number or a longer pin.

Soft base material

Check base material specification or contact Powers Fasteners

Tool doesn't fire

Tool does not completely set

See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

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Troubleshooting

Always check instruction manual for proper assembly of parts

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Always check instruction manual for proper assembly of parts

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Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.

Troubleshooting

Always check instruction manual for proper assembly of parts

Firing pin damaged

Replace damaged firing pin.

Tool doesn't fire

Tool does not completely set. See "Tool does not completely set" section below.

Firing pin damaged

Replace damaged firing pin.
**Safety Precautions**

Safety is your primary responsibility when operating any powder actuated tool. You must read and understand the contents of this manual. You must be familiar with all functional and safety requirements of the tool. It is your responsibility to obtain proper training and a Powers Fasteners operator's permit to use this tool in compliance with the current American National Standard Z35.3.3-1992 (SAE) for Powder Actuated Fastening Systems and the Federal Occupational Safety and Health Administration Standards (OSHA). Existing state or locale regulations should also be followed. When using this tool, you must have the qualified operator card in your possession.

**Precaution of card**

Failure to comply with any of the rules and regulations for safe operation of powder actuated tools shall be cause for the immediate revocation of your qualified operator card.

**Maintenance**

A continuing program of safety is required to be followed when operating a Powers Fasteners powder actuated tool. Failure to follow these safety instructions can result in serious injury or death to operators or bystanders.

**OPERATING THE TOOL**

1. WARNING: Users should always position themselves in the area where a powder actuated tool is to be used. The gun sights should always be set at 8° and 10° in side view to indicate that is less than 1° in height; the gun sights should state "Powder Actuated Tool in use!".

2. Approved safety goggles should always be worn by operator or bystander to protect their eyes from flying particles. Hearing protection should always be worn by the operator and bystanders when using a powder actuated tool. Other personal safety protection as required should also be used.

3. Never modify or fabricate parts for use in your Powers tool. Use only Powers Fasteners, loads, and tool parts.

4. Hands or other body parts must never be placed in front of muzzle/barrel. Accidental discharge can cause piston to discharge and strike operator and/or bystander. A jammed tool must be pointed in a safe direction at all times.

5. Powder loads should never be used in firearms. They are normally more powerful than the cartridges supplied in firearms.

6. Never attempt to install a fastener in an area that has been welded or cut with a torch as these procedures may cause the fastener to be overpowered. If this occurs, the fastener may fully penetrate the base material or fastener to pass through the operator's hand.

7. Never attempt to install a fastener in the same cavity as the fasteners or other load head. Never attempt to use powder actuated tools in a flammable or an explosive atmosphere.

8. Never attempt to install a fastener in a cracked or spalled area in concrete. Place fasteners at least 3" (three inches) away from a spalled area to prevent the possibility of the fastener bending and striking an operator or bystander.

9. Do not attempt to install fasteners in areas that have been wetted out with water or put through any process that may cause local hardening of the tool.

10. Do not fire a powder actuated tool if the breech is clear. Insert the powder load starting with the lowest power load or fastener.

11. Never attempt to install a fastener without the powder load. Do not fire a powder actuated tool when the breech is clear or a spalled area in concrete. Place fasteners at least 3" (three inches) away from a spalled area to prevent the possibility of the fastener bending and striking an operator or bystander.

12. Always hold the tool perpendicular to the work surface. Hold the tool firmly against the work surface for a minimum of 30 (thirty) seconds in case of a delayed load discharge. Then carefully remove the entire load strip and dispose of it in a can of water or other nonflammable liquid. Never attempt to fire a powder actuated tool if the breech is clear or an spalled area in concrete.

13. Do not attempt to install a fastener in a spalled area of the base material. A jammed tool must be pointed in a safe direction at all times.

14. Do not attempt to install a fastener in an area that has been welded or cut with a torch as these procedures may cause the fastener to be overpowered. If this occurs, the fastener may fully penetrate the base material or fastener to pass through the operator's hand.

15. Never attempt to install a fastener in the same cavity as the fasteners or other load head. Never attempt to use powder actuated tools in a flammable or an explosive atmosphere.

16. 1. If you decide to make a fastening after the tool has been loaded, you must always remove the powder load first followed by the fastener.

17. Pin regrinding may be performed only by qualified individuals.

18. Barrel should be pointed in a safe direction at all times.

**FOOTNOTE**

The following is a summary of safety precautions to be followed when operating a Powers Fasteners powder actuated tool. Failure to follow these safety instructions can result in serious injury or death to operators or bystanders.

1. Tools must be checked prior to operating to make sure they are not fully or partially loaded with a powder load or fastener.

2. Do not use powder actuated tools in a flammable or an explosive atmosphere.

3. Never attempt to install a fastener in an area that has been welded or cut with a torch as these procedures may cause the fastener to be overpowered. If this occurs, the fastener may fully penetrate the base material or fastener to pass through the operator's hand.

4. Never attempt to install a fastener in the same cavity as the fasteners or other load head. Never attempt to use powder actuated tools in a flammable or an explosive atmosphere.

5. Powder loads should never be used in firearms. They are normally more powerful that the cartridges supplied in firearms.

6. Never attempt to install a fastener in a spalled area of the base material. A jammed tool must be pointed in a safe direction at all times.

7. Do not attempt to install a fastener in an area that has been welded or cut with a torch as these procedures may cause the fastener to be overpowered. If this occurs, the fastener may fully penetrate the base material or fastener to pass through the operator's hand.

8. Never attempt to install a fastener in the same cavity as the fasteners or other load head. Never attempt to use powder actuated tools in a flammable or an explosive atmosphere.

9. Do not attempt to install a fastener in an area that has been welded or cut with a torch as these procedures may cause the fastener to be overpowered. If this occurs, the fastener may fully penetrate the base material or fastener to pass through the operator's hand.

10. Never attempt to install a fastener in the same cavity as the fasteners or other load head. Never attempt to use powder actuated tools in a flammable or an explosive atmosphere.

11. Powder loads should never be used in firearms. They are normally more powerful that the cartridges supplied in firearms.

12. Never attempt to install a fastener in a spalled area of the base material. A jammed tool must be pointed in a safe direction at all times.

13. Do not attempt to install a fastener in an area that has been welded or cut with a torch as these procedures may cause the fastener to be overpowered. If this occurs, the fastener may fully penetrate the base material or fastener to pass through the operator's hand.

14. Never attempt to install a fastener in the same cavity as the fasteners or other load head. Never attempt to use powder actuated tools in a flammable or an explosive atmosphere.

15. Never attempt to install a fastener in a spalled area of the base material. A jammed tool must be pointed in a safe direction at all times.

16. 1. If you decide to make a fastening after the tool has been loaded, you must always remove the powder load first followed by the fastener.

17. Pin regrinding may be performed only by qualified individuals.

18. Barrel should be pointed in a safe direction at all times.
License and Warranty Activation

THIS TOOL IS WARRANTED FOR 90 DAYS FROM DATE OF PURCHASE.

To activate your warranty:

1. Fill out the Registration Card and mail it to Tool License Coordinator, Powers Fasteners, 2 Powers Lane, Brewster, NY 10509

2. Keep your original sales receipt in a safe place.

3. In the event of unexpected tool failure, return the tool to the nearest Powers Fasteners Authorized Representative for service.

OWNERSHIP OF TOOL

You, the owner, are responsible for this tool. Do not lend or rent this tool to others until you are sure they understand its proper use. Always insist on a safety check before using the tool.

Service/Repairs

If you have questions or if you need assistance from the Powers Fasteners Field Service Team, contact your Powers Fasteners Authorized Representative.

Tool Lore

The T1000 powder actuated tool was designed and manufactured specifically for its intended use. The T1000 powder actuated tool is not compatible with any other powder actuated tool. The T1000 powder actuated tool is not designed to work with most low-level powder actuated tools. If you have any questions, please contact your Powers Fasteners Authorized Representative.

SPECIAL NOTE TO CUSTOMERS

When ordering replacement parts, please be sure to verify that the parts number are correct. Power levels and other specifications may be changed without notice.

Troubleshooting

Always check instructions manual for proper assembly

POWER LEVELS

Facing Overdrilling

Power load too high in tool short

Use a lower powder level or number of a longer pin.

Base material canister

Check base material canister section for information.

Tool does lose tool

Use “tool does not depress completely” section below.

Fire ring damaged

Replace fire ring damaged.

Tool doesn’t depress completely

Damage fire pin, springs, etc. Replace fire ring and spring.

Piston reset pin not used

Flatten tool tip and press down.

Remove and replace piston or pin ring.

Powder load will not eject

After firing tool

Stuck powder load

Remove barrel assembly from tool and carefully unload the powder load.

Broken or damaged parts

Tag tool with Warning “Defective - Do Not Use” inoperative and contact your powers fasteners authorized representative for service.

Power reduction or inconsistent

Barrel is not pulled fully

Piston tip is damaged or improperly assembled

Barrel is not pulled fully

Replace piston or piston ring.

Replace piston or pin ring.

Bent piston or damaged piston ring

Remove and replace piston or pin ring.

Bent or broken piston or pin ring

Replace piston or pin ring.

Laser etched on barrel

Replace piston or pin ring.

Entire barrel assembly

Replace piston or pin ring.

Bent barrel or other broken parts

Replace piston or pin ring.

Broken barrel or other broken parts

Replace piston or pin ring.

Bent barrel or other broken parts

Replace piston or pin ring.

Bent barrel or other broken parts

Replace barrel assembly.

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Toxic powder load selection guide

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<th>Cat. No.</th>
<th>Head Diameter</th>
<th>Drive Pins</th>
<th>Wt./Box</th>
<th>Dia.</th>
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<td>5000</td>
<td>.300</td>
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<td>50022</td>
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Piston failure

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<th>Wt./Box</th>
<th>Dia.</th>
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<td>50128</td>
<td>5&quot;</td>
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Troubleshooting

1. Warning signs should always be posted within the area in which a powder actuated tool is to be used. These signs should be at least 8" x 10" in size with boldface type that is not less than 1" in height. The signs should state: “Powder Actuated Tool in Use.”

2. Approved safety glasses should always be worn by operator and bystanders to protect their eyes from flying particles. Hearing protection should always be worn by the operator and bystanders when using a powder actuated tool. Other personal protective equipment as required should also be used.

3. Never modify or fabricate parts for use in your powder tool. Use only Powers Fasteners, Inc. loads and tool parts.

4. Pull the barrel all the way to the full open position. Accidental discharge can cause operator and bystanders to pass through the operator’s hand.

5. Never compress the tool against any part of the body. Serious injury or death may result in the event of an accidental discharge.

6. Do not close tool against work surface. The tool should be manually closed, with hand away from muzzle.

7. Barrel opens too easily. Reset pin spring has worn. Replace and replace with a new spring.


9. Damaged or bent piston. Replace damaged piston.

10. Not Use” place in locked container and dispose of properly.

11. Machine piston as shown on page ??

12. Piston regrinding may be performed only by qualified individuals.

13. Foreign material jammed between the barrel and housing. Disassemble and remove foreign object.

Low Velocity Powder Actuated Fastening Tool

**WARNING**

Operations on the T1000 tool must be performed by qualified personnel.

**TOOL OPERATION**

Before proceeding with the T1000 tool, be sure to read and understand the instructions contained in this manual.

**SIZING**

The tool uses a powder cartridge that is inserted into the tool's magazine. The cartridge contains the powder and a propellant to generate the force needed to drive the fastener into the workpiece. The cartridge is inserted into the tool's magazine, which is then loaded into the tool's magazine chamber. The tool uses a powder cartridge that is inserted into the tool's magazine. The cartridge contains the powder and a propellant to generate the force needed to drive the fastener into the workpiece. The cartridge is inserted into the tool's magazine, which is then loaded into the tool's magazine chamber.

**TYPICAL OPERATION**

The tool is used to fasten materials to a surface using a powder cartridge. The cartridge contains a propellant that is ignited by a striker, which generates the necessary force to drive the fastener into the workpiece. The fastener is then driven into the workpiece using the tool's magazine chamber.

**TOOL MAINTENANCE**

The tool requires regular maintenance, including cleaning and lubrication, to ensure its proper operation and longevity. The tool's magazine chamber should be cleaned regularly to remove any debris or material that may accumulate. The tool's magazine should also be lubricated to ensure smooth operation.

**SAFETY PRECAUTIONS**

Before operating the tool, it is important to review the safety precautions contained in this manual. These precautions are designed to ensure the safe and proper operation of the tool, as well as to protect the operator and bystanders from potential hazards.

**INSTALLATION IN STEEL**

For installations in A36 steel, 1/2" is the recommended minimum edge distance.

**BASE MATERIAL THICKNESS**

Steel base materials should be a minimum of 1/8" in thickness.

**EDGE DISTANCE**

For installations in A36 steel, 1/2" is the recommended minimum edge distance.

**FASTENER LENGTH SELECTION IN CONCRETE**

For permanent applications when using pins in steel, the distance from the face of the fastener to the point of penetration is a minimum of 1/4" to allow for proper penetration. The following guidelines are based on the installation of a fastener in ASTM A36 structural steel:

- Soft Masonry: 1/2" minimum
- Concrete: 1/2" minimum
- Porous concrete: 1/2" minimum
- Irregular concrete: 1/2" minimum
- Irregular concrete: 1/2" minimum
- Rebar: 1/2" minimum

**MODEL T1000 QUALIFIED TOOL OPERATOR EXAMINATION**

**TEST QUESTIONS**

1. **Checking the Correct Fastener**
   - A fastener should be chosen on the basis of which factor?
   - A fastener should be chosen on the basis of which factor?
   - A fastener should be chosen on the basis of which factor?
   - A fastener should be chosen on the basis of which factor?
   - A fastener should be chosen on the basis of which factor?

2. **Setting the Fastener**
   - For installations in A36 steel, 1/2" is the recommended minimum edge distance.
   - Steel base materials should be a minimum of 1/8" in thickness.
   - For installations in A36 steel, 1/2" is the recommended minimum edge distance.
   - Steel base materials should be a minimum of 1/8" in thickness.
   - For installations in A36 steel, 1/2" is the recommended minimum edge distance.
   - Steel base materials should be a minimum of 1/8" in thickness.

**MODEL T1000 OPERATING INSTRUCTION MANUAL**

**Low Velocity Powder Actuated Fastening Tool**

**DESCRIPTION**

This manual contains detailed instructions for operating the T1000 tool, as well as important safety precautions and maintenance guidelines. It is recommended that users familiarize themselves with the contents of this manual before operating the tool.

**WARNING**

Do not operate the T1000 tool until you have read this manual and received proper training according to ANSI Z10-1995.

**OPERATOR TRAINING**

Operators and instructors must have received operator training in accordance with the applicable standards.

**TOOL PROPER USE**

This tool is designed for use by qualified personnel only. It is important to read and understand the instructions contained in this manual before using the tool.

**TOOL OPERATION**

The T1000 tool is a low velocity powder actuated fastening tool. It is designed to be used in a variety of materials, including concrete, brick, and metal. The tool uses a powder cartridge that is inserted into the tool's magazine. The cartridge contains the powder and a propellant to generate the force needed to drive the fastener into the workpiece. The fastener is then driven into the workpiece using the tool's magazine chamber.

**SIZING**

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**TYPICAL OPERATION**

The tool is used to fasten materials to a surface using a powder cartridge. The cartridge contains a propellant that is ignited by a striker, which generates the necessary force to drive the fastener into the workpiece. The fastener is then driven into the workpiece using the tool's magazine chamber.

**TOOL MAINTENANCE**

The tool requires regular maintenance, including cleaning and lubrication, to ensure its proper operation and longevity. The tool's magazine chamber should be cleaned regularly to remove any debris or material that may accumulate. The tool's magazine should also be lubricated to ensure smooth operation.

**SAFETY PRECAUTIONS**

Before operating the tool, it is important to review the safety precautions contained in this manual. These precautions are designed to ensure the safe and proper operation of the tool, as well as to protect the operator and bystanders from potential hazards.

**INSTALLATION IN STEEL**

For installations in A36 steel, 1/2" is the recommended minimum edge distance.

**BASE MATERIAL THICKNESS**

Steel base materials should be a minimum of 1/8" in thickness.

**EDGE DISTANCE**

For installations in A36 steel, 1/2" is the recommended minimum edge distance.

**FASTENER LENGTH SELECTION IN CONCRETE**

For permanent applications when using pins in steel, the distance from the face of the fastener to the point of penetration is a minimum of 1/4" to allow for proper penetration. The following guidelines are based on the installation of a fastener in ASTM A36 structural steel:

- Soft Masonry: 1/2" minimum
- Concrete: 1/2" minimum
- Porous concrete: 1/2" minimum
- Irregular concrete: 1/2" minimum
- Rebar: 1/2" minimum

**MODEL T1000 QUALIFIED TOOL OPERATOR EXAMINATION**

**TEST QUESTIONS**

1. **Checking the Correct Fastener**
   - A fastener should be chosen on the basis of which factor?
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2. **Setting the Fastener**
   - For installations in A36 steel, 1/2" is the recommended minimum edge distance.
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Fasterer® Functioning

Fastener functioning is the process of driving the fastener. For this tool, it is important to understand how a powder actuated fastener works. A powder actuated fastener is considered to be a direct drive or blow type entry of fastener as it is driven directly into the base material. The energy that causes a fastener is contained in a powder charge, which is placed in the tool and is ignited. Powdered powder actuated fasteners are specially designed and manufactured using an autogenous process to form the desired driving force. Only fasteners manufactured or supplied by Powder Actuators should be used in this tool.

Low Velocity Powder Actuated Fastening Tool

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LOW VELOCITY POWDER ACTUATED FASTENING TOOL

DANGER! - TO AVOID SERIOUS INJURY OR DEATH:

Prior to operating the T1000 tool, study this manual carefully and develop a thorough understanding of the contents. It is imperative to understand the correct usage and standard practices for the tool. Safety regulations must be followed at all times.

DANGER!

WARNING!

The T1000 tool should only be used by a person familiar with the tool and its usage.


Placement and operators must stay clear of any hazardous materials.

Always assure tool is clear of debris and any other objects before using the tool. Use the safety feature of the tool only. Do not use the tool as a jackhammer or any other type of equipment. It is important to understand all of the above.

WARNING!

Cover your eyes with a powder load in the tool. If the tool accidentally

This is the sole warranty of Powers Fasteners and the sole remedy available to distributor or buyer.

Base material thickness:

Steel base material must be a minimum of 1/8" in thickness.

Use the Fastener manual before attempting to operate the tool. Be sure to read this manual carefully before attempting to operate the tool. This is the sole warranty of Powers Fasteners and the sole remedy available to distributor or buyer.

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It is your responsibility to obtain proper training and a Powers Fasteners operator card prior to using this tool. If you are unfamiliar with the safe operation of powder actuated tools or have not previously operated this tool, you should seek the assistance of a qualified operator before operating the tool.

1. Only use fasteners and powder loads designed for this tool as supplied by Powers Fasteners. Do not load the tool until you are ready to make a fastening. Check the powder load level before inserting it into the tool. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

2. To insure safe operation, perform the daily function test described in this manual. Be sure the tool is not loaded prior to performing this test. Do not operate this tool unless all of its parts are in place and operating properly. Never attempt to use a tool without a function test.

3. Never guess about the suitability of a base material. If you are uncertain about the suitability of a base material, perform a center punch test.

4. Never attempt to unload or disassemble a powder load or fastener. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

5. Do not leave a loaded tool unattended. Once the tool is loaded, make the fastening immediately or unload the tool. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

6. Do not close the tool against work surface. The tool should be manually closed, with hands away from muzzle bushing. Once the tool is closed and in the correct safe position, the tool can be loaded.

7. Hold the tool perpendicular to the work surface at all times. Use a spall guard wherever possible. This will limit the possibility of fastener ricochet which could cause serious injury or death to the operator or bystanders.

8. Do not attempt to install fasteners in areas that have been sealed or cut with a torch as these procedures may have caused hardening of the steel. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

9. Do not fasten onto metal, tiles, glass, or other types of bottle materials. These materials can shatter and create sharp fragments which may cause injury. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

10. Do not use fasteners that are outside the specified range of powder load material less than 1/2 mm or more than 5/16 mm in diameter. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

11. Do not attempt to install fasteners in a corroded or spalled area in concrete. Place fastener at least 3/8 inch away from a spalled area to prevent the possibility of the fastener bending and striking an operator or bystanders. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

12. Do not attempt to flip over the safety lever unless the tool has been loaded. Always remove the powder load first followed by the fastener. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

13. Do not attempt to install fasteners in areas that have been sealed or cut with a torch as these procedures may have caused hardening of the steel. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

14. Do not fasten through a peened hole unless proper guidelines is provided. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

15. Do not use fasteners or powder loads that are designed for this tool as supplied by Powers Fasteners. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

16. If you decide not to make a fastening after the tool has been loaded, you must always remove the powder load first followed by the powder. Failure to follow these safety instructions can result in serious injury or death to the operator or bystanders.

NOTE: If the tool is in the correct safe position, the tool can be loaded.
License and Warranty Activation

THE T1000 TOOL IS WARRANTED FOR 90 DAYS FROM DATE OF PURCHASE.

I certify that I have read and understand the T1000 Tool Operating Instruction Manual and have taken the Operator’s exam. I understand the importance of following all safety procedures and that failure to read, comprehend, and follow the detailed rules and warnings regarding the use of powder actuated tools.

(Please print clearly)

THE SERIAL NUMBER ON MY TOOL IS:

NAME
ADDRESS
CITY STATE ZIP PHONE

Tool License Coordinator • Powers Fasteners, Inc. • 2 Powers Lane • Brewster, NY 10509

Powder Load Selection Guide

.300 HEAD DIAMETER DRIVE PIN WITH .078" INSULATION WASHER

.300 HEAD DIAMETER STEP SHANK PIN

.300 HEAD DIAMETER DRIVE PIN WITH .124" WASHER

.300 HEAD DIAMETER DRIVE PIN WITH .050" WASHER

.300 HEAD DIAMETER DRIVE PIN WITH TOP HAT WASHER

.300 HEAD DIAMETER DRIVE PIN WITH 1/2" WASHER

PROBLEM POSSIBLE CAUSE SOLUTION

Tool does not fire Tool depressed incompletely See “Tool does not depressed completely” section below

Piston stuck in the forward position Pinion has been overdriven and is recessed inside the tool piston or piston ring

Power or damaged piston or piston ring

Build-up of dirt in breech

Powder load will not eject after firing tool Stuck powder load

Powder load will not eject after firing tool

Always check instruction manual for proper assembly of parts

PROBLEM POSSIBLE CAUSE SOLUTION

Tool cannot be opened or cycled Lack of proper cleaning Clean tool thoroughly

Tool cannot be opened or cycled

Ejector parts broken

Firing pin damaged

Powder load will not eject Barrel is not pulled forward Fully open tool. If necessary disassemble and clean parts.

Powder load will not eject

Powder load will not eject

Tool does not fire Tool not depressed completely See “Tool does not depressed completely” section below

Powder load will not eject

Powder load will not eject

Build-up of dirt in breech

Powder load will not eject

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