



Model BP307

Operating Instruction Manual



Low Velocity Powder Actuated Fastening Tool



WARNING! PLEASE DO NOT OPERATE THE TOOL UNTIL YOU HAVE READ THIS TRAINING MANUAL FOR THIS TOOL AND EDUCATION HAS BEEN RECEIVED ACCORDING TO THE ANSISTANDARD A 10.3-1995. BY READING THIS MANUAL IT CAN HELP AVOID SERIOUS INJURY OR DEATH.



PRIOR TO OPERATING THE BP307 TOOL, PLEASE STUDY THIS MANUAL CAREFULLY AND DEVELOP A THOROUGH UNDERSTANDING OF THE CONTENTS. PROPER TRAINING ACCORDING TO THE CURRENT ANSI STANDARD A 10.3, SAFETY REQUIREMENTS FOR POWDER ACTUATED FASTENING SYSTEMS MUST BE COMPLETED AND A BLUEPOINT FASTENERS QUALIFIED OPERATOR CARD MUST BE OBTAINED PRIOR TO OPERATION OF THE TOOL. STATE, LOCAL, OR OTHER REGULATIONS SHOULD ALSO BE FOLLOWED. LAWS, REGULATIONS, AND STANDARDS REGARDING THE USE OF POWDER ACTUATED TOOLS MAY PERIODICALLY BE REVISED WITHOUT NOTICE. ANY SUCH REVISIONS MAY CHANGE THE SAFETY AND OPERATING PROCEDURES DESCRIBED IN THIS MANUAL. BLUEPOINT FASTENERS, INC. IS NOT RESPONSIBLE FOR ANY SUCH REVISIONS WHICH OCCUR AFTER PUBLICATION OF THIS MANUAL. IT IS THE RESPONSIBILITY OF THE USER TO MAINTAIN ALL KNOWLEDGE OF THE LAWS, REGULATIONS, AND STANDARDS THAT APPLY TO THE POWDER ACTUATED TOOLS.

DANGER! TO AVOID SERIOUS INJURY OR DEATH:

NEVER PLACE YOUR HAND AT THE END OF THE FASTENER GUIDE OF THE BP301 TOOL. OPERATORS AND BYSTANDERS AROUND THE TOOL BEING USED MUST USE EYE AND EAR PROTECTION. ALWAYS ASSUME THAT THE TOOL IS LOADED WITH A LOAD. NEVER PLACE YOUR FINGERS ON THE TRIGGER OF THE LOADED OR UNLOADED TOOL UNTIL THE TOOL FASTENER GUIDE IS AGAINST THE WORK BASE AND YOU ARE READY TO DO A FASTENING. IF THE TOOL ACCIDENTALLY SHOOTS HIS/HER HAND OR ANY PART OF THE BODY, THE PISTON CAN ENTER THE BODY AND CAUSE SERIOUS INJURY OR DEATH. IT IS VERY IMPORTANT THAT THE OPERATOR OF THIS BP301 TOOL READS AND UNDERSTANDS THE FULL MANUAL OF THE TOOL AND COMPLETED THE OPERATORS EXAM WITH A 100% GRADE. THE WARRANTY DOES NOT APPLY UNTIL BLUEPOINT FASTENERS, INC. RECEIVES A COPY OF OPERATORS EXAM AND A COPY OF YOUR RECEIPT WHEN THE TOOL WAS PURCHASED.

WARRANTY

All warranties or products described herein, express or implied, including the warranties of merchantability or fitness for a particular purpose, are specifically excluded, with the following exceptions: Bluepoint Fasteners will repair or replace, at its option, any tool, part or element holding that, within 90 days after the sale. If Bluepoint is found to be responsible for a defective part in material or workmanship, excluding normal wear. THIS IS THE ONLY WARRANTY AND REMEDY BLUEPOINT HAS AVAILABLE AND IS IN NO EVENT FOR ANY DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR ANY OTHER DAMAGES, is available.

Introduction

The **BP307** is an economically designed tool that produces high productivity and dependable performance. This single shot firing tool makes it easy to operate and allows fast maintenance making it easy to repair in minutes. BP307 handles all .300" and 8mm head diameter drive pins from 1/2" to 3" shank lengths and 1/4" threaded studs.

PREPERATION

Base materials acceptable to shoot:

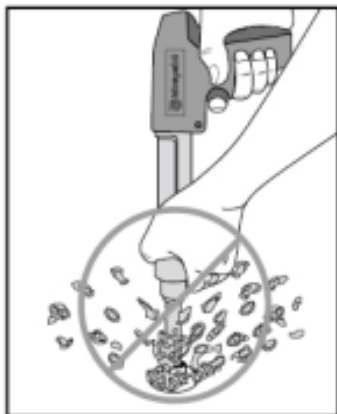
Powder-actuated fastening is suitable for use in the following base material only:

- Poured concrete
- Structural Steel
- Masonry Joints

Never attempt to fasten into any other type of material. Fastening into other types of materials can cause serious injury.

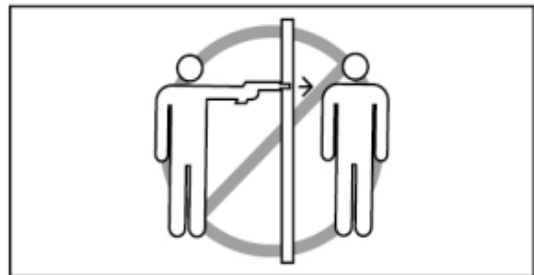
Unacceptable Base materials that should not be fastened to:

Never attempt to fasten into very hard or brittle materials such as cast iron, tile, glass or rocks of any kind. These materials can shatter, break, causing the base material and fragments to pop up or fly freely and cause serious injury to the tool operator and others around the operator.



Never attach directly to a base where it can easily penetrate like wood or gypsum board. These types of materials may cause the fasteners to skip through to the other side making it dangerous for other people who are around.

Never fasten into a base material that fails the center punch test. Failure to check the suitability of the base material can cause serious injury to the eyes or other body parts.



Center Punch Test

ALWAYS WEAR EYE PROTECTION WHEN PERFORMING THIS TEST.

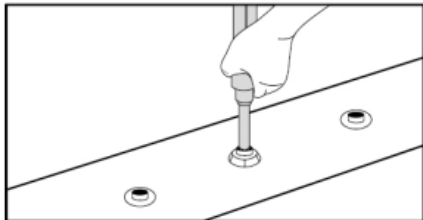
1. Always check the hardness of the base where you are to fasten.
2. Using a fastener as a center punch, strike the fastener against the work surface with a regular hammer and check the results.

Center Punch Test Result

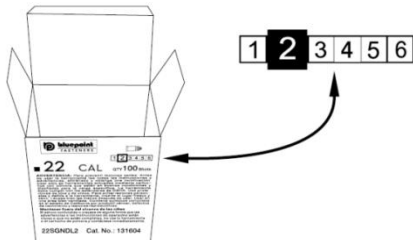
1. If the fastener point is flattened, the material is too hard for a powder actuated fastening.
2. If the fastener easily penetrates the material, the material is too soft.
3. If the material cracks or shatters, the material is too fragile.
4. If the fastener causes a small indentation into the material, the material is suitable for powder actuated fastening.

SELECTION OF LOADS AND SAFETY

1. Always make a fastening test after being sure that the base material is suitable for powder actuated fasteners. Failing to determine the appropriate power level to be used may result in the use of excessive power, allowing the fastener to pass completely through the work material, causing severe injury or death to others who maybe in the path of the fastener.



2. All operators must always select the level of the loads by the power level to avoid the use of incorrect loading for the same reason as that of# 1.



SAFETY AT WORK

1. Operators and by standers must always wear safety glasses and approved hearing protection. Failure to do so can result in blindness or serious eye injury from debris and hearing loss for unprotected exposure to constant or repeated noise from the fastening tool.

2. Keep the work area clear of by standers and unnecessary materials that may interfere with the safe operation of the tool. Operating the tool in a congested or disorderly area may affect the ability to operate safely.



3. Never operate the tool when inflammable or explosive materials are nearby. Powder loads burn and create sparks when fired and could ignite these materials or vapors.

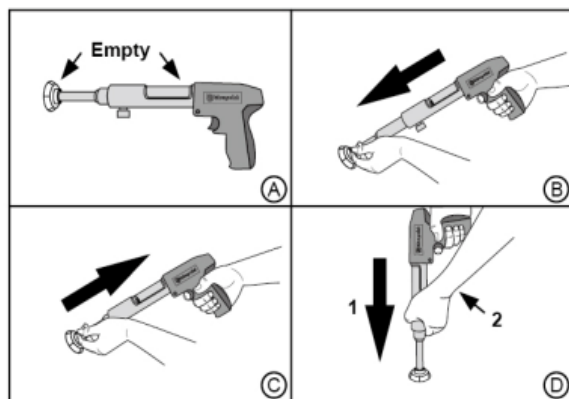


4. Always provide warnings within 50' of the area where fastening is being taken place. Sign should state: "Caution powder actuated tool in use." Failure to warn others can result in serious injury or death to them. Contact your supervisor for this sign.

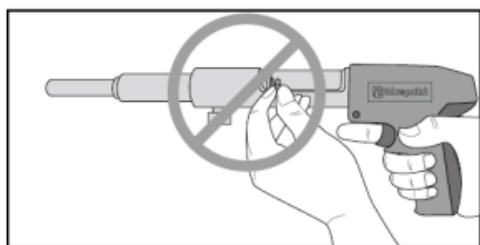


SAFE HANDLING OF TOOLS

1. Always make sure that the tool is working properly before attempting to use. Follow daily check function, see the example below and described instructions in the maintenance section.

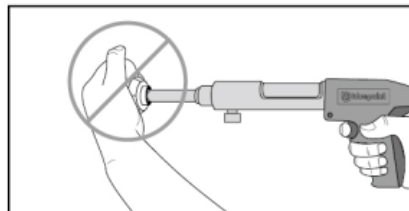


2. Always use loads directly selected from a box indicating the type of load power and number. Never attempt to use a load that is loose or out of its box (must be from a box).
3. Never transport loads in pockets with loose pins or other hard objects. Doing so may cause the loads to fire.
4. Never load a tool unless you intend to use immediately to insure of it being used. Loading a tool and not using it in the work place may result in the tool accidentally being discharged by others.

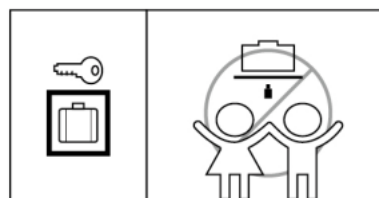


5. Never place your hands or any other body part on the loading end of the tool. It can

cause serious injury by the fastener or piston must the tool be fired accidentally.



6. Always store the tool unloaded and keep the tool and loads safely locked in a tool box. Keep keys away from children and unauthorized/ unlicensed persons.



7. Always keep the tool pointed away from yourself and others.
8. Never carry a loaded tool around the work area.
9. Never play with the tool.
10. Using tools in poorly ventilated areas, cleaning tools or handling charges may result in exposure to lead and other substances known to cause birth defects and physical damage. Have adequate ventilation at all times and wash thoroughly after exposure.

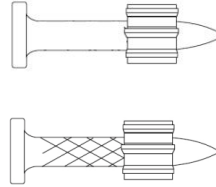
Technical Specifications:

- Length: 13.39"
- Weight: 4.08 LBS
- Load Caliber: .27 caliber long strip loads (all power levels)
- Firing Action: Single Shot
- Fastener Capacity: 1/2" to 3"

Selection Guide for Pins

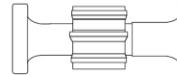
.300 Head, .145 Shank, Flat Head Drive Pin

Blue Point Part #	Length
PD13F10K	1/2" Knurled
PD19F10	3/4"
PD25F10	1"
PD32F10	1-1/4"
PD37F10	1-1/2"
PD52F10	2"
PD62F10	2-1/2"
PD76F10	3"



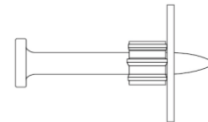
.300 Head Diameter Drive Pin w/ Top Hat

Blue Point Part #	Length
PDTH13F10K	1/2" Knurled
PDTH16F10K	5/8" Knurled
PDTH19F10	3/4"
PDTH25F10	1"



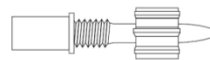
.300 Head, .145 Shank Pin w/ 1" Metal Washer

Blue Point Part #	Length
PDW19-19F10	3/4" w/ 3/8" Washer
PDW25-27F10	1"
PDW25-32F10	1-1/4"
PDW25-38F10	1-1/2"
PDW25-51F10	2"
PDW25-63F10	2-1/2"
PDW25-76F10	3"



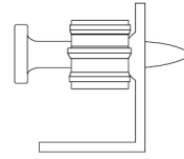
1/4"-20 Threaded Stud w/ .300 Cap

Blue Point Part #	Thread/Shank
M1/4PH-13-13F10K	1/2" / 1/2" Knurled
M1/4PH-13-25F10	1/2" / 1"
M1/4PH-19-13F10K	3/4" / 1/2" Knurled
M1/4PH-19-25F10	3/4" / 1"
M1/4PH-19-32F10	3/4" / 1-1/4"



.300 Head, .145 Shank Pin w/ 90 Degree Angle Clip

Blue Point Part #	Length
PDAC90-25F10	1"
PDAC90-32F10	1-1/4"



.300 Head, .145 Shank Pin w/ 120 Degree Angle Clip

Blue Point Part #	Length
PDAC120-25F10	1"
PDAC120-32F10	1-1/4"

.300 Head, .145 Shank Pin, 90 Degree Angle Clip

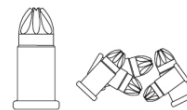
Blue Point Part #	Length
PDACTH90-22F10	7/8"

.300 Head, 1" X .145 Shank Pin w/ EMT Clip

Blue Point Part #	Size
PDCC50-25F10	1/2"
PDCC75-25F10	3/4"
PDCC100-25F10	1"

Power Loads Selection Guide

Product Number	Description
22GNL2	27 Caliber strip loads, Brown
22GNL3	27 Caliber strip loads, Green
22GNL4	27 Caliber strip loads, Yellow

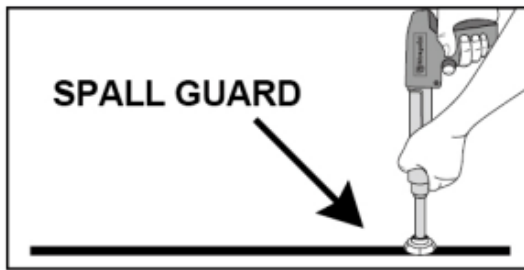




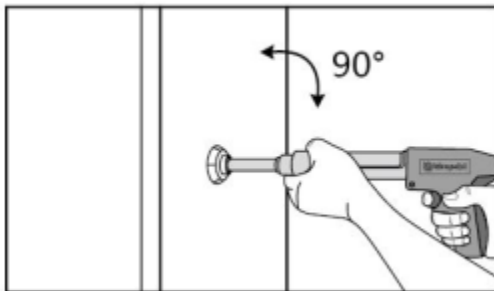
Failure to follow these instructions can result in injury to the tool operator or bystanders.

Fastener Driving Safety

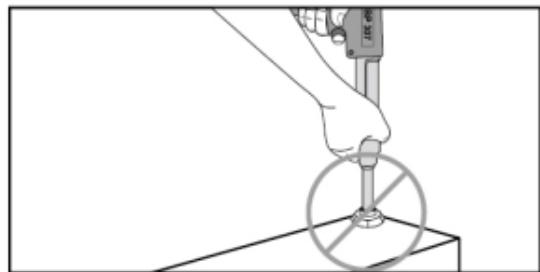
1. Only use the tool for fastening into a suitable base material.
2. Do not fire the tool without a fastener. The shooting of an instrument without a fastener can cause the piston to strike the work surface, and can cause serious injury to you and others in the work area.
3. Always use spall guard protection whenever possible to minimize the flying particles or debris.



4. Always hold the tool perpendicular to and firmly against the work surface to a fastener. Otherwise, it could allow a fastener to ricochet.

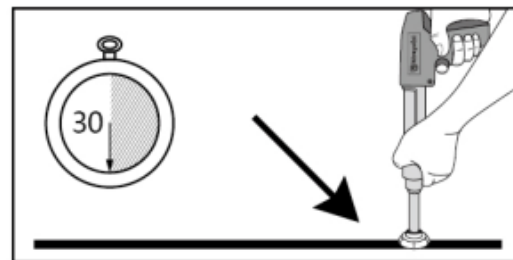


5. Never attempt to drive a fastener close to an edge or other fastener. See the installation page.



Always follow the misfire procedures.

If the tool does not fire after pulling the trigger, continue to hold the tool against the work surface for at least 30 seconds. Then carefully open the tool, remove the load and put in a can of water or other non-flammable liquid. Never discard loads into a dumpster.



If the tool becomes stuck or jammed with a powder charge, keep the tool pointed in a safe direction and immediately labeled "Danger do not use defective". Lock the tool in a box and contact your local dealer for assistance from Bluepoint.

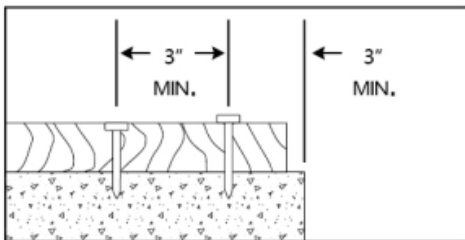
Applications of fasteners

BP307 tool can be used for a wide range of fastening needs in a variety of base materials. Read and follow these important instructions for fastening guidelines will help you get the best results from your tool, fasteners and powder loads and as well as helping to do these operations safely and effectively.

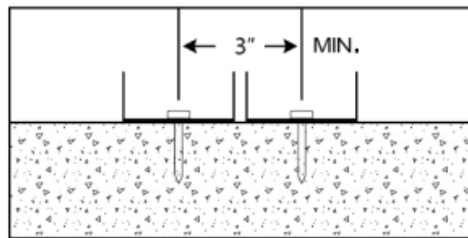
Powder actuated fastening are permanent solutions to try to remove a bra concrete or steel can result in serious injury.

Fastening on concrete

For fastening in concrete, keep a minimum distance of 3" between fastening and 3" of any free edge. Concrete thickness should be at least three times the expected depth of penetration into the concrete. The primary exception to edge distance 3" can occur in an application where lower sill, of necessity, reduces the edge.

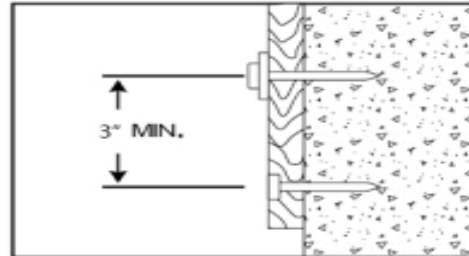


Fastening wood to concrete



Penetration of thin gauge metal

Concrete Fasteners driving too close to an edge or too close together can cause the concrete edge to fail or fasteners to fly free.

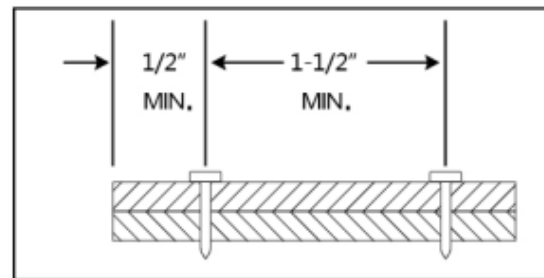


Fastening to concrete block or masonry walls

Although this application is not recommended when used, care must be taken to observe a 3" edge distance to avoid cracking the block and superior penetration of the fastener to avoid a loss in the holding value. Fastening can be done in horizontal joints, but not in the vertical joints.

Fastening to steel

BP307 tool can be used for fastening on the flat surfaces of structural steel. For steel fastening, always maintain a minimum of 1-1/2" between the fasteners and 1/2" from any edge.

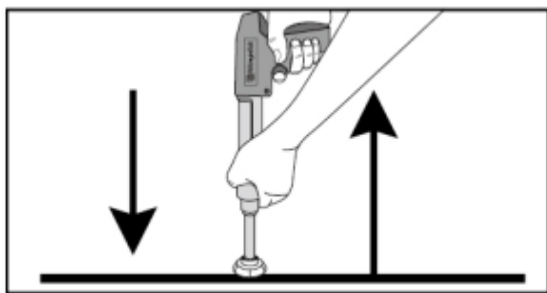


Steel

Operating Instructions

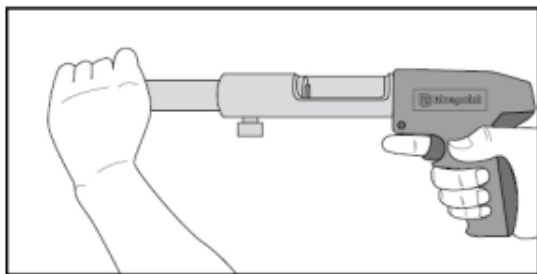
Daily Function test

Always check the tool first to ensure that it does not contain a strip or fastener. Try the tool repeatedly pressing the muzzle bushing completely on a hard surface and pull the trigger. You should hear an audible clicking sound while pulling on the trigger. Let up on the tool and make sure the barrel is open to semi-open position.



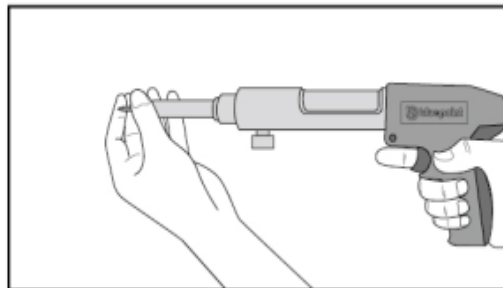
Operating the BP307 tool

1. After checking to make sure that the tool is not loaded, pointed in a safe direction and make sure the barrel is fully extended and close the tool to the semi-closed position. This ensures that the piston is in position for the next fastening operation. Use the spall guard whenever possible to minimize the risk of being struck by flying debris.

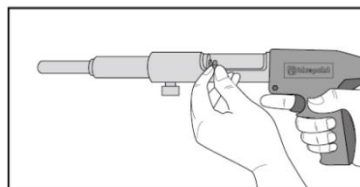


2. With your finger off the trigger, place the fastener; point out, into the muzzle end until the end is inside the muzzle completely. STOP immediately if required

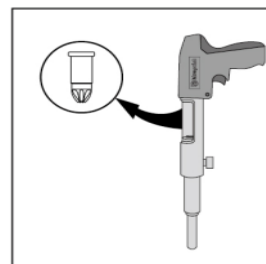
excessive power is needed; inspect the barrel to find out why the fastener is not entering the fastener guide easily. Do not continue to use the tool unless the problem is corrected. DO NOT use excessive force when inserting a fastener. NEVER load a fastener with your finger on the trigger.



3. With the tool pointed in a safe direction and your finger off the trigger, insert the strip in the tool through the bottom of the handle. Make sure the load is inserted correctly.



4. After shooting pull the fastener guide out on the tool and push it back in, this will allow the strip to advance.



Trouble Shooting

Problem	Cause	Solution
Excessive penetration of the pin, fastener material	Power level too high / too short pin, soft base material	Use a gunpowder charge level lower. Check the base material and see it's not too weak.
If the tool does not fire	The firing pin is not pushing all through to fire the load or it is damaged.	-The tool must be pressed flat against the base. -Replace the damaged part.
The tool does not fully press into the ground	It was assembled incorrectly or damaged parts.	Contact your distributor or call the offices of Bluepoint Fasteners.
Reduction or loss of power	The barrel of the tool is not returning to its correct position or the piston is damaged.	The barrel must be removed completely to return the piston back into place or replace the piston.
The powder load does not eject after shooting	<ol style="list-style-type: none"> 1. Tool was not completely open. 2. The piston is damaged. 3. The ejector piston is damaged. 	<ol style="list-style-type: none"> 1. Open and clean tool. 2. Replace the piston. 3. Clean the barrel with Lube to clean and brush. 4. Remove the tool Barrel and disassemble the piston. Use a 1/8" rebar and push the load off.

Maintenance and Cleaning Tool BP307

All parts should be cleaned with oil detergent and wire brushes supplied with the tool kit. Remove the thick brush land that has been accumulated. After cleaning with detergent oil, must be completely dry all parts of the BP307. Excess oil will tend to accumulate dirt and dust. Use eye protection when cleaning the tool.

Excess dirt or dust on the piston and cylinder assembly of the receiver must be cleaned daily. Please review the condition of the piston to check for damage or deformation of the piston. You have to see the condition of the piston for deformation and damage caused by the use pistons.

For the tool to perform in good operating condition and work well, it is necessary to disassemble and clean the tool when the dirt collects on the side chamber or the tools seems to be losing power. If the tool seems to be losing power check for collected dirt in the chamber, this may cause loss of power.

All parts must be cleaned as above with oil and brushes. Be sure to dry all parts when assembling your tool.

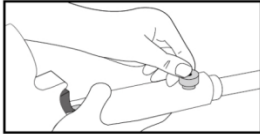
Depending on tool use general maintenance has to be done every six months.

How to repair a damaged piston

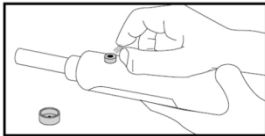
The piston is used very frequently and must be replaced periodically. Typical signs of a worn piston are broken, bent or enlarged head.

Before performing maintenance to a tool, make sure there is no powder load in the BP307 tool. When taking the tool apart do not lose or damage any other part of the tool.

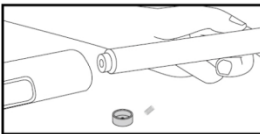
1. Rotate the annular spring off the pawl using a flat screwdriver.



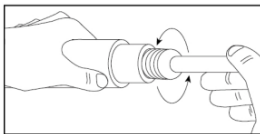
2. Remove the pawl by lifting it up and away from the tool body.



3. Slide the piston sleeve and front barrel assembly out of the tool body.



4. Remove the piston sleeve and front barrel assembly.



5. Unseat and remove the shear clip by prying it up with a flat screwdriver. Remove the clip from the barrel by prying it up and away from the groove in the barrel. Use care to

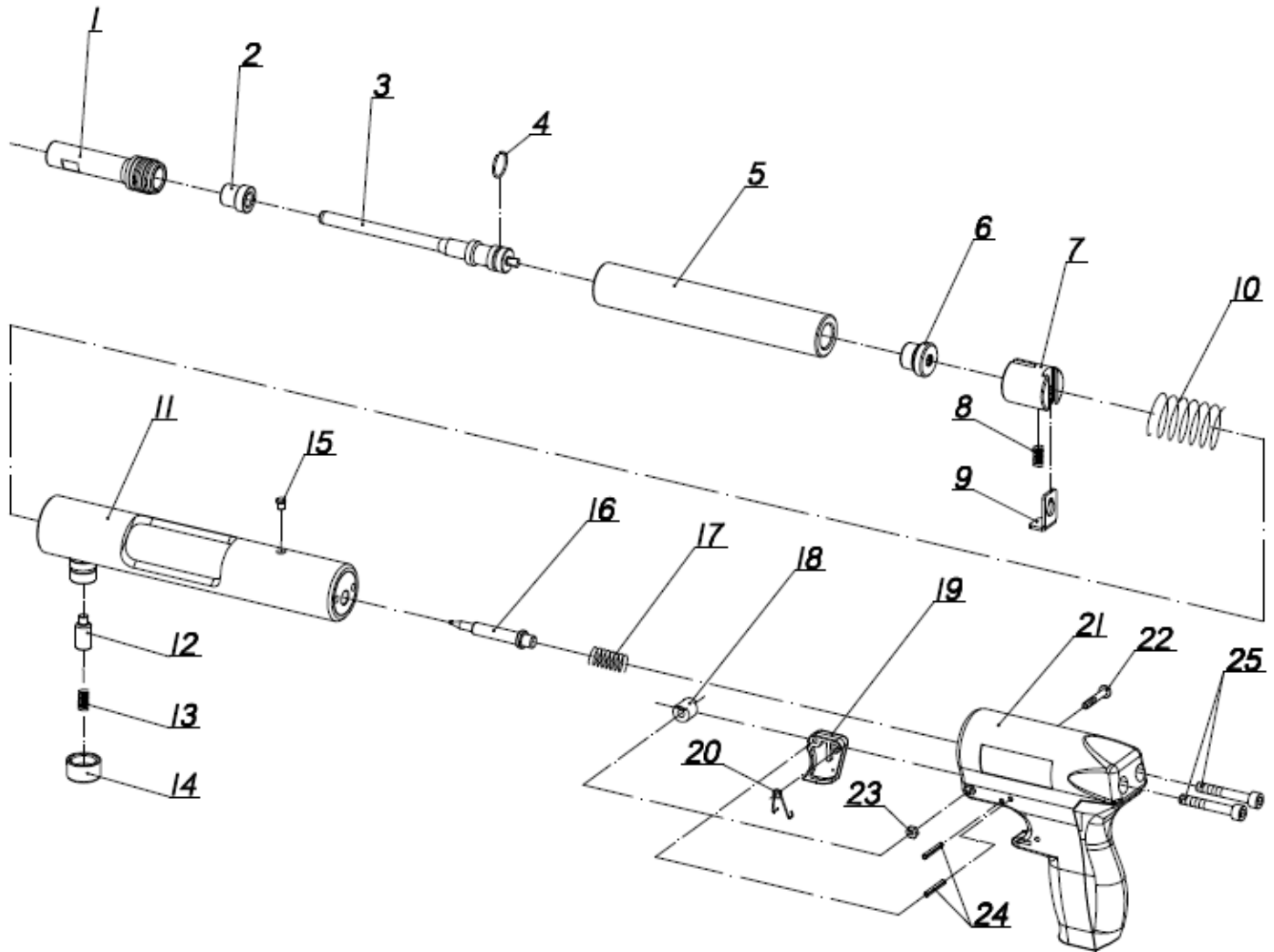
keep the clip from flying free when it is removed.

6. Separate the front barrel and fastener guide from the piston sleeve.
7. Slide the piston out of the piston sleeve and slide the fastener guide out of the front barrel.
8. **The tool is now disassembled for normal cleaning.** Inspect all the parts for wear and tear or damage. Clean or replace if needed, use detergent oil and cleaning brushes to remove dirt and powder residues. Wipe all parts dry before reassembly. Wear safety goggles when cleaning tool parts.

To assemble the tool BP307

1. Reassemble the tool in the reverse order of disassembly. When sliding the front barrel onto the piston sleeve, align the groove in the piston sleeve with the groove in the front barrel.
2. Align the groove in the piston sleeve with the pawl opening in the tool body when placing the barrel assembly into the tool body. Replace the pawl and install the annular spring.

CAUTION: The test should be done without a fastener or load in the tool.



Item #	PART #	DESCRIPTION	Item #	PART #	DESCRIPTION
1	BP307-1	Fastener Guide	14	BP307-14	Reset Pin Cap
2	BP307-2	Buffer	15	BP307-15	Locking Pin
3	BP307-3	Piston	16	BP307-16	Firing Pin
4	BP307-4	Piston Ring	17	BP307-17	Firing Pin Spring
5	BP307-5	Barrel	18	BP307-18	Tube
6	BP307-6	Breach Plug	19	BP307-19	Trigger
7	BP307-7	Breach Block	20	BP307-20	Trigger Spring
8	BP307-8	Sear Spring	21	BP307-21	Handle
9	BP307-9	Sear	22	BP307-22	Trigger Hinge Bolt (M4X25)
10	BP307-10	Firing Mech. Spring	23	BP307-23	Trigger Hinge Nut (M4)
11	BP307-11	Receiver	24	BP307-24	Spring Pins 3X22 (2)
12	BP307-12	Piston Reset Pin	25	BP307-25	Handle Bolts M6 X 40 (2)
13	BP307-13	Reset pin spring			



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