



Model BP301

Operating Instruction Manual



Low Velocity Powder Actuated Fastening Tool



WARNING!

DO NOT OPERATE THE BP301 TOOL UNTIL YOU HAVE READ THIS INSTRUCTION MANUAL AND RECEIVED PROPER TRAINING ACCORDING TO ANSI STANDARD A 10.3-1995. BY READING THIS MANUAL IT CAN HELP AVOID SERIOUS INJURY OR DEATH.



WARNING!

PRIOR TO OPERATING THE BP301 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 BLUE POINT 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. BLUE POINT 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 BP35 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 BLUE POINT 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: Blue Point Fasteners will repair or replace, at its option, any tool, part or element holding that, within 90 days after the sale. If Blue Point is found to be responsible for a defective part in material or workmanship, excluding normal wear. THIS IS THE ONLY WARRANTY AND REMEDY BLUE POINT HAS AVAILABLE AND IS IN NO EVENT FOR ANY DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR ANY OTHER DAMAGES, is available.



INTRODUCTION

The **BP301** is an economically designed tool that produces high productivity and dependable performance. This semi-automatic tool makes it easy to operate and allows for fast maintenance making it easy to repair in minutes. **BP301** 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:

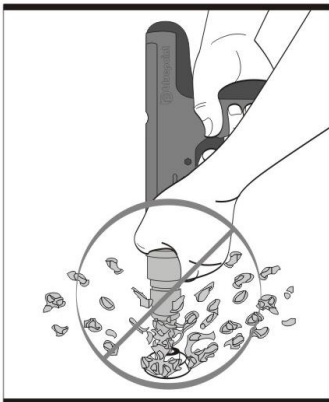
Powder-actuated fastening is suitable for use in the following base material only:

- Poured concrete
- Structural Steel
- Masonry Joints

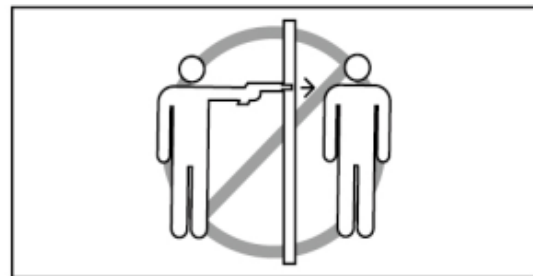
Never attempt to fasten into any other type of material. Fastening into other types of materials can cause serious injury.

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.

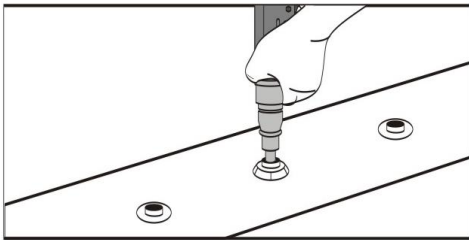
1. Always check the hardness of the base where you are to fasten.
2. Using a fastener as a center punch, strike the fastener against the work surface with a regular hammer and check the results.

CENTER PUNCH TEST RESULT

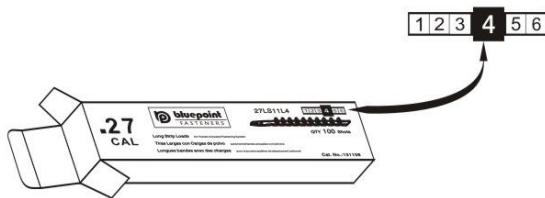
1. If the fastener point is flattened, the material is too hard for a powder actuated fastening.
2. If the fastener easily penetrates the material, the material is too soft.
3. If the material cracks or shatters, the material is too fragile.
4. If the fastener causes a small indentation into the material, 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 flammable or explosive materials are nearby. Powder loads burn and create sparks when fired and could ignite these materials or vapors.

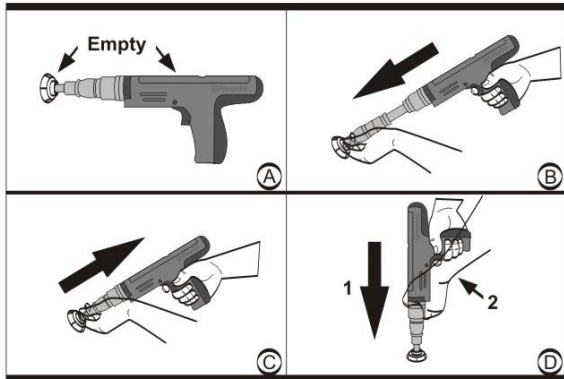


4. Always provide warning signs within 50' of the area where fastening is taken place. Sign should state: "Caution powder actuated tool in use." Failure to warn others can result in serious injury or death to them. Contact your supervisor for this sign.

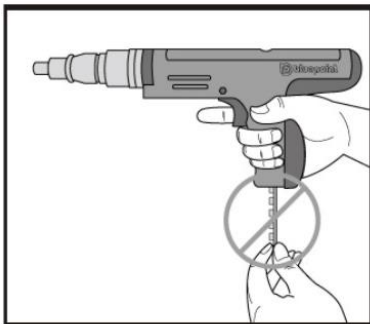


SAFE HANDLING OF TOOLS

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.

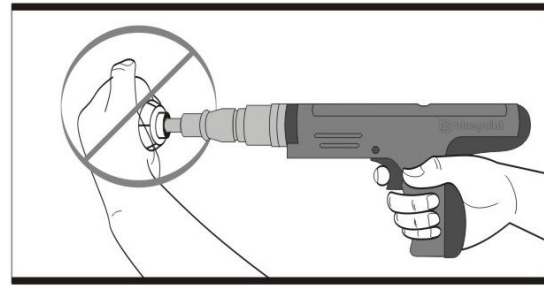


2. Always use loads directly selected from a box indicating the type of load power and number. Never attempt to use a load that is loose or out of its box (must be from a box).
3. Never transport loads in pockets with loose pins or other hard objects. Doing so may cause the loads to fire.
4. Never load 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.

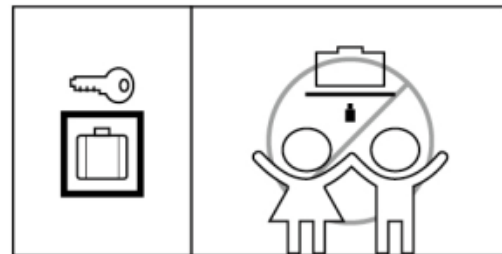


5. Never place your hands or any other body part on the loading end of the tool. It can cause serious injury by the fastener or piston must the tool be

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: 5.07 LBS
- Load Caliber: .27 caliber strip loads (all power levels)
- Firing Action: Semi-automatic
- Fastener Capacity: 1/2" to 3"

Selection Guide for Pin

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

Blue Point Part #	Shank 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"



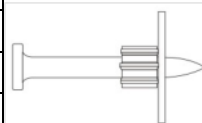
.300 Head Diameter Drive Pin w/ Top Hat

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



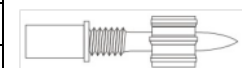
.300 Head, .145 Shank Pin w/ 1" Metal Washer

Blue Point Part #	Shank Length
PDW19-19F10	3/4" w/ 3/4" 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

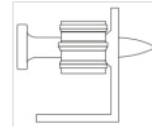
Blue Point Part #	Thread Length/Shank Length
M1/4PH-13-13F10K	1/2" / 1/2" Knurled
M1/4PH-13-25F10	1/2" / 1"
M1/4PH-19-13F10K	3/4" / 1/2" Knurled
M1/4PH-19-25F10	3/4" / 1"
M1/4PH-19-32F10	3/4" / 1-1/4"





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

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



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

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

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

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

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

Blue Point Part #	Description
PDCC50-25F10	1/2" EMT w/ 1" Pin
PDCC75-25F10	3/4" EMT w/ 1" Pin
PDCC100-25F10	1" EMT w/ 1" Pin

Power Loads Selection Guide

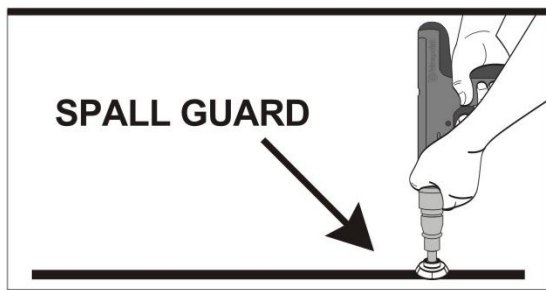
Product Number	Description
27LS11L3	27 Caliber strip loads, Green
27LS11L4	27 Caliber strip loads, Yellow
27LS11L5	27 Caliber strip loads, Red
27LS11L6	27 Caliber strip loads, Purple



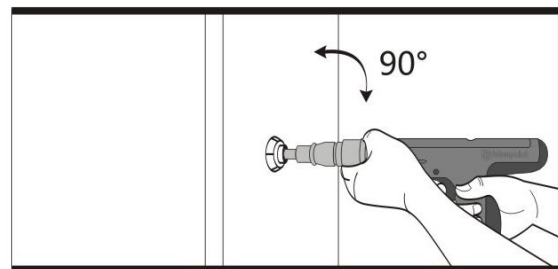
**FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY TO
THE TOOL OPERATOR OR BYSTANDERS**

FASTENER DRIVING SAFETY

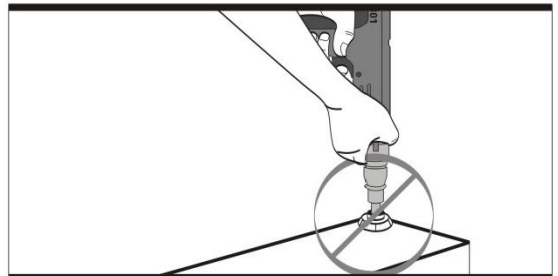
1. Only use the tool for fastening into a suitable base material.
2. Do not fire the tool without a fastener. The shooting of an instrument without a fastener can cause the piston to strike the work surface, and can cause serious injury to you and others in the work area.
3. Always use spall guard protection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



4. Always hold the tool perpendicular to and firmly against the work surface. Otherwise, it could allow a fastener to ricochet which could cause serious injury or death to operator or bystanders.



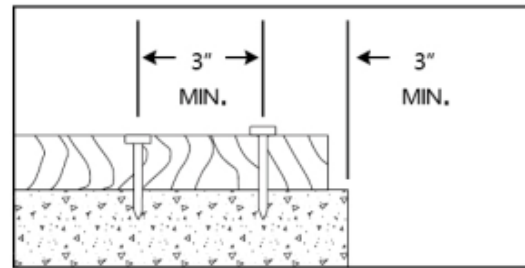
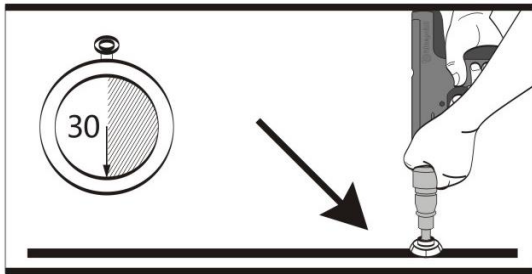
5. Never attempt to drive a fastener close to an edge or other fastener. See the installation page.



**ALWAYS FOLLOW THE MISFIRE
PROCEDURES**

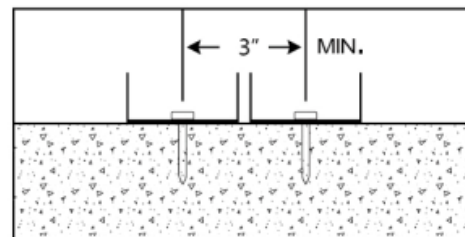
If the tool does not fire after pulling the trigger, continue to hold the tool against the work surface for at least 30 seconds. Then carefully open the tool, remove the load and put in a can of water or other non-flammable liquid. Never discard loads into a

dumpster.



Fastening wood to concrete

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 Blue Point.



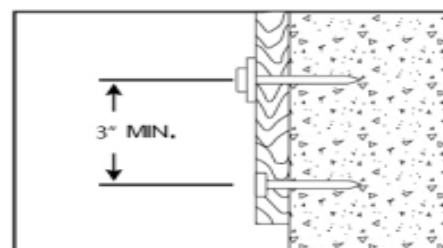
Penetration of thin gauge metal

APPLICATIONS OF FASTENERS

BP301 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.

Fasteners driven in concrete too close to an edge can cause the concrete edge to fail or fasteners to fly free or concrete can crack if driven too close together.



FASTENING TO CONCRETE

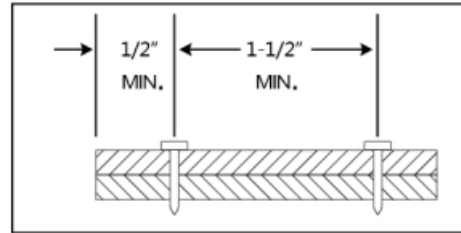
For fastening in concrete, keep a minimum distance of 3" between fastening and 3" of any free edge. Concrete thickness should be at least three times the expected depth of penetration into the concrete. The primary exception to the 3" edge distance can occur in an application where lower sill, of necessity,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

FASTENING TO CONCRETE BLOCKS 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

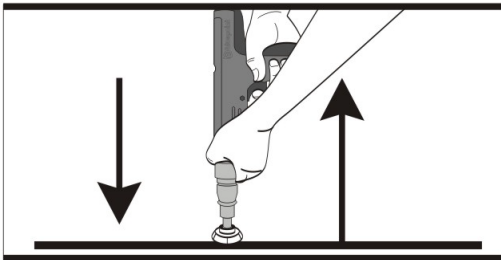
BP35 tool can be used for fastening on the flat surfaces of structural steel. For steel fastening, always maintain a minimum of 1-1/2" between the fasteners and 1/2" from any edge.



Operating Instructions

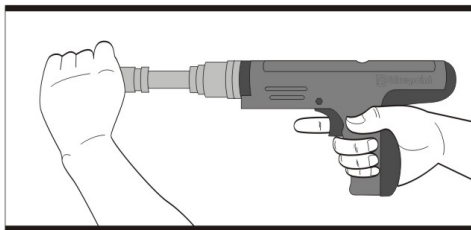
DAILY FUNCTION TEST

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.



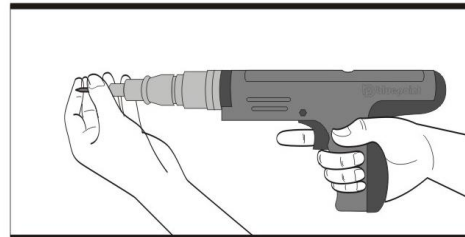
OPERATING THE BP301 TOOL

1. After checking to make sure that the tool is not loaded, point it 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 spill guard whenever possible to minimize the risk of being struck by flying debris.

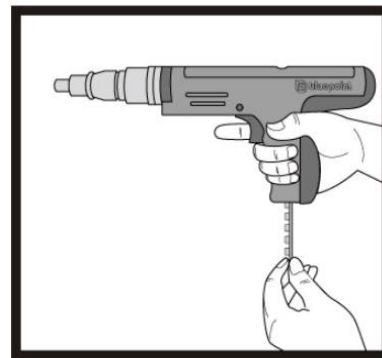


2. With your finger off the trigger, place the fastener, point out, into the end of the

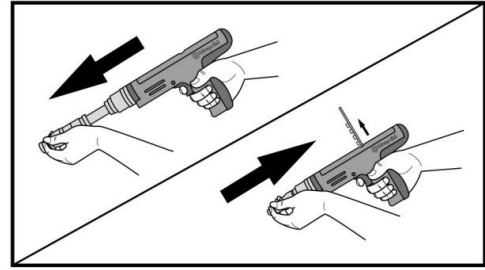
fastener guide until the end is inside the fastener guide completely. STOP immediately if excessive force is required; inspect the barrel to find out why the fastener is not entering the fastener guide easily. Do not continue to use the tool unless the problem is corrected. DO NOT use excessive force 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	Power level too high or pin is too short/ base material too soft	Use a lower charge level. Check the base material and make sure it's not too weak.
Tool does not fire	The firing pin is damaged or tool is not being fully depressed.	-The tool must be pressed flat against the base. -Replace the damaged part.
The tool does not fully depress	Tool was assembled incorrectly or damaged parts.	Contact your distributor or call the offices of Blue Point 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 advance	Advance lever is worn.	Advance lever needs to be replaced.

MAINTENANCE AND CLEANING TOOL

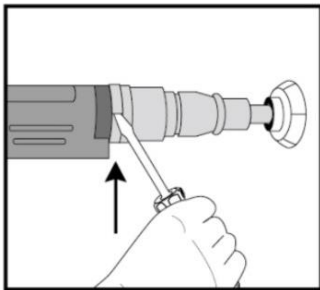
All parts should be cleaned with oil detergent and wire brushes supplied with the tool kit. Remove heavy dirt build-up with the brush. After cleaning with detergent oil, all parts should be wiped thoroughly dry. Excess oil will tend to accumulate dirt and dust. Use eye protection when cleaning the tool. 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. 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

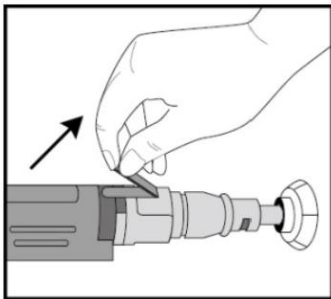
The piston is used very frequently and must be replaced periodically. Typical signs of a worn piston are broken, bent or enlarged head.

Before performing maintenance to a tool, make sure there is no powder load in the BP35 tool. When taking the tool apart do not lose or damage any other part of the tool.

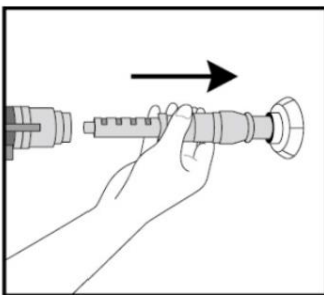
1. Rotate the annular spring off the pawl using a flat screwdriver.



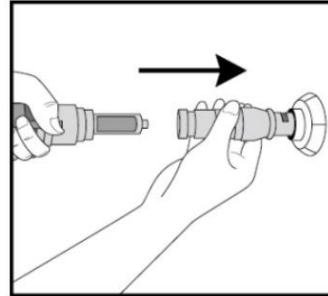
2. Remove the pawl by lifting it up and away from the tool body.



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



4. Remove the piston sleeve and front barrel assembly.



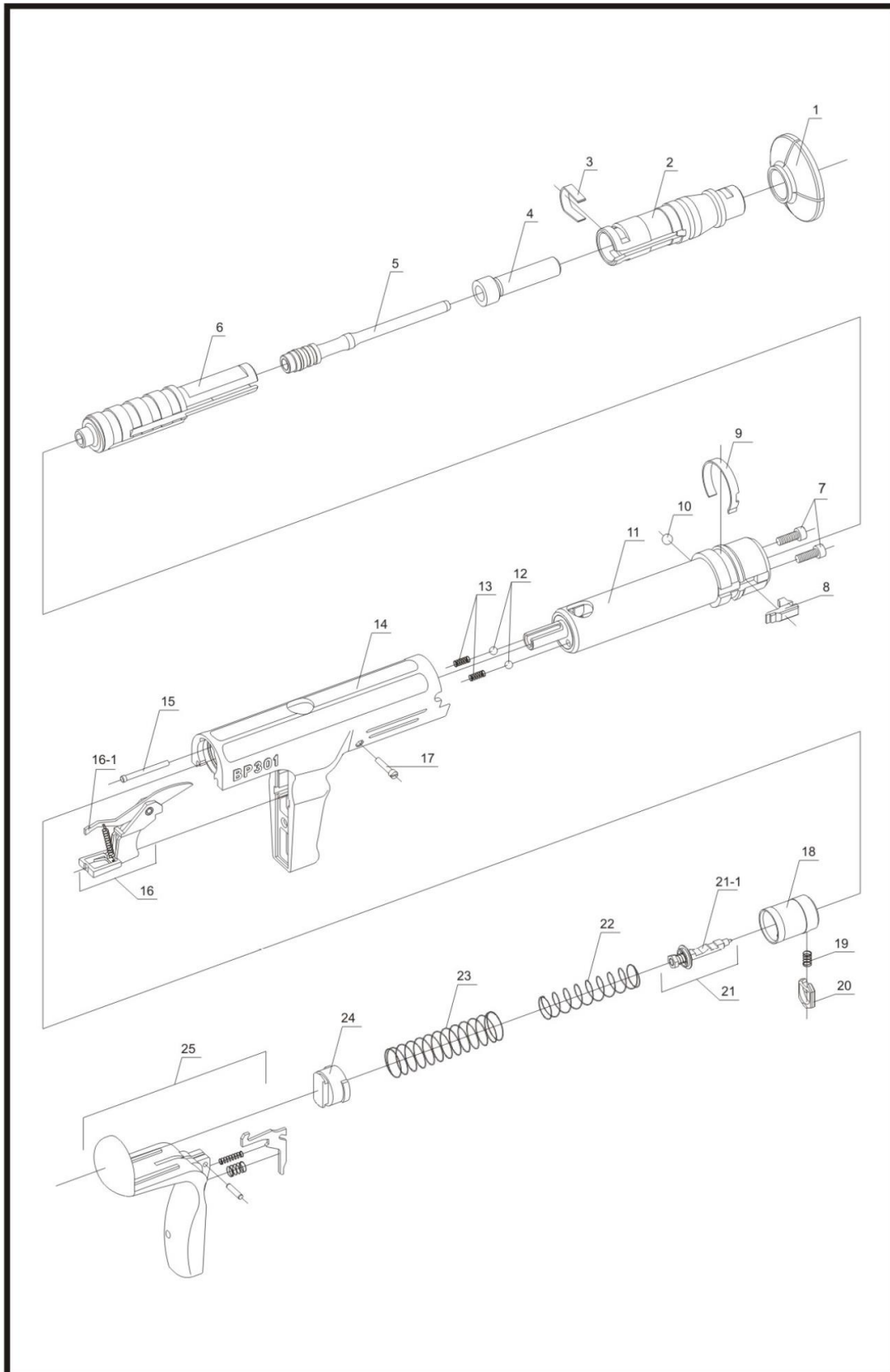
5. Unseat and remove the shear clip by prying it up with a flat screwdriver. Remove the clip from the barrel by prying it up and away from the groove in the barrel. Use care to keep the clip from flying free when it is removed.
6. Separate the front barrel and fastener guide from the piston sleeve.
7. 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 reassembled. Wear safety goggles when cleaning tool parts.



To assemble the tool BP301

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	BP301-01	Spall guard	14	BP301-14	Tool body
2	BP301-02	Base Plate	15	BP301-15	Push Pin
3	BP301-03	Shear clip	16	BP301-16	Trigger assembly
4	BP301-04	Fastener guide	16-1	BP301-16-1	Advance Arm
5	BP301-05	Piston with piston ring	17	BP301-17	Screw, Trigger
6	BP301-06	Piston sleeve	18	BP301-18	Sear holder
7	BP301-07	Bolt (M6 X 18) 2pcs	19	BP301-19	Sear spring
8	BP301-08	Stop (PAWL)	20	BP301-20	Sear
9	BP301-09	Annular spring	21	BP301-21	Firing pin assembly
10	BP301-10	Ball (Dia. 6mm)	22	BP301-22	Firing pin spring
11	BP301-11	Liner	23	BP301-23	Sear holder return spring
12	BP301-12	Detent Ball 2pcs	24	BP301-24	Cover plug
13	BP301-13	Detent spring 2pcs	25	BP301-25	Rubber handle assembly



14728 Yorba Court
Chino, Ca. 91710 U.S.A.
Tel: (877)779-2583 Fax: (866)672-9402
www.bpfasteners.com