

# **USER MANUAL**

# SAFETY/OPERATION MAINTENANCE/TROUBLESHOOTING

#### **IMPORTANT:**

IMPROPER AND UNSAFE USE OF THIS TOOL MAY RESULT IN DEATH OR SERIOUS INJURY. IT IS VERY IMPORTANT THAT THE INTENDED OPERATOR OF THIS TOOL READS AND UNDERSTANDS THIS MANUAL BEFORE OPERATING THIS TOOL. KEEP THIS MANUAL AVAILABLE FOR OTHERS BEFORE THEY USE THE TOOL.

| Located on the t   | ool nousing are | the mode | and seri | iai numbers |
|--------------------|-----------------|----------|----------|-------------|
| of your tool, plea | se record these | e.       |          |             |

| Model Number: | Seriai Number: |
|---------------|----------------|
|               |                |
|               |                |



EC Machinery directive – EN 792-13 ANSI SNT – 101

**BISSETTFASTENERS.CA** 



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#### 1. IMPORTANT SAFETY INSTRUCTIONS

It is the customer's responsibility to give this manual to the person intending to operate this tool, and to make sure that it is read carefully and understood completely by that person. Do not use the tool or allow others to use the tool until all safety instructions have been read and understood. The customer is responsible for enforcing the use of safety protection equipment by the tool operator and all other personnel in the work area.

- Always use the tool only for the intended purpose for which it was designed.
- Use safety glasses: all persons in the work area must ALWAYS wear safety glasses complying with ANSI Z87.1/EN 166 with FRONT and SIDE protection against flying object in order to prevent eye injuries.
- Use head protection complying with ANSI Z89.1.
- Use ear protection to prevent possible hearing loss.
- Use clean dry regulated compressed air at the recommended pressure (given in the technical data).
- Use only Bissett parts and fasteners (refer also to the technical data). Using unauthorized parts and fasteners may result in damage and injury. The use of non-genuine Bissett parts and fasteners may void your warranty.
- Never exceed the maximum recommended operating pressure of the tool.
- Never use oxygen, carbon dioxide, combustible gases or any bottled gas to operate the tool.
- Always disconnect the air supply when loading fasteners, doing any tool maintenance, cleaning a jam, moving work locations, leaving the work area or passing the tool. Do not assume that the tool is empty of fasteners.
- Always disconnect the tool from the air supply when not in use or when the tool is being left unattended.

- Regularly inspect the safety, the trigger and the springs for free unhindered movement. Never use a tool that requires servicing.
- Connect the male free flow nipple to the tool side of the air supply so that the tool is depressurized when disconnected from the hose. Never install female quick disconnect couplings on the tool, as this may trap air in the tool when disconnected and result in a fastener being fired.
- Never load fasteners with the triggering device depressed as this may result in a fastener being fired.
- Never carry the tool with the safety depressed as this may result in a fastener being fired.
- Never tamper with, modify or permanently engage the triggering device.
- Never point the tool at yourself or at anyone else. The tool is not a toy. Do not engage in horseplay with the tool.
- Never fire a fastener into a hard, brittle surface such as concrete, steel or tiles.
- Do not drive fasteners too close to an edge or at too great an angle as the fastener may fly free or ricochet causing personal injury and damage.
- Always ensure that the work area is amply lit so as to avoid possible accidents caused by insufficient lighting.
- Never remove, tamper with or otherwise cause the tools operating controls to become inoperable.
- Dress properly. Do not wear loose clothing or jewelry as they
  can be caught in moving parts. Rubber gloves and non-skid
  footwear are recommended when working outdoors. Wear
  protective hair covering to contain long hair.

#### COMPRESSED AIR SYSTEM

Proper use of the tool requires an adequate quantity of clean dry compressed air.

All compressed air contains moisture and other contaminants that may be detrimental to the tool, so it is recommended to use an air supply filter regulator lubricator as close to the tool as possible (within 4.5 meters/15 feet). The filter should be well maintained so as to ensure optimum performance and power. All parts of the air supply system should be clean and contaminant free.

The tool shall only be connected to a compressed air supply where the maximum allowable pressure of the tool cannot be exceeded by a factor of more than 10%. This can be achieved, for example, by a pressure reduction valve which includes a downstream safety valve.

A male free-flow coupling should be connected to the tool side of the system with the female coupling providing a seal to prevent air loss from the compressor tank upon disconnection. Never connect a female disconnect coupling to the tool side as this may trap air in the tool when the air supply is disconnected, leaving the tool charged and capable of firing a fastener. Do not mount a swivel connector in the air supply line.

Different workpieces will require different operating pressures. Never exceed the maximum recommended operating pressure of the tool as indicated on the tool.

**Warning:** Keep hands, body and loose clothing and jewelry away from the discharge area of the tool when connecting the air supply and always disconnect the tool before loading, servicing, adjusting, cleaning and when the tool is not in use.

#### 3. OPERATING INSTRUCTIONS

#### 3.1 LOADING FASTENERS

Refer also to the technical data.

#### 3.1.1 SIDE LOADING MAGAZINE

Open the magazine cover, load the fasteners, and close the magazine.

#### 3.1.2 REAR LOADING MAGAZINE

For 2 step type, slide the fasteners into the magazine and pull the pusher until it is behind the fasteners. Then release the pusher and ensure its proper engagement on the fasteners.

For 3 step type, pull the pusher to the back and keep it on the latch mechanism. Load the fasteners and release the pusher.

#### 3.1.3 TOP LOADING MAGAZINE

Pull the pusher to the back of the magazine and keep it on the latch mechanism. Load the fasteners, then release the pusher and guide it to the fasteners. Never allow the pusher to snap back towards the fasteners as it will damage the pusher spring.

#### 3.1.4 BOTTOM LOADING MAGAZINE

Push the release, catch and then slide back the magazine. Load the fasteners into the magazine cover. Then slide the magazine back closed.

**Warning:** Point away the nozzle when loading or unloading the fasteners. Always disconnect the air supply before loading fasteners.

#### 3.2 GENERAL OPERATING INSTRUCTIONS

#### 3.2.1 TYPES OF ACTUATING AND TRIGGERING SYSTEMS

#### FOR TOOLS WITHOUT A CONTACT SAFETY:

**Single action actuation:** The tool contains an actuating system where the triggering device has to be actuated for each driving operation.

**Single action with simple safety:** The tool contains a safety latch that is built into the triggering device enabling the user to disengage it when it is not in use.

#### FOR TOOLS WITH A CONTACT SAFETY INSTALLED:



#### **Dual action safety/contact safety**

(contact actuation): It will be necessary to activate the contact safety mechanism as well as the triggering device in order to fire a fastener. By keeping the trigger activated and activating the contact safety a fastener is fired, allowing for high speed firing, also known as bump firing.

Single sequential trip fire (single-sequential actuation): Fasteners can only be fired by first activating the contact safety by holding the tool against the workpiece and then by pulling the trigger. Thereafter any further driving operations can only be actuated after the trigger has been returned to the starting position. The single sequential trip tool allows exact fastener location without the possibility of driving a second fastener due to recoil.

**Changing the trigger:** To change the trigger lever, simply remove the trigger pin, remove the trigger lever and insert the required one, replacing the trigger pin to hold it in place.

#### 3.2.2 OPERATING PROCEDURES

**Protective Equipment:** Before using the tool always ensure that the user and those in the work area are using the appropriate personal protective equipment.

**Firing a fastener:** To fire a fastener, place the nose of the tool against the workpiece and pull the trigger. If the tool has a contact safety it will be necessary to press the tool against the workpiece so as to activate the contact safety, before pulling the trigger to fire a fastener.

**Exhaust air:** Each time a fastener is driven a blast of air is exhausted from the top front area of the tool. Keep your face clear of the exhaust area. Some tools incorporate a 360° exhaust deflector, which enables you to control the direction of the exhaust air.



**Depth control:** Check whether the fastener has been driven into the workpiece in accordance with the requirements. The driven depth can be changed by adjusting the air pressure or, if available, by using the depth control device. The following Bissett tools have a depth adjustment device feature:

- BT-CNR45
- BT-CNF90
- BT-SN2890
- BT-SN3190
- BT-BN1855

The depth adjustment can be changed by turning the depth adjustment device. Always use the lowest possible air pressure for the following reasons:

- Save energy
- · Less noise will be produced
- A reduction in fastener driving tool wear will be achieved

If any unusual, defective, or improper functioning occurs, disconnect the tool immediately from the compressed air supply before inspecting the tool.

**Cold weather tested:** The following Bissett Tools have been rated for cold weather usage.

- BT-CNR45
- BT-CNF90
- BT-SN2890
- BT-SN3190
- BT-MCN38
- BT-MCN65
- BT-CNS65

Cold weather care & operation: Do not store the tool in a cold weather environment. Keep the tool in a warm and dry area until beginning the work. If the tool is already cold, bring it into a warm area and allow the tool to warm up before use. Do not use the tool in cold weather conditions for extended periods of time.

**LED light:** The following tool(s) are equipped with an LED light. The light must be manually turned on or off when needed. *The battery is not covered by warranty.* 

BT-BN1855

#### 3.3 PRECAUTIONARY MEASURES

"Respect your tool and never engage in horseplay."

#### 3.3.1 ACTUATION SYSTEMS

Refer to 3.2.1 and 3.2.2.

#### 3.3.2 FLAMMABLE ATMOSPHERES

Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, bottled air or gases, or combustible dust.

#### 3.3.3 TOOL MODIFICATION

The tool must not be modified in any way. Never tamper with or disable the trigger so that it is set in an operating position, as this may cause a fastener to fire at any time.

#### 3.3.4 TOOL MAINTENANCE

The tool must be inspected regularly to ensure safe and proper usage. Refer to the tool maintenance instructions for detailed information on the proper maintenance of the tool.

#### 3.3.5 RECOMMENDED FASTENERS AND ACCESSORIES

Use only Bissett parts and fasteners. Using unauthorized parts and fasteners may result in damage and injury. The use of non-genuine Bissett parts and fasteners may void your warranty.

#### 3.3.6 PERSONAL PROTECTIVE EQUIPMENT

Appropriate personal protective equipment must be worn.

#### Eye protection:

Warning: Eye protection must be worn by the operator and other people in the work area.

Warning: It is the customer's responsibility to provide and enforce the use of eye protection by the operator and other people in the work area.

#### Hearing protection:

Warning: Hearing protection must be worn by the operator and other people in the work area.

Warning: It is the customer's responsibility to provide and enforce the use of hearing protection by the operator and other people in the work area.

#### 3.3.7 INSPECT THE TOOL BEFORE OPERATING

Before each use, inspect the tool to ensure that it is in proper working order. Check for misalignment or binding of moving parts and any other condition that may affect tool operation. Select the appropriate air pressure determined by the type of fastener used, the workpiece, and other conditions of use. Never exceed the maximum recommended operating air pressure of this the tool. If a regulator fails, the pressure delivered to a tool must not exceed 1.5 times the maximum air pressure or 200 psi (13.8 bar), whichever is greater.

#### 3.3.8 OPERATING CONTROLS

- Do not use a tool with missing or damaged safety warning label(s).
- A tool that is not in proper working order must not be used.
- Do not remove, tamper with, or otherwise cause tool operating controls to become inoperable.
- Do not operate the tool if any portion of the tool operating controls is inoperable, disconnected, altered, or not working properly.

#### 3.3.9 OPERATING CONTROLS

- Only persons who have read and understood the tool operating/safety instructions should operate the tool.
   It is the customer's responsibility to give this manual to the person intending to operate the tool, and to make sure that it is read carefully and understood completely by that person.
- Never assume that the tool is empty of fasteners.
- Never point the tool at yourself or at anyone else.
   The tool is not a toy. Do not engage in horseplay with the tool.
- Keep bystanders and children away while operating the tool.
- Do not actuate the tool unless the tool is placed firmly against the workpiece.
- Stay alert, focus on your work and use common sense when working with tools.

- Do not use the tool while tired, after having consumed drugs or alcohol, or while under the influence of medication.
- Do not overreach. Keep proper footing and balance at all times.
- Do not hold or carry the tool with a finger on the trigger.
- Drive fasteners into proper workpieces only.
- Do not drive fasteners into other fasteners.
- After driving a fastener, the tool may spring back ("recoil") causing it to move away from the workpiece.
   To reduce risk of injuring always manage recoil by:
  - » Always maintaining control of the tool.
  - Allowing recoil to occur by allowing the tool to move away from workpiece and not resisting the recoil such that the tool will be forced back into the workpiece. In "Contact Actuation Mode", if the tool is allowed to re-contact the workpiece before the trigger is released, an unintended discharge of a fastener will occur.
  - » Keeping face and body parts away from tool.
- When working close to the edge of a workpiece or at steep angles use care to minimize chipping, splitting or splintering, or free flight or ricochet of fasteners, which may cause injury.
- Keep hands and body away from fastener discharge area of tool.
- Do not load the tool with fasteners while attached to the air supply, or when any one of the operating controls is activated.
- Do not operate the tool with any air supply other than that specified in the tool operating/safety instructions.

- Operate the tool only within the recommended operating air pressure range. Never exceed the maximum recommended operating pressure of the tool.
- Use extra caution when driving fasteners into existing walls or other blind areas to prevent contact with hidden objects or persons on the other side (e.g., wires, pipes).
- Do not lift, pull or lower the tool by the hose.

#### 3.3.10 DISCONNECTING THE TOOL

Always disconnect the tool from the air supply when:

- Loading fasteners
- The tool is not in use
- Performing any maintenance or repairs
- Clearing a jam
- Elevating, lowering or otherwise moving the tool to a new location
- The tool is outside of the operator's supervision or control or
- Removing fasteners from the magazine

#### 4. MAINTENANCE

"Clean and inspect your tool every time you use it."

#### 4.1 TOOL MAINTENANCE

The customer is responsible for assuring that the tool is kept in safe working order. Furthermore, only service personnel trained by the manufacturer or distributor shall repair the tool and shall only use Bissett parts and accessories.

**Caution:** Always disconnect the tool from the air supply before commencing any cleaning, inspection, or maintenance work.

- Wipe the tool clean and inspect tool for wear or damage. Use non-flammable cleaning solutions to wipe the tool. Never soak the tool in these solutions as they can cause internal damage.
- Always ensure that all screws are kept tight as loose screws can cause injury or can damage the tool.
- Tools requiring lubricant: If the tool is used without an in-line lubricant, be sure to put in about 5 drops of lubricant at the start of each workday and 3 drops for every 1,000 fasteners fired thereafter.
- Tools shall be repaired or equipped only with Bissett parts or accessories.
- Never use the tool if there is any doubt that it is not in safe working order.
- Always use pneumatic tool oil or pneumatic gun oil
   do not use air tool oil.

#### 4.2 TOOL STORAGE

**Storage:** When not in use for an extended period, apply a thin coat of the lubricant to the steel parts of the tool to avoid rust. Make sure the tool is dry before storing. Do not store the tool in a cold weather environment. When not in use, keep the tool out of reach from children.

## 5. TROUBLESHOOTING

| FAILURE            | POSSIBLE CAUSES   | CHECK METHOD  | COUNTERMEASURES   |
|--------------------|---|---|---|
|                    | Nail Incorrect nails are loaded Abnormal nails are loaded (large-sized head, bent incorrectly, chained, etc.)   | Check if recommended nails are loaded.  | Use recommended nails     Remove abnormal nails     and load normal nails |
| No nail<br>ejected | Magazine Unit Push lever Defective nail feeder (deflected, bent, or broken) Defective feed spring (worn or broken) Narrow or wide width of the magazine groove Worn nail head supporting the portion of the magazine Abnormal nail guide groove of Blade Guide (deflected, deformed, or broken) | Check for<br>abnormalities of<br>the nail feeding<br>portion (deflected,<br>worn, deformed,<br>and or broken) | Repair deformed parts     Replace defective parts                         |
|                    | Adhesive fragment<br>or wood dust<br>sticking on the<br>magazine or<br>nail feeder  |   | Remove adhesive fragment or wood dust                                     |
|                    | Push lever  | Check push<br>lever movement  | Replace   |

| FAILURE                 | POSSIBLE CAUSES  | CHECK METHOD  | COUNTERMEASURES                           |
|-------------------------|--|---|---|
| No nail<br>ejected      | Output unit:     piston or driver     Air pressure     too low                 | Carry out idle driving and check the return of the driver blade | Check compressor                          |
|                         | Worn piston ring   |   | Replace piston ring                       |
|                         | Defective piston bumper  |   | Replace the piston bumper                 |
|                         | Defective bumper<br>piece (defective,<br>deformed, or broken)                  | Check for abnormalities of the nail feeding                     | Replace the piece                         |
|                         | Defective O-ring<br>(disconnected,<br>deformed, or broken)                     | portion (deflected,<br>worn, deformed,<br>and or broken)        | Reassemble or replace the O-ring          |
|                         | Defective driver<br>blade (deflected,<br>deformed, or broken)                  |   | Replace                                   |
|                         | Defective<br>inside cylinder<br>(adhesive or wood<br>fragment, worn)           |   | Remove adhesive fragment or wood dust     |
|                         | Nails are inaccurately fed into the Blade Guide     Incorrect nails are loaded | Check if the nailer<br>drives at minimum<br>operating pressure  | Remove the adhesive fragment or wood dust |
| The driven nail is bent | Worn driver blade  | Check if the driver blade is extremely worn or not              | Repair the driver blade                   |
|                         | The wood is too hard   | Check if the nails<br>bend on softer<br>wood or not             | Stop using the tool                       |

| FAILURE   | POSSIBLE CAUSES  | CHECK METHOD   | COUNTERMEASURES  |
|---|--|--|--|
| The driven nails do not fully penetrate the work piece (heads protrude) | The wood is too hard                                     |  | Stop using the tool  |
|   | Air pressure too low                                     |  | Adjust the air pressure  |
|   | Worn or broken<br>driver blade                           | Carry out idle<br>driving and check<br>if the driver blade<br>protrudes from the<br>blade guide nose | If the driver blade does not protrude from the blade guide replace         |
|   | Incorrect driving depth adjustment                       | Check if the tip of<br>the driver blade is<br>excessively worn<br>or not                             | Adjust the guide plate to the appropriate position                         |
|   | Defective piston ring (worn or broken)                   | Disassemble the output unit and check the inside   | Replace the defective parts  |
|   | Defective inner<br>surface of cylinder<br>(worn or rough | and outside surfaces<br>of the piston ring<br>and cylinder   |  |
| Nails clog<br>within the<br>ejecting gate                               | Nails are inaccurately fed into the blade guide          | Disassemble the output unit and check the inside and outside surfaces                                | <ul><li>Replace the defective parts</li><li>Use designated nails</li></ul> |
|   | Incorrect nails are loaded                               | of the piston ring<br>and cylinder   |  |
|   | Worn tip of the driver blade                             | Carry out idle driving<br>and check if the<br>blade tip is worn<br>or not                            | Replace  |
|   | Worn guide groove of the blade guide                     | Check the wear of the blade guide  | Replace  |
|   | Workpiece material is too hard                           |  | Stop using the tool  |

Please send the tool back to the tool manufacturer/distributor if failure other than those as tabulated above occurs.

# BISSETT PNEUMATIC TOOLS

## WARRANTY AND LIMITATIONS

Bissett Fastener's Limited (Bissett) warranties that new Bissett fastening tools, parts and accessories will be free from defects in material and workmanship for the periods shown below, after from the date of purchase by the original user from the original retail purchaser only. Proof of purchase must be provided. This warranty is not transferable. This warranty gives you specific legal rights and you may have other rights which vary in certain provinces.

#### SIX-YEAR EXTENDED LIMITED WARRANTY

A six-year extended limited warranty will apply from the date of purchase by the original retail purchaser to Bissett fastening tools and will include the frame and magazine to be free from defects in material and workmanship with the exception of any items specifically covered by an extended or limited warranty as listed below.

#### **ONE-YEAR LIMITED WARRANTY**

A one-year warranty will apply from the date of purchase by the original retail purchaser to all parts, except those listed below as normal wearing parts, or parts which are specifically covered by an extended or limited warranty. It does not cover conditions or malfunctions resulting from neglect, abuse, accident or repairs attempted or made by other than authorized service centers in Canada.

#### 90-DAY LIMITED WARRANTY

A 90-day limited warranty applies from the date of purchase by the original retail purchaser to the following parts, which are considered normal wearing parts:

- Bumper
- Driver Blades
- O-Rings
- Seal Rings

Always use genuine Bissett tools, parts and accessories.

**Exclusion after 90 days:** Normal wear parts—as listed above within the 90-day limited warranty.

#### WARRANTY STATEMENT

This warranty is limited to Bissett fastening tools, parts and accessories sold by authorized dealers and serviced by authorized service centers in Canada. Customer to return the tool, parts, and or accessories to the nearest authorized service center or original dealer at own cost. Proof of purchase date is required. This warranty is not transferable. This warranty gives you specific legal rights and you may have other rights which vary in certain provinces. To obtain information on warranty service in Canada, please refer to the Bissett website at www.bissettfasteners.ca.

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

This warranty is void as to any tool which has been subjected to misuse, abuse, accidental or intentional damage, or which results from alterations with non-conforming parts or unauthorized dealers, use with fasteners, or anything other than pneumatic tool/gun oil, that does not meet Bissett specifications, size, or quality, improperly maintained, repaired with other than genuine Bissett replacement parts, damaged in transit or handling, or which, in Bissett's opinion, has been altered or repaired in a way that affects or detracts from the performance of the tool. The cold weather rating for select Bissett tools is based off of the tools being able to operate in a controlled, isolated environment.

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

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