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(800) 992-3833 • mail@bnproducts.com

## Operating Instructions BNT-40 Automatic Rebar Tying Machine

This Tool Has  
Passed ISO9001 International  
Quality System Certification  
The charger has passed ETL Certification



Please read this manual carefully before using this machine to make sure you are familiar with all safety and warning instructions.



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The BN-40 is a hand-held battery operated tool. In this manual you will learn that this machine consists of four parts: the machine body, special wire coil, battery box and a charger. The tool is designed to be used for the fast tying of rebar or steel used in construction sites for the building trades. Due to its speed, convenience and safety, this machine can save a great deal of valuable labor and material resources. In addition, the parts and components as well as advanced production technologies are made from well-known manufacturers both here and abroad. This machine was developed as an economical and practical tying machine with many international patents.

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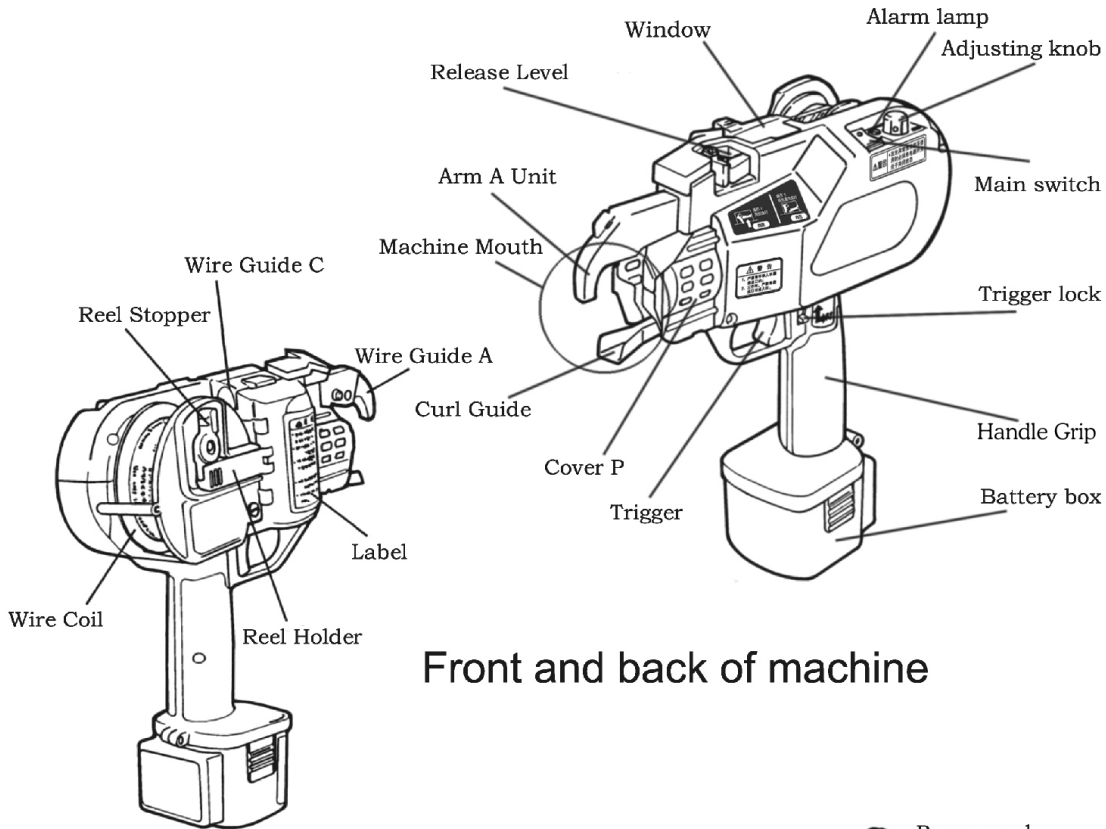
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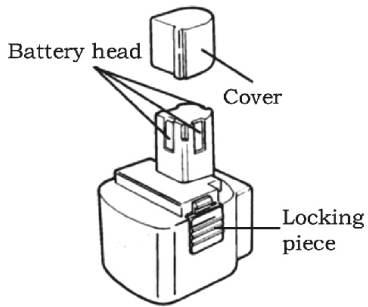
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OPERATION INSTRUCTION

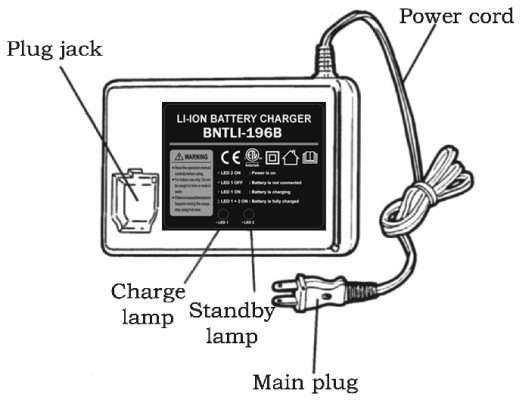
# Machine Call-Outs



Front and back of machine



Battery



Charger

# Safety

This machine is a high-performance battery operated tool. Failure to follow the warnings and instructions may result in an electric shock, fire or serious injuries.



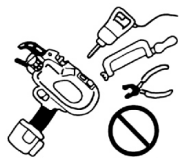
- Always operate the tool with personal protection equipment (safety helmet and eye protection, etc...). Using the appropriate safety equipment at all times will avoid body injury.

- Keep children and bystanders away while operating this tool. Distractions may cause serious accidents.



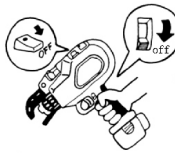
- Do not aim the tool at those standing around your work area. Serious accidents can happen if you mishandle this tool.

- Do not place your hand or position the machine mouth (between arm A and the curl guide) near the body. This will cause serious injury.



- Do not attempt to dismantle, modify or perform any major maintenance on this tool. Any modification may result in a deterioration of the tool's performance and may cause serious injury and void any warranty.

- Make sure that the electric switch is in the off position when the tool is not being used or when abnormalities occur. When changing or adjusting the wire coil, or when changing the battery pack, make sure to turn off the main power switch and lock the trigger.



- Do not place fingers or hands in the wire coil area. This may result in distortion of the coil and may cause injury to you.



- Do not operate this tool in the rain or areas where moisture is present. This may result in

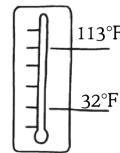
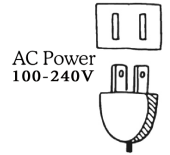
electrical shock or accident.

- Stay particularly alert while working in a loft area. Do not operate any power tool under the influence of drugs, alcohol, or medication. A moment of inattention may result in serious injury to you or someone near you.



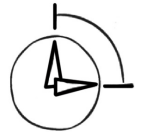
- Do not operate this tool in a hazardous area containing flammable liquid, gas or powders which may ignite and cause a fire.

- The charger has been designed to use standard AC power (100-240V ~ 50-60Hz). Do not recharge the battery using a generator power supply as this will cause the charger to malfunction.



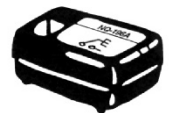
- Our batteries charge best when the ambient temperature is between 32°F and 113°F. Super-cooling or over-heating environments are not suitable for charging.

- Continuous use of the charger is not advised as this will shorten the life span of the battery and the performance of the charger itself. When not in the charging mode the power supply must be turned off.



- Please do not carry the charger by the cord. Do not pull out the power cord from the wall socket with a strong force, this will damage the cord and break the wires or cause a short circuit. A damaged cord must be repaired or replaced immediately.

- Use only the specified charger that came with your machine. Using an unauthorized charger may result in damage to the battery components and possible explosion.



- Avoid battery terminal contact with other metal objects. Trying to recharge the battery with an external wire could result in a short circuit of the battery.

- Do not throw away the protective battery cap. Use it to cover the terminal when not in use.

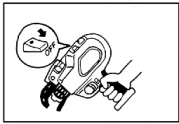


## Safety Locks

Make sure that all safety features are operational before using any power tool.

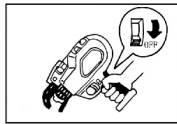
DO NOT OPERATE THE TOOL IF THE SAFETY LOCKS ARE NOT FUNCTIONAL.

**This tool is equipped with the following safety devices:**



- The Main Switch: Please turn the main switch on the power supply off when not in operation.

- The Trigger Lock: Always turn the trigger lock to the off position when not in use or when changing the wire coil.



Tool Technical Parameters

Model	BNT-40
Dimensions (in.)	11.22 x 3.93 x11.65
Weight (lbs)	4.85 Incl Battery
Voltage (V)	14.4
Max Tying Diameter (in.)	1.57

Wire Technical Parameters

Type	NY80
Dimeter (in.)	ø0.03
Material	Q195
Length (in.)	3937(approx)

## Product Specifications and Technical Parameters

BNT-40		Longitudinal Steel Diameter. (mm)											
		ø6	ø8	ø10	ø12	ø14	ø16	ø18	ø20	ø22	ø25	ø28	ø32
Traverse Steel Diameter	ø6	○	○	○	○	○	○	○	○	○	○	○	○
	ø8	○	○	○	○	○	○	○	○	○	○	○	○
	ø10	○	○	○	○	○	○	○	○	○	○	○	○
	ø12	○	○	○	○	○	○	○	○	○	○	○	○
	ø14	○	○	○	○	○	○	○	○	○	○	○	○
	ø16	○	○	○	○	○	○	○	○	○	○	○	○
	ø18	○	○	○	○	○	○	○	○	○	○	○	○
	ø20	○	○	○	○	○	○	○	○	○	○	○	○
	ø22	○	○	○	○	○	○	○	○	○	○	○	○
	ø25	○	○	○	○	○	○	○	○	○	○	○	○
	ø28	○	○	○	○	○	○	○	○	○	○	○	○
	ø32	○	○	○	○	○	○	○	○	○	○	○	○

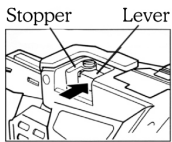
# Battery and Charger Usage

- Before inserting or removing the battery from this tool, please set the main switch to the off position.
- To avoid a short circuit to the battery, always use the battery terminal cover when it is not in use with the tool.
- When placing the battery into the tool, press the battery lock before placing it into the battery holder. When removing the battery, press the battery lock button before pulling it out of the battery holder.
- Use 100-240V ~ 50-69Hz AC power supply for the charger. Fully insert the battery into the charger slot and it will begin to charge automatically as indicated by the charging light. It will take approximately 74 minutes to fully complete the battery charge.
- It is recommended to charge the battery between 32°F and 113°F. Do not charge in extreme cold or hot environments.

# Machine Operation and Methods

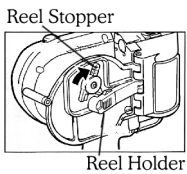
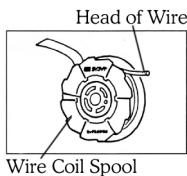
Before inserting and removing the wire coil spool turn the main power switch to the off position, lock the trigger switch and remove the battery.

## Installing the wire coil spool. Please only use matching wire without rust in this tool.



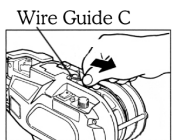
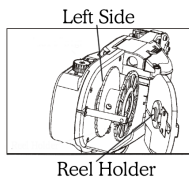
Only use original wire coil. Using non-standard wire or spool could cause the tool to malfunction.

Remove part of the adhesive tape and cut about 2 inches of wire from the coil.



Push the reel stopper to release the reel stay and open the gate at the same time.

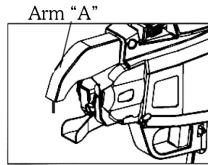
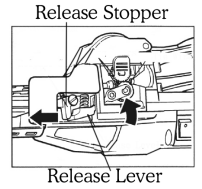
Install the wire coil with the left side facing the tool. Lock the opening by closing the reel holder.



Insert the wire into the wire guide "C" (Note: the wire must not

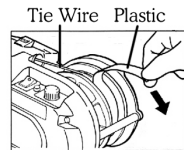
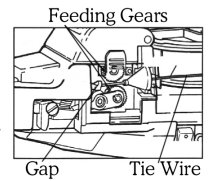
be bent or curved).

The wire must pass through the wire guide "C" in between the two feeding gears until it reaches the end gap. Then push the wire until it reaches the machine arm.



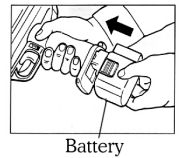
Keep pushing the wire until it reaches the arm "A" unit.

Release the release stopper and confirm the release lever has returned to its original position. (Note: the wire coil must be clamped the gap of the feeding gears).



Remove the rest of the remaining adhesive tape from the wire spool.

Install the battery into the machine, when you hear a locking sound the battery has been installed correctly. (Note: make sure that the main power switch is in the off position and that the trigger is locked before installing the battery).



Turn on the main power switch. The machine is now ready for use.

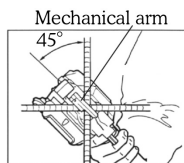
## How to remove the wire coil spool

Turn off the main power switch, lock the trigger and remove the battery.

Press the release lever and confirm that it is caught in the open position.

Remove the plastic wire coil spool.

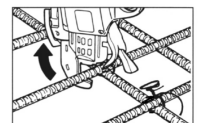
## The Tying Procedure



Unlock the trigger lock. Keep the mechanical arm on the rebars to be tied with a 45° angle at a vertical position to the rebars.

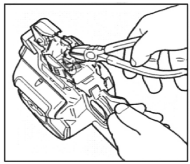
Press the trigger and the tool will tie automatically.

Remove the tool when the tying is com-





plete.



Do not press the trigger when the mechanical arm is not on the rebar surface. (Note: if this should happen turn off the machining, position the trigger lock to the “off” position and remove the trapped wire with a pair of pliers inside the mechanical mouth).

Adjust the tie tightness. There are 5 tightness levels that can be adjusted with the “adjusting dial”.

## Replacement of Gears

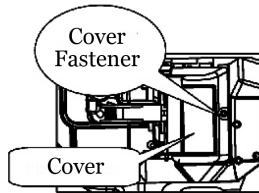


Figure 1

- Remove the screws that fasten the plastic housing over the motor as show above.

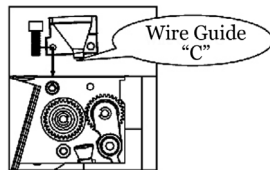


Figure 2

- Remove the wire guide “C” which is fastened on the plate as shown above.

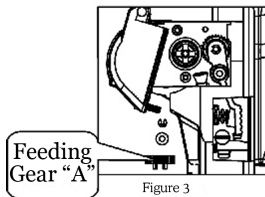


Figure 3

- Use a pair of pliers to remove the E-ring and washer fixed on the feed gear as shown above.

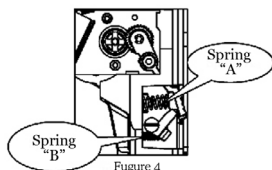


Figure 4

- With a pair of pliers remove Spring “A” at the end of the release lever as shown above.

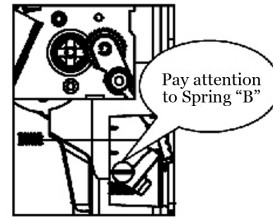


Figure 5

- Be careful not the drop the smaller Spring “B” at the other end of the release lever when you take out Spring “A” as shown above.

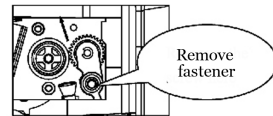


Figure 6

- Remove the hex screws of the release lever from the plate and take out the release lever in the direction of the arrow as shown above.

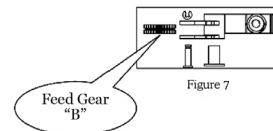


Figure 7

- After you remove the release lever you can remove the E-rings with pliers and the feeding gears “B” and then replace them as shown above.

NOTE:

After you finish replacing the gears all of the tool parts must be reassembled in order.

- First install the release lever and fasten it.
- Fit Spring “A” at the end of the release lever
- Install the feeding gears, washer and E-ring in sequence
- Fix wire guide “C” on to the plate
- Finally attach the plastic cover with screws.

## Care and Maintenance

- Please do a daily inspection prior to using this tool
- Please maintain this electric tool carefully, making sure that the adjustments are correct and that it has been stored properly.
- Inspect the tool for damage and cracks in the housing and that the power supply is in good working order.
- Make sure that the battery charger is the one that came with your machine. Using another charger could cause damage to the battery and/or charger and could even cause a fire.

- Improper use of the battery could cause it to leak. If this happens it will need to be replaced and properly recycled. Please do not touch any leaking material from this battery. If you come in contact with the battery liquid flush with clean water and seek medical attention immediately.

- When not in use, store this tool carefully in the supplied case. It can be washed with a soft cloth and soapsuds after you finish work. Do not use petrol chemicals or alcohol to clean this tool.

- In the event that this tool malfunctions or drops in performance you can call our Customer Service Repair Center (800) 992-3833 or send us a note to mail@bnproducts.com

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## Common Faults

This tool alerts you to the following fault conditions by means of a warning sound and warning light. If the problem is not solved please contact our maintenance support department: (800) 992-3833.

Common Faults	Warning Sound	Indicator Light	Items To Inspect	Possible Cause	Actions
The machine does not work after putting in a new wire spool.	None	Off	Inspect the battery terminal	Oxidation or there is dirt on the electrodes	Use a dry cloth to wipe the surfaces
	Beep----	On-	Confirm that the battery is charged	Low power in the battery	Recharge the battery
	Beep, Beep,Beep	On Off On Off On off...	Check wire guide “A” to see if there is stray wire in the guide	The head of the wire was caught in the guide	Using a pair of pliers remove the wire
	Beep, Beep, Beep, Beep...	On Off On Off On off...	Check the curl guide to see if there is a stray wire caught in the tool	Tying strength may be to strong	Adjust the tying force and remove the caught wire
The wire does not feed correctly	Beep, Beep	On Off On Off On off...	Check the curl guide	The curl guide is open	Close the curl guide
	Beep, Beep, Beep	On Off On Off On off...	Check the diameter of the rebars	The diameter of the rebar exceeds chart	Use the proper diameter rebars
	Beep, Beep, Beep, Beep...	On Off On Off On off...	Check the tightness of the wire coil	The wire is too tight on the coil	Clear the winded wire
Irregular binding and wire stepping out of the curl guide	None	On-	Alarm when pressing the trigger- No alarm when released	Overheated motor from constant use	Let the motor cool down
Failure to cut the wire after binding	None	On-	Check if the wire hits the rebar when tying	The wire hitting the rebar will stop the action	Pay attention so that the wire does not hit the rebar
Tying knot is loose	None	On-	Check to see if the cutting mechanism is working correctly	There may be a stray piece of wire in the cutting mechanism	Clean the cutting mechanism
	None	On-	Check the operation instruction	Wrong operation	Please read the operation manual
Tying knot is not correct	None	On-	Check the tying strength	The tying force is too great	Adjust to the proper tying force