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Operating Manual



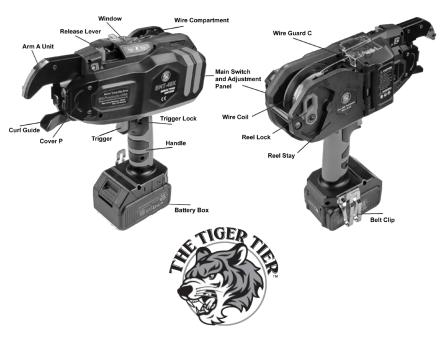
BNT-25X • BNT-40X • BNT-58X
DIGITAL DISPLAY SERIES

This tool has passed ISO9001 International Quality System Certification The charger has passed ETL Certification



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

BNT-Series Tiger Tier™ Callouts







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

Safety First

- 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 (including eye protection, etc.). Using the appropriate safety equipment at all times will avoid 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 near your body. Doing this could cause serious injury.
- Do not attempt to dismantle, modify or perform any major maintenance on this tool.
 Modifications may deteriorate the tool's performance and may cause severe injury, and void the warranty.
- Ensure that the main switch is off when the tool is not in use or when abnormalities
 occur. For example, 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 or
 remove the battery.
- Do not place fingers or hands in the wire coil area. Doing so may cause injury.
- Do not operate this tool in the rain or areas where moisture is present. Doing so may result in electrical shock or accident.
- Stay particularly alert while working in a high 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 that may ignite and cause a fire.
- The charger unit uses standard AC power (100-240V ~ 50-60Hz). Do not recharge
 the battery using a gas generator power supply, as this will cause the electronic
 charger to malfunction.
- Our batteries charge best when the ambient temperature is between 32°F and 113°F. Therefore, Super-cooling or over-heating environments are not suitable for charging.
- Continuous use of the charger is not advised. This will shorten the battery's life span and the charger's performance. When not in the charging mode, the power supply must be unplugged.
- Please do not carry the charger by the cord. Also, do not pull out the power cord
 from the wall socket with the cord. 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 a possible explosion.
- Avoid battery terminal contact with other metal objects. For example, trying to recharge the battery with an external wire could result in a short battery circuit.
- 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 off when not in operation.
- The Trigger Lock: Always engage the trigger lock when not in use or when changing the wire spool.

Technical Data

Product No. >	BNT-25X	BNT-40X	BNT-58X		
Tool Only	4.15 lbs.	4.45 lbs.	4.85 lbs.		
Tool + Battery	5.5 lbs.	5.8 lbs.	6.2 lbs.		
Tool + Battery + Wire	6.4 lbs.	6.7 lbs.	7.1 lbs.		
Height	11.81" (300mm)	11.81" (300mm)	12.2" (310 mm)		
Width	4.29" (109mm)	4.29" (109mm)	4.29" (109mm)		
Length	11.06" (281mm)	(- /			
Ties per spool	160-220	85+			
Wraps per tie	3 Wraps		4 Wraps		
Time per tie	0.6-0.8 Sec	onds			
Max tying diameter	1" (25mm)	1.575" (40mm)	2.283" (58mm)		
	#3 x#4	#6x#6	#8x#8		
Battery	Li-lon 18V, 4.0Ah, 72Wh (BNTLI-20)				
Ties per charge	4000-5000				
Additiona	al Charger (B	NTLI-20C)			

BNT-40-Wire					
Diameter (in.)	ø 0.03 (21 Gauge)				
Material	Q195 Galvanized				
Length (in.)	3937 (approx)				
BNT-40-\	Wire-USA				
Diameter (in.)	ø 0.03 (21 Gauge)				
Material	Q195 Black Annealed Wire				
Length (in.)	3937 (approx)				

BNT-40-Wire-P					
Diameter (in.)	ø 0.03 (21 Gauge)				
Material	Q195 Polycoated				
Length (in.)	3937 (approx)				

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 or removing the wire spool turn the main power switch to off and lock the trigger.
- When installing the wire spool in this tool only use recommended wire that is clean and rust free.
- Only use recommended wire spools. Using non-standard wire or spool could cause the tool to malfunction.
- Press and lock the lever.
- Push the Reel Stopper to release the Reel Stay (door) and open.
- Cut about 2 inches of wire off the end of the coil.
- Install the wire spool with the left side facing the tool (left is marked on the spool). Close and latch the Reel Stay (door).
- Insert the wire into Wire Guide C. Note: the wire must not be bent or curved.
- The wire must pass through Wire Guide C and in between the two feeding gears until it reaches the flared tube. Then push the wire an additional ½ inch into the flared tube.
- Release the Release Stopper and confirm the Release Lever has returned to its original position.
 Note: the wire must be clamped in between the feeding gears.



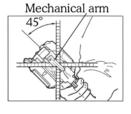


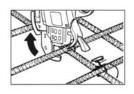
 Turn on the main power switch and unlock the trigger. The tool is now ready for use.

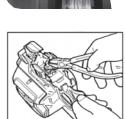
How to remove the wire coil spool

- 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 spool.

The Tying Procedure







Release Stopper

Release Lever

Feeding

Gears

Wire Guide C

Wire Path

Wire Spool

- 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 complete.
- Do not press the trigger when the mechanical arm is not on the rebar surface.
 (Note: if this should happen turn off the machine, position the trigger lock to the "off" position and remove the trapped wire with a pair of pliers inside the machine mouth).
- Adjust the tie tightness. There are 9 tightness levels that can be adjusted.

The Digital Display:

The left number on the LED display is the wire wraps (or loops). The second number is the tension.

Making Wire Wrap Adjustment:

To adjust the wire wraps, hold the trigger down while turning the tool on and it will do one less loop than the default setting. When the tool is turned off it will reset to the default setting. The BNT-25X and the BNT-40X default setting is three loops. The BNT-58X default setting is four loops.



Making Tension Adjustment:

Use the up or down button to increase or decrease the tightness of the ties. 1 is the lowest setting and 9 is the highest. Turn the tension up as much as it will tie without breaking the twist (or pig-tail). If it breaks the pig-tail, turn down the setting until it does not break. That is the tightest setting you can use.

Replacement of Gears

- Remove the screw that fastens the plastic cover over the motor.
- Remove Wire Guide "C" which is fastened to the plate.
- Remove the E-ring on Feed Gear B1. Press lever and remove feed gear.
- Release the lever and remove Comp. Spring 3. Be careful not to lose the smaller Comp. Spring 4 on the Release Stopper.





- Take out the screw and washers from the Release Lever and remove the Release Lever in the direction of the arrow.
- After you remove the Release Lever you can remove the E-ring and Pin to replace Feed Gear B2.
- After you finish replacing the gears reassemble the tool in reverse order.
- First install the Release Lever and fasten it.
- Install Comp. Spring 4 on the Release Stopper and Comp. Spring 3 on the Release Lever (press lever into locking position to hold springs in place while making sure spring 4 stays in place).
- Install Feed Gear B1 and E-ring in sequence.
- Install Wire Guide C on the plate. Finally attach the Motor Cover with the screw.

Care and Maintenance

- Perform 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. 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 if necessary.

BNT-Series Tiger Tier" Common Faults *Recommended Action items that are shaded likely require professional service; Contact BN Customer Service at (800) 992-3833 for assitance	*Recommended Action	If the unit is powered on with a charged battery, contact BN Customer Service to assist in determining if repair is required.	Service is required for LED light to be functional, if not working	(Service Required) Service is required to repair electrode/signal wiring or repair the twisting motor	Remove obstruction or foreign bodies; cut wire if necessary	(Service Required) Contact Technical Service for assistance	Fully close curl guide	(Service Required) Service: Switch lever repair or replacement may be necessary
	Part(s) to Inspect	Check to ensure that the main switch is in the on position.	Power off, then power on - determine if LED is lit or remains off	Service: Electrode wire or twisting motor has a connection or signal failure, or damage to the twisting motor has occurred	Check for obstruction by pulling back the curl guide	Service: Inspect Main PWB unit, Twister Assembly, gearbox, motor	Inspect Curl Guide. The Guide may not be closing completely due to contamination or damage.	If curl guide is closed, Switch lever may be broken
BNT-Series Tiger kely require professi	Possible Cause	No power or bent electrode	LED not connected or broken wire, bent electrode	Twisting motor fault	Twister assembly hook is obstructed by wire	Electronic failure possible, requires Service Technician	Curl guide may be open	Sensor failure
e shaded lil	Alert Tone	None	None	4 beeps	7 beeps	7 beeps	Continu- al single beep	Continu- al single beep
d Action items that ar	Common Fault	No LED light, no operation occurs	No LED light, but tool is fully func- tional	Twister assembly fails to return to its original position			No wire is fed, or a very short segment is released	
*Recommended Ac	Use Case or Normal Condition	Power = On > The twister is intialized and the wire cutter should operate automatically					Trigger is pressed > Wire should be fed from the unit	
	Section	1					2	

			-				
°Recommended Action	Replace wire spool, or remove slack from the wire spool that is causing failure for wire to feed into the machine	(Service Required) If spool is unable to rotate or parts appear to be damaged in the brake housing assembly, repair may be required	Clean the wire feed (channel on Wire Guide A, or visible obstructions) and/or remove any foreign substances	(Service Required) Repair of wiring or feed motor may be necessary	Ensure that bars tied are within the tying range of the tool when in-use. If the bars to be tied do not fit within the space alotted by the tool, a properly-sized tying machine may be necessary. Refer to the Rebar size chart in the Operator Manual for maximum tying capacity of the tying tool	If Wire Guide A is dirty, it should be cleaned. If a Wire Guide A is worn, replacement may be necessary - contact Customer Service for assistance.	(Service Required) If Arm Unit or curl guide are damaged, repair or replacement of parts are necessary
Part(s) to Inspect	Check to see if wire spool needs to be replaced; Check spool to ensure that wire is not loose, jammed, or caught inside the spool	Rotate wire spool by hand, check to ensure that the spool rotates freely. Clean if necessary. If the spool does not rotate freely, service is required.	Inspect wire feed channel for build- up or obstruction from a foreign object; see "How to Clear a Wire Jam" in the BNT-X series Operator Manual	If spool rotates freely and Wire Guide A is clear, the feed motor assembly may be damaged	Determine if obstruction was caused by wire colliding with reinforcement bars to be tied	Inpsect wire guide A; also verify that proper wire for the machine is being used	Inspect Arm Unit and curl guide for damage
Possible Cause	Wire spool is empty, or wire may be jammed inside the spool	Wire Spool is blocked by Reel Press or there is damage to the brake assembly	Wire Feed (check Guide A) is blocked by a foreign object or buildup of dirt	Feed motor or wiring to the feed motor is damaged	Wire tie is obstructed by contact with rebar during tying	Loop is oversized / too large	Curl guide or Arm Unit is damaged or bent
Alert Tone	3 beeps	3 beeps			None		
Common Fault		No wire is fed, or a very short segment is released			Loop is inconsistent and/or is deflected from the curl guide		
Use Case or Normal Condition		Trigger is pressed > Wire should be fed from the unit			Binding Wire should form a circular pattern (loop) and should com- plete a twist-tie around bar(s)		
Section		2			ю		

*Recommended Action	Clean and/or remove buildup or foreign substances from brake housing assembly, lubricate as needed	Replace spool with BNT-40-WIRE compatible wire spool	(Service Required) Brake motor assembly may be damaged or require repair or replacement	Clear wire jam or obstruction	Refer to the Operator Manual to check rebar (size) tying range, use adjustment dial (on some models) or digital display to adjust tightness of rebar ties (tie needs to be tighter). In some instances the loop size may be incorrect, and may require Service (contact Customer Service for assistance)
Part(s) to Inspect	Inspect brake housing for dirt and foreign substances	Determine if tie-wire is designed to work with the BNT-25X/40X/58X tying machines	If brake housing is clean and free of substances, and wire spool is compatible with machine, contact a service representative	Check for wire jam or obstruction; see "How to Clear a Wire Jam" in the BNT-X series Operator Manual	Check to ensure that rebar being tied fits within the tying range of the tool; then check tighness setting on the tying machine
Possible Cause	Brake assembly is blocked by buildup or blocked by for- eign substance	Wire spool is a third-party prod- uct not designed for use with tool	Damage to the brake assembly motor	Loop diameter is too small	Tightness adjustment is too low; or it is possible that Rebar tied is not within the tying diameter range (too large or too small) for the tool
Alert Tone	None	None	None	None	None
Common Fault	Wire is loose on the spool	Wire is loose on the spool		Wire loop is fed, but machine fails to twist wire	Tie is loose or broken
Use Case or Normal Condition	Wire feeds, wire spool should dispense wire consistently with no excess (slack) in wire coil	Wire feeds, wire spool should dispense wire consistently with no excess (slack) in wire coil		Wire is fed and twist-tie should be formed snugly around the bar(s)	
Section	4	4		ſĊ	

- 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
 petroleum chemicals or alcohol to clean this tool.
- In the event that this tool malfunctions or drops in performance you can contact our Customer Service Repair Center:

 (800) 992-3833 or mail@bnproducts.com.

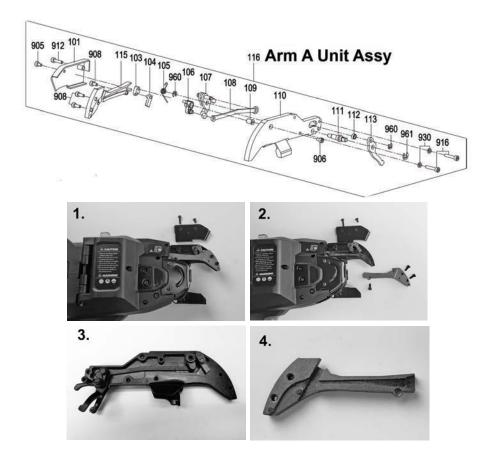
BNT-25X			#1	#2	#3	#4	#5	
		NT-25X		BNT-25X		1/8"	1/4"	3/8"
	DITT ZOX		Mesh	6mm	8mm	10mm	13mm	16mm
	Mesh		х	х	х	х	Х	х
#1	1/8"	6mm	х	х	х	х	х	х
#2	1/4"	8mm	х	х	х	х	Х	
#3	3/8"	10mm	Х	х	х	х	Х	
#4	1/2"	13mm	х	х	х	х		
#5	5/8"	16mm	х	х				

			#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
BNT-40X		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	
			6mm	8mm	10mm	13mm	16mm	20mm	22mm	25mm	29mm	32mm
#1	1/8"	6mm			х	х	х	х	х	х	х	х
#2	1/4"	8mm		х	х	х	х	х	х	х	х	х
#3	3/8"	10mm	х	х	х	х	х	х	х	х	х	
#4	1/2"	13mm	х	х	х	х	х	х	х	х		
#5	5/8"	16mm	х	х	х	х	х	х	х			
#6	3/4"	20mm	х	х	х	х	Х	Х				
#7	7/8"	22mm	х	х	х	х	Х					
#8	1"	25mm	х	х	х	х						
#9	1-1/8"	29mm	х	х	х							
#10	1-1/4"	32mm	х	х								

			#3	#4	#5	#6	#7	#8	#9	#10	#11	#14
l F	BNT-58X		3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-3/8"	1-3/4"
			10mm	13mm	16mm	20mm	22mm	25mm	29mm	32mm	36mm	43mm
#1	1/8"	6mm						х	х	х	х	х
#2	1/4"	8mm					х	х	х	х	х	х
#3	3/8"	10mm				х	х	х	х	х	х	х
#4	1/2"	13mm			х	х	х	х	Х	Х	х	х
#5	5/8"	16mm		х	х	х	х	х	х	х	х	
#6	3/4"	20mm	Х	х	Х	х	Х	х	Х	х		
#7	7/8"	22mm	Х	х	Х	х	Х	х	Х			
#8	1"	25mm	Х	х	Х	Х	Х	х				
#9	1-1/8"	29mm	Х	х	Х	Х	Х					
#10	1-1/4"	32mm	х	х	х	х						
#11	1-3/8"	36mm	х	х	х							
#14	1-3/4"	43mm	Х	х								

How To Clear A Wire Jam On The BNT X Series Rebar Tiers

The three-beep audio error code on the BNT X Series Rebar Tier most likely signifies a wire jam in the nose of the tool. Here are the steps you can take to clear misfed wire.



- 1. Remove the two hex fasteners (905 & 912). A 2.5mm tool is supplied with the tier. Remove the arm unit cover plate (101) and set it aside (see picture 1).
- 2. Remove the three (3) hex fasteners (908) on the wire guide (115) and remove it (picture 2).

leave the wire cutters and the connecting rod (108) in place (see picture 3)

3. Clean the channel on the backside of the wire guide with a wire brush or small screw-driver (see picture 4)



4. Reassemble the tool in reverse order. Make sure that the notch on the connecting plate fits into the half moon cutout on the wire guide as seen in Picture 5. **Note: A tiny bit of grease can be put on the linkage points and fixed cutter but not too much as this will attract debris.

Note: Do not over tighten any of the fasteners.

Loop Diameters and Wire Lengths

Tiger Tier	Diameter	Length
BNT-25X	1-13/16 to 1-15/16 in.	24-3/4 in.
BNT-40X	2-1/4 to 2 3/8 in.	31 in.
BNT-58X	3 to 3-1/8 in.	48 in.

Getting a loop sample

- 1. Pull the trigger while holding a screwdriver or pen in the tying position
- 2. Push the loops forward after pulling the trigger but before the tool twists the loops.
- 3. You can now measure the diameter of the loops.







The BNT-Series are hand-held battery operated tools. 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.

For additional information including:

- Product Parts List
- Product Literature
- BNT Wire Supplies

NOTES:

- BNEX-40X Arm extension with electronic trigger
- BNH-40 Holster Heavy-duty holster
- BNTLI-20 Replacement Lithium-ion Battery (18V)
- BNTLI-20C Replacement Charger for the BNTLI-20 Battery

Visit www.bnproducts.com or call (800) 992-3833

BNT Series Accessories & Supplies

ADJUSTABLE EXTENSION ARM FOR THE BNT-SERIES REBAR TIGER TIERS™







This is an innovative accessory made to assist in tying rebar floor mats with the BNT Tiger Tier™. Just lock the tool into position, plug in the electronic switch and adjust to a comfortable length. Tying floor mats couldn't be easier!



Product No. Description BNEX-40 ARM **Arm Extension**

HOLSTER FOR THE TIGER TIER™





This tool holster is made from red/black nylon that is 11" high, 8.125" wide and 10" deep with an adjustable belt

Product No. Description BNH-40 Tying Tool Holster

21 GAUGE STEEL REBAR TIE WIRE ON SPOOLS





Spooled 21 gauge zinc coated rebar tie wire sold in cartons of 50. Each spool has 330 feet of wire.

Product No. Description BNT-40-WIRE Rebar Tie Wire (Carton)

WIRE - POLYESTER COAT 21 GUAGE ON SPOOLS



Spooled 21 gauge polyester coated rebar tie wire sold in cartons of 50. USA made for BNT Series Rebar Tiers.

Product No. Description BNT-40-WIRE-P-USA Tie Wire (Carton)

21 GAUGE USA BLACK STEEL **REBAR TIE WIRE ON SPOOLS**





Spooled 21 gauge black steel rebar tie wire sold in cartons of 50. USA made for the BNT Series Rebar Tiers.

Product No. Description BNT-40-WIRE-USA Tie Wire (Carton)

WIRE - POLYESTER COAT **GALVANIZED 21 GUAGE** ON SPOOLS





Spooled 21 gauge polyester coated rebar tie wire sold in cartons of 50. For **BNT Series Rebar** Tiers.

Product No. Description BNT-40-WIRE-P Tie Wire (Carton)





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