




REBAR TYING TOOL

OWNER'S MANUAL



 **WARNING:** Read carefully and understand all **INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item #999322

Thank you very much for choosing a NORTHERN TOOL + EQUIPMENT CO., INC. Product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. Northern Tool + Equipment cannot be responsible for issues arising from modification. We strongly recommend this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted Northern Tool + Equipment to determine if it can or should be performed on the product.

For technical questions please call **1-800-222-5381**.

INTENDED USE

This handheld tool quickly and efficiently ties rebar for use on construction sites, including buildings, foundations, roads and bridges.

TECHNICAL SPECIFICATIONS

Item	Description
2 Batteries	Ni-Cd battery pack, 9.6 Volts
Charger	110 Volt 60 Hz
Charge time	1 hour
Tire-Wire	Diameter of wire is 0.8mm; length of coil is 328 feet
Max. rebar dia.	3/4"

GENERAL SAFETY RULES



WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.



WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep work area clean**, free of clutter and well lit. Cluttered and dark work areas can cause accidents.

- **Do not use your tool where there is a risk of causing a fire or an explosion;** e.g. in the presence of flammable liquids, gasses, or dust. Power tools create sparks, which may ignite the dust or fumes.
- **Keep children and bystanders** away while operating a power tool. Distractions can cause you to lose control, so visitors should remain at a safe distance from the work area.
- **Be aware of all power lines, electrical circuits,** water pipes and other mechanical hazards in your work area, particularly those hazards below the work surface hidden from the operator's view that may be unintentionally contacted and may cause personal harm or property damage.
- **Be alert of your surroundings.** Using power tools in confined work areas may put you dangerously close to cutting tools and rotating parts.

ELECTRICAL SAFETY

- **Cordless tools (battery powered)** get their electrical power from batteries. They demand the same respect that "corded" tools demand. Remember, cordless tools are very capable of causing injury if all safety precautions are not followed. Read and thoroughly understand the instruction manual that is provided with the tool.
- **Electrical power source and cord recommendations** in this manual do not apply to cordless tools themselves, but do apply to their chargers. If a cordless tool is connected to its recharge unit, both pieces of equipment must conform strictly with electrical power source and cord recommendations in this brochure.



WARNING! Always check to ensure the power supply corresponds to the voltage on the rating plate.

- **Do not abuse the cord.** Never carry the batter charger by its power cord, or yank cords from the receptacle. Keep power and extension cords away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords may cause a fire and increase the risk of electric shock.
- **Grounded tools** must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.
- **Double insulated tools** are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still doesn't fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.
- **Avoid body contact** with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increase risk of electric shock if your body is grounded.
- **When operating a power tool outside,** use an outdoor extension cord marked "W-A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock.
- **Extension Cord Use.**
 - A. Use only 'Listed' extension cords. If used outdoors, they must be marked "For Outdoor Use." Those cords having 3-prong grounding type plugs and mating receptacles are to be used with grounded tools.
 - B. Replace damaged or worn cords immediately.
 - C. Check the name plate rating of your tool. Use of improper size or gauge of extension cord may cause unsafe or inefficient operation of your tool. Be sure your extension cord is rated to allow sufficient current flow to the motor. For the proper wire gauge for your tool, see

chart.

CHART FOR MINIMUM WIRE SIZE OF EXTENSION CORD:

Nameplate AMPS	CORD LENGTH			
	25'	50'	100'	150'
0-6	18 AWG	16 AWG	16 AWG	14 AWG
6-10	18 AWG	16 AWG	14 AWG	12 AWG
10-12	16 AWG	16 AWG	14 AWG	12 AWG
12-16	14 AWG	12 AWG	(NOT RECOMMENDED)	

If in doubt, use larger cord.

Be sure to check voltage requirements of the tool to your incoming power source.

- **Do not expose** power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- **Do not let your fingers** touch the terminals of plug when installing to or removing from the outlet.
- **Ground fault circuit interrupters.** If work area is not equipped with a permanently installed Ground Fault Circuit Interrupter outlet (GFCI), use a plug-in GFCI between power tool or extension cord and power receptacle.
- **Never place a cloth or any other cover over the battery charger while the battery pack is being charged.** This will cause overheating, enough that the charger may even catch fire.

PERSONAL SAFETY

- **Stay alert,** watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly.** Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts. Air vents often cover moving parts and should be avoided.
- **Use safety apparel and equipment.** Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use as dust mask in dusty work conditions. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.
- **Avoid accidental starting.** Do not carry the power tool with your finger on the switch. Ensure the switch is in the off position before plugging tool into power outlet. In the event of a power failure, while a tool is being used, turn the switch off to prevent surprise starting when power is restored.
- **Keep fingers and body parts clear of the feeder arm** and curl guide at all times. Failure to do so may result in serious injury.
- **Keep fingers and body parts away from the tie-wire reel when tool is in use.**
- **Never point the tool at anyone.** Serious injury may result if the tool catches an operator or anyone working close to the work area.
- **Do not overreach.** Keep proper footing and balance at all times.
- **Remove adjusting keys or wrenches** before connecting to the power supply or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may result in personal injury.

TOOL USE AND CARE

- **Do not modify or force the tool.** Tools do a better and safer job when used in the manner for which they are designed. Plan your work, and use the correct tool for the job.
- **Never use a tool** with a malfunctioning switch. Any power tool that cannot be controlled with the switch is dangerous and must be repaired by an authorized service representative before using.
- **Disconnect power** from tool and place the switch in the locked or off position before servicing, adjusting, installing accessories or attachments, or storing. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **The trigger lock** prevents the tool from operating when not in use. Be sure the trigger is locked when inserting a charged battery.
- **Secure work** with clamps or a vise instead of your hand to hold work when practical. This safety precaution allows for proper tool operation using both hands.
- **After battery installation, if the operator notices unusual heat, smell, sound or vibration, discontinue use and remove the battery.**
- **Store idle tools.** When tools are not in use, store them in a dry, secure place out of the reach of children. Inspect tools for good working condition prior to storage and before re-use.
- **Use only accessories that are recommended** by the manufacturer for your model. Accessories that may be suitable for one tool may create a risk of injury when used on another tool.
- **Keep guards in place** and in working order.
- **Never leave tool** running unattended.

ASSEMBLY



1.

Peel off the tape fixing Tie-Wire and stretch out the tip of the wound Tie-Wire a few inches.



2.

Press the release lever until it clicks into place and is secured by the release stopper.



3.

Push the reel stopper to release the reel holder.



4.

Insert the reel into the slot, making sure the side with the white dots is facing the inside of the tool.

Then push the reel holder to the closed position.



5.

Insert the tip of the stretched out Tie-Wire into the wire guide. (Keep the Tie-Wire straight, not bent or curved, for easier insertion.)



6.

Continue inserting the Tie-Wire through the center slot of the left and right drive gear.



7. 10mm

Keep inserting the Tie-Wire into the pipe until the tip of the wire comes out from the upper arm about 3/8" (10mm).



8.

Release the release stopper, and confirm that the release lever has returned to its original position and the feeding gears are clamping the Tie-Wire. This completes all the Tie-Wire installing operation.



9.

Make sure the trigger is locked (ON). Mount the battery pack on the tool body by inserting the charged battery pack into the grip until a click is heard.



10.

After the battery pack is inserted, unlock the trigger and turn the main switch ON. The tool feeds the Tie-Wire automatically for a couple of inches. Remove any excess wire.

Note:

- When installing the battery, turn off the main switch and lock the trigger. Don't bring your finger or other parts of body close to the binding and rotating parts of the trip.

- Don't switch the main switch "ON" and "OFF" in rapid succession.
- Don't bring fingers or other parts of your body close to the Tie-Wire during operation.
- Lock the trigger when the tool is not in use.

HOW TO REMOVE THE TIE-WIRE

NOTE: First, turn the main switch "OFF," lock the trigger and detach the battery pack.



1. _____

Press the release lever until it clicks into place and is secured by the release stopper.



2. _____

Push the reel stopper to release the holder and remove the Tie-Wire.



3. _____

Pull the spool to remove the Tie-Wire from the upper arm, wire guide and tool. Remove the Tie-Wire at the back.



4. _____

Insert a new Tie-Wire spool (refer to previous instructions) or reset the reel holder. Load tool and accessories into the tool kit then the work is completed.

TENSION ADJUSTMENT



1. _____

Be sure to turn the main switch "OFF," lock the trigger and detach the battery pack.



2.

This dial is used to adjust electric torque and wire tension. To increase tension, turn dial clockwise; to decrease tension, turn dial counterclockwise. (Dial location on tool varies depending on model.)



3.

Insert the battery pack, then turn the main switch ON and unlock the trigger. The Tie-Wire is fed automatically to the arm unit and set in the required position.



4.

Test tie some rebar to check for proper tie tension and strength.



5.

If the tie tension is not appropriate, repeat the previous directions to readjust the tension.

OPERATION

⚠ CAUTION: Do not move the tool during tying operation until the tool stops tying automatically.



1.

Press the tool's arm on the rebar and tilt the tool to a 45° angle to the crossed rebar.



2.

Keep the tool perpendicular to the surface of the crossed rebar.



3. Press the trigger to complete tying operation.



4. Detach the arm from the rebar. Continue tying in alternate directions until tying is completed.

TROUBLE SHOOTING/REPAIRS

This tool alerts you to the troubleshooting by means of a warning sound and warning lamp. Take measures according to the following table. Please contact if the trouble is not solved.



WARNING: After determining the cause of any problem, be sure to turn off the main switch and lock the trigger before following through with the solution (see below).

Problem	Warning sound	What to check	Cause	Solution
The tool can't operate after installing battery and tie-wire (with switch turned ON).	No sound emitted	Confirm residual quality of battery pack	Dead battery (completely empty)	Replace the battery or charge the battery.
		Detach the battery, see if electrode is luminous	Electrode plate oxidized or has impurity on it.	Polish the surface of battery pack with dry polish or abrasive paper.
	Pi,pi,pi,pi	Confirm residual quality of battery pack.	Dead battery (with only a small quality left)	Replace the battery or charge the battery.
	Piii.....	Open/Close curl guide	Curl guide is left open	Close curl guide.
	Pi,pi,pi.....	Confirm if binding wire has been tangled.	Binding wire has been tangled around twist section	Turn off the main switch, lock the battery, and remove binding wire inside curl guide.
The tie-wire does not thread through tool.	Piii.....	Open/Close curl guide.	Curl guide is left open.	Close curl guide.
	Pipipi.....	Check if wire inside reel has been loosened or caught	Wire caught inside wire reel.	Remove fray on reel.
		Confirm functioning of cutter	Cutter section is blocked with foreign substance.	Wipe cutter section.
	Pipipi.....	Warning sound does not go continuously. It occurs only when trigger is pulled.		Halt machine and cool it down slightly.
Tie-wire threads but stop half way		Confirm reel side face	Not using designated types of binding wire	Use proper Tie-wire.
	Pipipi.....			
	Pipipi.....	Confirm reel winding	Binding wire has been entangled inside reel.	Elimate Tie-wire on the reel.

Problem	Warning Sound	What to Check	Cause	Solution
Tie-wire steps out of curl guide	No sound emitted	Check if wire hits reinforced concrete at binding.	Wire hitting reinforced concrete may cause this problem	Pay attention so that the wire doesn't hit reinforced concrete during operation.
No wire cutting takes place	No sound emitted	Confirm functioning of cutter section.	Cutter section is blocked with foreign substance.	Wipe the foreign substance in the cutter section.
Wire tangles	No sound emitted.	Check if wire hits reinforced concrete at binding.	Wire hitting reinforced concrete may cause this problem.	Pay attention so that the wire doesn't hit reinforced concrete during operation.
Binding is not tight enough	No sound emitted.	Confirm diameter of rebar to be tied	The diameter of rebar is not of designated size.	Use proper Rebar Tying Machine.
	No sound emitted.	Confirm the curl holder has been reset	The curl holder hasn't been reset, which leads to switch not working properly.	Fully reset the curl holder.
	No sound emitted.	Confirm to understand the operating manual.	Improper use of machine.	Be familiar with operating manual and instructions.
Tying twisting takes place	No sound emitted.	Confirm diameter of rebar to be tied.	The diameter of rebar is too large.	Use proper Rebar Tying Machine.
	No sound emitted.	Confirm to understand the operating manual.	Improper use of machine.	Be familiar with operating manual and instructions.

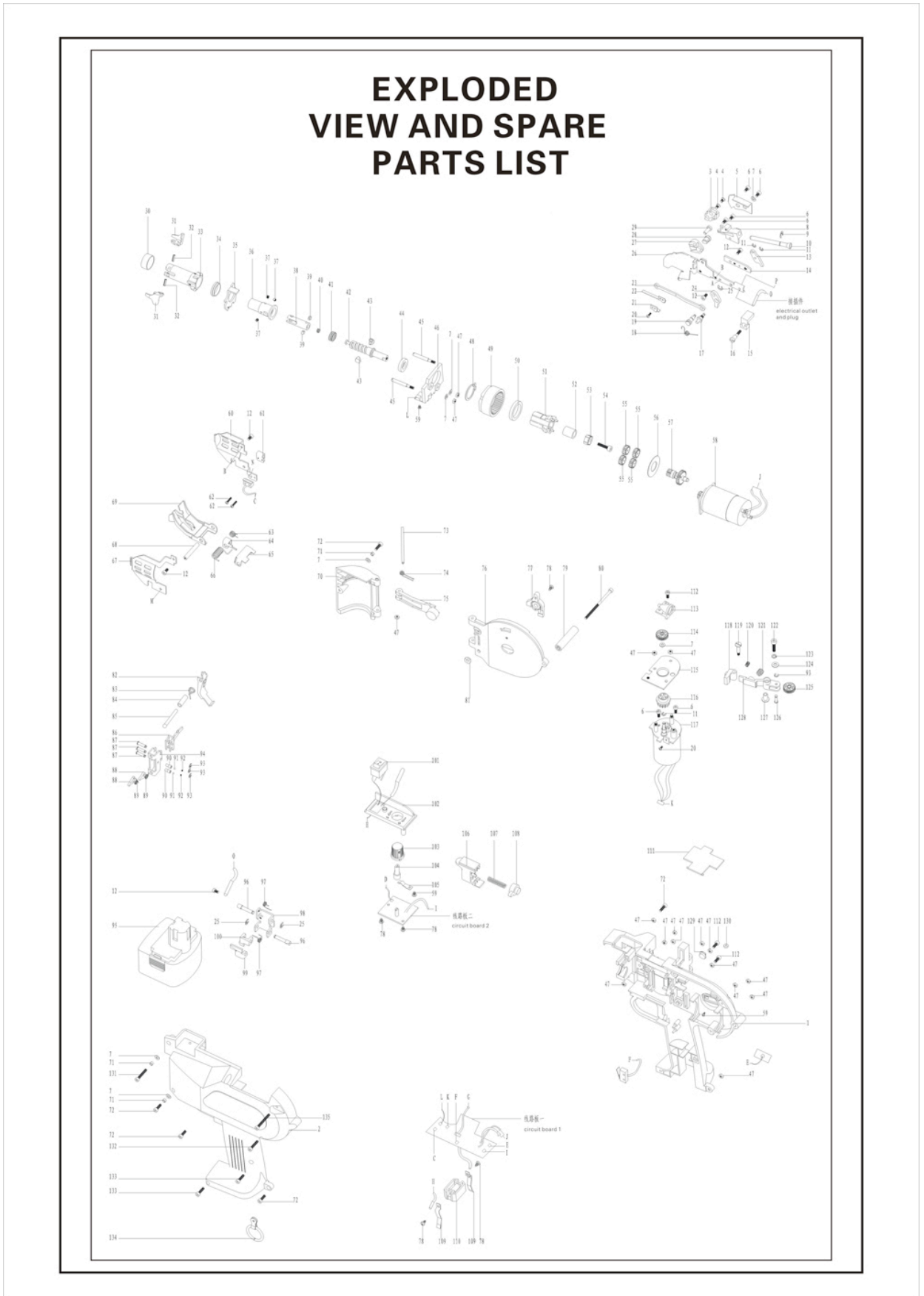
MAINTENANCE



WARNING: Make sure this tool is disconnected from its power source before attempting any maintenance, cleaning, or inspection.

- **Maintain your tools.** It is recommended that the general condition of any tool be examined before it is used. Keep your tools in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. If any abnormal vibrations or noise occurs, turn the tool off immediately and have the problem corrected before further use. Have necessary repairs made by qualified service personnel.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control. Keep handles dry, clean, and free from oil and grease.
- **Cleaning.** Use only soap and a damp cloth to clean your tools. Many household cleaners are harmful to plastics and other insulation. Never let liquid get inside a tool.

DIAGRAM & PARTS LIST



EXPLODED VIEW AND SPARE PARTS LIST

NO.	名称	Name	NO.	名称	Name
1	机身上盖	the above cover	72	内六角圆柱头螺钉M3×10	hexagonal inside cylindrical bolt M3*10
2	机身上盖	the above cover	73	销一	pin 1
3	引线板	leading wire Board	74	压簧1	press spring 1
4	十字槽沉头螺钉M3×6	cross-shaped slot bolt M3*6	75	线盘压臂	wire tape pressing arm
5	刀片压板	reamer board	76	线盘仓侧板	wire tape side=window Block
6	内六角圆柱头螺钉M3×5	hexagonal inside cylindrical bolt M3*5	77	轴销锁止器	axis locker
7	平垫圈-A级Φ3	flat cushion loop-levelA Φ3	78	压簧2	press spring 2
8	送丝腔	entering wire chamber	79	十字槽盘头自攻螺钉M3×8	cross-shaped slot bolt M3*8
9	开口挡圈-4	ringent blocking loop -4	80	侧盖撑杆	side cover stay bar
10	引线管	leading wire pipe	81	内六角圆柱头螺钉M3×60	hexagonal inside cylindrical bolt M3*60
11	开口挡圈-2.5	ringent blocking loop -2.5	82	塞块二	filling block 2
12	内六角圆柱头螺钉M3×6	hexagonal inside cylindrical bolt M3*6	83	线盘锁扣	wire tape locker
13	前推杆摆臂	front handspike arm	84	弹簧3	spring 3
14	刀架螺母板	reamer nut board	85	柱销一	pole pin 1
15	刀架减震垫	reamer shock absorption mat	86	套管	cover tube
16	外螺柱二	outside stud 2	87	垫块	pulling block
17	外螺柱三	outside stud 3	88	销六	pin 6
18	扭簧8	twisting spring 8	89	径向锁止片	radial locker
19	外螺柱四	outside stud 4	90	弹簧4	spring 4
20	十字槽盘头螺钉M2×5	cross-shaped slot bolt M2×5	91	短销	short pin
21	簧板加强板	intensive spring board	92	钢珠	steel ball
22	簧板	spring board	93	弹簧F	spring F
23	刀片推杆	reamer handspike	94	开口挡圈-2	ringent blocking loop -2
24	后推杆摆臂	back handspike arm	95	拨杆支架	stand
25	开口挡圈-3.5	ringent blocking loop -3.5	96	电池	battery
26	上引导架焊接总成	the above guide jointing assembly	97	销七	pin 7
27	切刀块	cutting reamer piece	98	弹簧5	spring 5
28	刀销	reamer pin	99	径向锁止器支架	radial locker stand
29	销二	pin 2	100	支架一	stand 1
30	套二	cover 2	101	支架二	stand 2
31	转板	rotating board	102	开关按钮	switch button
32	弹性圆柱销ST2.5×9	elastic cylindrical pin ST2.5×9	103	预设调节仓面板	presetting adjusting window panel
33	主轴	main axis	104	调节旋钮外套	adjusting knob cover
34	防尘	rank cover	105	内六角平端紧定螺钉M3×6	hexagonal inside flat tight bolt M3*6
35	剪丝推动板总成	cutting wire pulling board assembly	106	调节旋钮内接杆	adjusting knob inner connecting pole
36	内套一	inner cover 1	107	电源插座弹片	power plug spring piece
37	内六角平端紧定螺钉M3×3	hexagonal inside flat tight bolt M3*3	108	扳机	trigger
38	内套二	inner cover 2	109	弹簧B	spring B
39	圆柱销Φ4×10	cylindrical pin Φ4×10	110	扳机弹簧套	trigger spring cover
40	锁止块	lock block	111	电池插座弹片	battery plug spring piece
41	簧簧C	spring C	112	电池插座	battery plug
42	簧簧D	spring D	113	进丝护盖	entering wire cover
43	螺纹轴	screw thread axis	114	内六角圆柱头螺钉M3×8	hexagonal inside cylindrical bolt M3*8
44	螺纹块	screw thread block	115	进丝口	wire entrance
45	中间套	middle cover	116	送丝机构主动齿轮	sending wire driving gear
46	螺柱	stud	117	轴承Φ3	axletree Φ3
47	架体	stand	118	盖板	cover board
48	六角螺母M3	hexangular nut M3	119	送丝电机减速齿轮总成	decelerating gear of sending wire motor assembly
49	轴用弹性挡圈-B型 20	axis elastic blocking Loop B20	120	内六角圆柱头螺钉M3×5	hexagonal inside cylindrical bolt M3*5
50	行星齿轮	planet gear cover	121	开口挡圈-2.5	ringent blocking loop -2.5
51	滚动轴承Φ20	rolling axletree Φ20	122	十字槽盘头螺钉M2×5	cross-shaped slot bolt M2×5
52	过渡轴	transition axis	123	电机固定板总成	motor fixed board assembly
53	套三	cover 3	124	送丝电机	sending wire motor
54	轴套	axis cover	125	送丝电机齿轮	sending wire motor gear
55	内六角圆柱头螺钉M1×14	hexagonal inside cylindrical bolt M1*14	126	送丝电机齿轮	sending wire motor gear
56	行星齿轮	planet gear	127	进丝开关	wire entrance switch
57	行星齿轮盖板	planet gear cover board	128	外螺柱一	outside stud 1
58	齿轮系总成	gear assembly	129	弹簧E	spring E
59	扭电机总成	twisting motor assembly	130	弹簧A	spring A
60	十字槽盘头自攻螺钉ST2.2×4.5	cross-shaped slot self-tapping bolt ST2.2×4.5	131	内六角圆柱头螺钉M1×16	hexagonal inside cylindrical bolt M1*16
61	左挡板	left blocking board	132	轻型弹垫	light elastic mat
62	前开关托板	front switch board	133	平垫圈-A级Φ4	flat cushion loop-levelA Φ4
63	十字槽盘头螺钉M2×10	cross-shaped slot bolt M2*10	134	送丝机构从动齿轮	sending wire driven gear
64	扭簧7	twisting spring 7	135	轴承Φ3	axletree Φ3
65	拨片一	pulling piece 1	136	轴套	axletree cover
66	拨片二	pulling piece 2	137	进丝齿轮架	entering wire gear stand
67	扭簧6	twisting spring 6	138	塞块一	filling block 1
68	右挡板	right blocking board	139	盖板胶合销下橡胶套	rubber cover
69	双头螺柱	double-headed stud	140	内六角圆柱头螺钉M3×20	hexagonal inside cylindrical bolt M3*20
70	下引导槽焊接总成	the below guide jointing assembly	141	内六角圆柱头螺钉M3×16	hexagonal inside cylindrical bolt M3*16
71	送丝电机盖板	entering wire cover board	142	内六角圆柱头螺钉M3×12	hexagonal inside cylindrical bolt M3*12
	套一	cover 1	143	挂环组件	hanging loop component
			144	内六角圆柱头螺钉M3×28	hexagonal inside cylindrical bolt M3*28

For replacement parts and technical questions, please call 1-800-222-5381.



WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.



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